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**PART I**

**Forward-Looking Statements**

This annual report on Form 10-K of Liquidmetal Technologies, Inc. contains “forward-looking statements” that may state our management’s current expectations, estimates, forecasts, and projections about the company and its business. Any statement in this report that is not a statement of historical fact is a forward-looking statement, and in some cases, words such as “believe,” “estimate,” “project,” “expect,” “intend,” “may,” “anticipate,” “plans,” “seeks,” and similar expressions identify forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or result. These statements are not guarantees of future performance, and undue reliance should not be placed on these statements. It is important to note that Liquidmetal Technologies, Inc.’s actual results could differ materially from what is expressed in our forward-looking statements due to the risk factors described in the section of this report entitled “Risk Factors” in Item 1A of this report as well as the following risks and uncertainties:

- Our history of operating losses and uncertainty surrounding our ability to achieve or sustain profitability;
- Our limited history of developing, manufacturing, and selling products made from our bulk amorphous alloys;
- Lengthy customer adoption cycles and unpredictable customer adoption practices;
- Our ability to identify, develop, and commercialize new product applications for our technology;
- Competition from current suppliers of incumbent materials or producers of competing products;
- Our ability to identify, consummate, and/or integrate strategic partnerships;
- The potential for manufacturing problems or delays; and
- Potential difficulties associated with protecting or expanding our intellectual property position.

Liquidmetal Technologies, Inc. undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

**Item 1. Business**

In this annual report on Form 10-K, unless the context indicates otherwise, references to “the Company”, “Liquidmetal Technologies”, “our Company”, “we”, “us”, and similar references refer to Liquidmetal Technologies, Inc. and its subsidiaries.

**Overview**

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary coatings, powders, bulk alloys, and composites that utilize the advantages offered by amorphous alloy technology. We develop, manufacture, and sell products and components from bulk amorphous alloys to customers in various industries, and we also partner with third-party licensees and distributors to develop and commercialize bulk Liquidmetal alloy products. We believe that our proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace. In addition to our bulk alloys, we market and sell a line of proprietary amorphous alloy-based industrial coatings under the Liquidmetal Armacor™ Coatings brand.

Amorphous alloys are unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in other metals and alloys when they solidify. Liquidmetal alloys possess a combination of performance, processing, and potential cost advantages that we believe will make them preferable to other materials in a variety of applications. The amorphous atomic structure of our alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. For example, our zirconium-titanium Liquidmetal alloys are approximately 250% stronger than commonly used titanium alloys such as Ti-6Al-4V, but they also have some of the beneficial processing characteristics more commonly associated with plastics. We believe these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as

titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

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## **General Corporate Information**

We were originally incorporated in California in 1987, and we reincorporated in Delaware in May 2003. Our principal executive offices are located at 30452 Esperanza, Rancho Santa Margarita, California 92688. Our telephone number at that address is (949) 635-2100. Our Internet website address is [www.liquidmetal.com](http://www.liquidmetal.com) and all of our filings with the Securities and Exchange Commission are available free of charge on our website.

## **Subsidiaries and Other Locations**

We currently own and operate a manufacturing facility in Pyongtaek, South Korea, which became operational in the third quarter of 2002. This Korean subsidiary handles our Bulk Liquidmetal alloy business which includes market opportunities to manufacture and sell components made out our bulk alloys. We operate a distribution warehouse division in Huntsville, Texas to handle our Liquidmetal alloy industrial coatings which are used primarily as protective coatings for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used by coal burning power plants. Lastly, we operate a coatings application business based in Dothan, Alabama used to support our industrial coatings business.

## **Segments**

In April 2002, we began classifying operations into two reportable segments: Liquidmetal alloy industrial coatings and bulk Liquidmetal alloys. The Liquidmetal alloy industrial coatings are used primarily as a protective coating for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used by coal burning power plants. Bulk Liquidmetal alloys include market opportunities to manufacture and sell components made out of our bulk alloys. The expenses incurred by the bulk Liquidmetal alloy segment are manufacturing, research and development costs, and selling expenses associated with identifying and developing market opportunities. Bulk Liquidmetal alloy products can be distinguished from Liquidmetal alloy coatings in that the bulk Liquidmetal alloy can have significant thickness, up to approximately one inch, which allows for their use in a wider variety of applications other than a thin protective coating applied to machinery and equipment. Revenue and expenses associated with research and development services are included in the bulk Liquidmetal alloy segment.

Results of segment operations and assets are included in Note 17 to the Consolidated Financial Statements contained in this Form 10-K.

## **Our Technology**

The performance, processing, and potential cost advantages of Liquidmetal alloys are a function of their unique atomic structure and their proprietary material composition.

### ***Unique Atomic Structure***

The atomic structure of Liquidmetal alloys is the fundamental feature that differentiates them from other alloys and metals. In the molten state, the atomic particles of all alloys and metals have an amorphous atomic structure, which means that the atomic particles appear in a completely random structure with no discernible patterns. However, when non-amorphous alloys and metals are cooled to a solid state, their atoms bond together in a repeating pattern of regular and predictable shapes, or crystalline grains. This process is analogous to the way ice forms when water freezes and crystallizes. In non-amorphous metals and alloys, the individual crystalline grains contain naturally occurring structural defects that limit the potential strength and performance characteristics of the material. These defects, known as dislocations, consist of discontinuities or inconsistencies in the patterned atomic structure of each grain. Unlike other alloys and metals, bulk Liquidmetal alloys can retain their amorphous atomic structure throughout the solidification process and therefore do not develop crystalline grains and the associated dislocations. Consequently, bulk Liquidmetal alloys exhibit superior strength and other superior performance characteristics compared to their crystalline counterparts. Our Liquidmetal alloy coatings, in contrast to our bulk alloys, have a crystalline atomic structure when initially applied, but their atomic structure becomes amorphous as the coatings rub against surfaces under force, thus improving their performance over time.

Prior to 1993, commercially viable amorphous alloys could be created only in thin forms, such as coatings, films, or ribbons. However, in 1993, researchers at the California Institute of Technology (Caltech) developed the first commercially viable amorphous alloy in a bulk form. Today, bulk Liquidmetal alloys can be formed into objects that

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are up to one inch thick, and we are not aware of any other commercially available amorphous alloys that can achieve this thickness. We have the exclusive right to commercialize bulk amorphous alloy technology through a license agreement with Caltech and other patents that we own.

### ***Proprietary Material Composition***

The constituent elements and percentage composition of Liquidmetal alloys are critical to their ability to solidify into an amorphous atomic structure. We have several different alloy compositions that have different constituent elements in varying percentages. These compositions are protected by various patents that we own or exclusively license from third parties, including Caltech. The raw materials that we use in Liquidmetal alloys are readily available and can be purchased from multiple suppliers.

## **Advantages of Liquidmetal Alloys**

Liquidmetal alloys possess a unique combination of performance, processing and cost advantages that we believe makes them superior in many ways to other commercially available materials for a variety of existing and potential future product applications.

### **Performance Advantages**

Our bulk Liquidmetal alloys provide several distinct performance advantages over other materials, and we believe that these advantages make the alloys desirable in applications that require high yield strength, strength-to-weight ratio, elasticity and hardness.

The high yield strength of bulk Liquidmetal alloys means that a high amount of stress must be exerted to create permanent deformation. However, because the yield strength is so high, the yield strength of many of our bulk Liquidmetal alloy compositions is very near their ultimate strength, which is the measure of stress at which total breakage occurs. Therefore, very little additional stress may be required to break an object made of bulk Liquidmetal alloys once the yield strength is exceeded. Although we believe that the yield strength of many of our bulk alloys exceeds the ultimate strength of most other commonly used alloys and metals, our bulk alloys may not be suitable for certain applications, such as pressurized tanks, in which the ability of the material to yield significantly before it breaks is more important than its strength advantage. Additionally, although our bulk alloys show a high resistance to crack initiation because of their very high strength and hardness, certain of our bulk alloys are sensitive to crack propagation under certain long-term, cyclical loading conditions. Crack propagation is the tendency of a crack to grow after it forms. We are currently developing new alloy compositions that have improved material properties to overcome these limitations.

### **Processing Advantages**

The processing of a material generally refers to how a material is shaped, formed, or combined with other materials to create a finished product. Bulk Liquidmetal alloys possess processing characteristics that we believe make them preferable to other materials in a wide variety of applications. In particular, our alloys are amenable to processing options that are similar in many respects to those associated with plastics. For example, we believe that bulk Liquidmetal alloys have superior net-shape casting capabilities as compared to high-strength crystalline metals and alloys. "Net-shape casting" is a type of casting that permits the creation of near-to-net shaped products that reduce costly post-cast processing or machining. Additionally, unlike most metals and alloys, our bulk Liquidmetal alloys are capable of being thermoplastically molded in bulk form. Thermoplastic molding consists of heating a solid piece of material until it is transformed into a moldable state, although at temperatures much lower than the melting temperature, and then introducing it into a mold to form near-to-net shaped products. Accordingly, thermoplastic molding can be beneficial and economical for net shape fabrication of high-strength products.

Bulk Liquidmetal alloys also permit the creation of composite materials that cannot be created with most non-amorphous metals and alloys. A composite is a material that is made from two or more different types of materials. In general, the ability to create composites is beneficial because constituent materials can be combined with one another to optimize the composite's performance characteristics for different applications. In other metals and alloys, the high temperatures required for processing could damage some of the composite's constituent materials and therefore limit their utility. However, the relatively low melting temperatures of bulk Liquidmetal alloys allow mild processing conditions that eliminate or limit damage to the constituent materials when creating composites. In addition to composites, we believe that the processing advantages of Liquidmetal alloys will ultimately allow for a variety of other finished forms, including sheets and extrusions.

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Notwithstanding the foregoing advantages, our bulk Liquidmetal alloys possess certain limitations relative to processing. The beneficial processing features of our bulk alloys are made possible in part by the alloys' relatively low melting temperatures. Although a lower melting temperature is a beneficial characteristic for processing purposes, it renders certain bulk alloy compositions unsuitable for certain high-temperature applications, such as jet engine exhaust components. Additionally, the current one-inch thickness limitation of our zirconium-titanium bulk alloy renders our alloys currently unsuitable for use as structural materials in large-scale applications, such as load-bearing beams in building construction. We are currently engaged in research and development with the goal of developing processing technology and new alloy compositions that will enable our bulk alloys to be formed into thicker objects.

### **Cost Advantages**

Liquidmetal alloys have the potential to provide cost advantages over other high-strength metals and alloys in certain applications. Because bulk Liquidmetal alloy has processing characteristics similar in some respects to plastics, which lends itself to near-to-net shape casting and molding, Liquidmetal alloys can in many cases be shaped efficiently into intricate, engineered products. This capability can eliminate or reduce certain post-casting steps, such as machining and re-forming, and therefore has the potential to significantly reduce processing costs associated with making parts in high volume.

Additionally, because the near-to-net shape processing of Liquidmetal alloys reduces the need for capital-intensive heavy industrial equipment such as that found in foundry and forging operations, Liquidmetal alloys can be processed with a smaller machinery footprint, which allows for more efficient development of facilities and reduced permitting and regulatory costs. We believe that these advantages may allow our customers an opportunity to maintain or improve the performance of their products without a commensurate increase in cost.

### **Our Strategy**

As a result of the experience and knowledge that we have gained through our activities to date, and recognizing that developing and commercializing a revolutionary new technology is an evolutionary process, we are continually modifying our business strategy to enable us to better capitalize on our evolving core strengths and more effectively pursue revenue growth and profitability. The key elements of our strategy include:

- *Identifying and Developing New Applications for Our Liquidmetal Alloy Technology.* We intend to continue to identify and develop new applications that will benefit from the performance, processing, and cost advantages of Liquidmetal alloys.
- *Focusing Our Marketing and Internal Manufacturing Activities on Select Products with Expected Higher Gross-Margins.* We intend to focus our marketing and internal manufacturing activities on select products with anticipated higher gross margins. This strategy is designed to align our product development initiatives with our manufacturing processes and manufacturing cost structure, and to reduce our exposure to more commodity-type product applications that are prone to unpredictable demand and fluctuating pricing. Our focus is primarily on higher-margin products that possess design features that take optimal advantage of our existing and developing manufacturing technology and that command a price commensurate with the performance advantages of our alloys. In addition to our focus on products with higher gross margins, we will

continue to engage in prototype manufacturing, both for internally manufactured products and for products that will ultimately be licensed to or manufactured by third parties.

*Further Developing Our Manufacturing Processes, Capabilities, and Efficiencies for Bulk Liquidmetal Alloys.* We intend to improve and enhance our internal manufacturing processes, capabilities, and efficiencies in order to maintain quality control over products made from bulk Liquidmetal alloys, to focus on improvements to the processing of our alloys, and to protect our intellectual property. As our alloys become more pervasive, however, we expect to enter into additional strategic relationships that would involve the licensing of Liquidmetal technology to third parties for certain market segments.

*Pursuing Strategic Partnerships In Order to More Rapidly Develop and Commercialize Products.* We intend to actively pursue and support strategic partnerships that will enable us to leverage the resources, strength, and technologies of other companies in order to more rapidly develop and commercialize products. These partnerships may include licensing transactions in which we license full commercial rights to our technology in a specific application area, or they may include transactions of a more limited scope in which, for example, we outsource manufacturing activities or grant distribution rights. We believe that utilizing such a partnering strategy will enable us to reduce our working capital burden, better fund product development efforts, better understand customer adoption practices, leverage the technical and financial resources of our partners, and more

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effectively handle product design and process challenges. As this partnering strategy evolves, a growing portion of our revenue mix may be comprised of revenue from the provision of product development services, technical support, and engineering services, as well as revenues from royalties on the sale of Liquidmetal alloy products by our partners.

*Advancing the Liquidmetal® Brand.* We believe that building our corporate brand will foster continued adoption of our technology. Our goal is to position Liquidmetal alloys as a superior substitute for materials currently used in a variety of products across a range of industries. Furthermore, we seek to establish Liquidmetal alloys as an enabling technology that will facilitate the creation of a broad range of commercially viable new products. To enhance industry awareness of our company and increase demand for Liquidmetal alloys, we are reviewing various brand development strategies that could include collaborative advertising and promotional campaigns with select customers, industry conference and trade show appearances, public relations, and other means.

## **Applications for Liquidmetal Alloys**

We have focused our commercialization efforts for Liquidmetal alloys on five identified product areas. We believe that these areas are consistent with our strategy in terms of market size, building brand recognition, and providing an opportunity to develop and refine our processing capabilities. Although we believe that strategic partnering transactions could create valuable opportunities beyond the parameters of these target markets, we anticipate continuing to pursue these markets both internally and in conjunction with partners.

### ***Components for Electronic Products***

We produce components for electronic devices using our bulk Liquidmetal alloys and believe that our alloys offer enhanced performance and design benefits for these components in certain applications. Bulk Liquidmetal alloys can be used for various structural components of a cellular phone, including the shield, faceplate, hinge, hinge housings, back plate, side plates, brackets, and the cover on the phones. We initially targeted the electronic casings market because of its potential for high product volumes and branding opportunities; however, unpredictable customer adoption practices, short product model lives, processing limitations, and intense pricing pressures make it very challenging to compete in this high-volume market. Accordingly, we are currently limiting our focus in this market to higher-margin applications that have the potential to benefit from the unique performance characteristics of bulk Liquidmetal alloys. We continue to believe that the high strength-to-weight ratio and elastic limit of bulk Liquidmetal alloys enable the production of stronger and thinner electronic devices as compared to plastic, zinc, and magnesium, and we intend to focus on products that require these design and performance benefits.

### ***Sporting Goods and Leisure Products***

We are developing a variety of applications for Liquidmetal alloys in the sporting goods and leisure products area.

In the sporting goods industry, we believe that the high strength, hardness, and elasticity of our bulk alloys have the potential to enhance performance in a variety of products, and we further believe that many sporting goods products are conducive to our internal manufacturing strategy of focusing on high-margin products that meet our design criteria. Substantial opportunities also exist for our amorphous alloy coatings, powders and composites. In 2003, Rawlings Sporting Goods Company launched a new line of baseball and softball bats that utilize a Liquidmetal alloy coating, and HEAD NV Sport launched a new line of HEAD® Liquidmetal® tennis racquets that incorporate Liquidmetal alloy in composite form in their racquet design. In 2005, we have also launched goods that utilize Liquidmetal alloy including skis. Other potential applications for our alloys in this industry include golf clubs, eyewear, fishing, hunting, and other sport products.

In the leisure products category, we believe that bulk Liquidmetal alloys can be used to efficiently produce intricately engineered designs with high-quality finishes, such as premium watchcases, and we further believe that Liquidmetal alloy technology can be used to make high-quality, high-strength jewelry from precious metals. We have successfully produced prototype rings made from an amorphous Liquidmetal platinum alloy that is harder (and hence more scratch resistant) than conventional platinum jewelry.

In order to accelerate the commercialization of Liquidmetal alloys in the jewelry and high-end luxury products market, in June 2003, we entered into an exclusive, ten-year license agreement with LLPG, Inc. ("LLPG"). Under the terms of the agreement, LLPG has the right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets.

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## **Medical Devices**

We are engaged in product development efforts relating to various medical devices that could be made from Liquidmetal alloys. We believe that the unique properties of bulk Liquidmetal alloys provide a combination of performance and cost benefits that could make them a desirable replacement to incumbent materials, such as stainless steel and titanium, currently used in various medical device applications. Our ongoing emphasis in 2006 and 2007 has been on surgical instrument applications for Liquidmetal alloys. These include, but are not limited to, specialized blades, orthopedic instruments utilized for implant surgery procedures, dental devices, and general surgery devices. The potential value offered by our alloys is high performance in some cases and cost reduction in others, the latter stemming from the ability of Liquidmetal alloys to be net shape cast into components, thus reducing costs of secondary processing. The status of most components in the prototyping phase is subject to non-disclosure agreements with our customers.

We believe that our future success in the medical device market will be driven largely by strategically aligning ourselves with well-established companies that are uniquely positioned to facilitate the introduction of Liquidmetal alloys into this market, especially as it relates to the unique processing challenges and stringent material qualification requirements that are prevalent in this industry. We also believe that our prospects for success in this market will be enhanced through our focus on optimizing existing alloy compositions and developing new alloy compositions to satisfy the industry's rigorous material qualification standards.

## **Industrial Coatings and Powders**

We continue to market and sell amorphous alloy industrial coatings and powders under the Liquidmetal Armacor™ Coatings brand name. Liquidmetal alloy coatings are used primarily as a protective coating for industrial machinery and equipment. Since the inception of this business in the late 1980s, our proprietary coatings have demonstrated a high degree of hardness and low coefficient of friction which, when combined with their strong adhesion properties, reduce the wear and consequent failure of the machinery and equipment on which they are used. In contrast to our bulk alloys, we sell Liquidmetal coatings primarily in the form of a wire or powder feedstock that is melted and applied to machinery or equipment through welding or thermal spray processes.

Our Liquidmetal coatings are widely used in the oil drilling industry as a protective coating on drill pipe and casings, and we estimate that our coatings represent a dominant share of annual worldwide sales of hard band coatings for new oil drill pipe. Drilling often places tremendous stress on pipes and casings, especially whenever the drill changes direction. Both the drill pipe and casing experience excessive wear, which leads to higher replacement costs and greater failure rates. Liquidmetal coatings are used to provide a protective coating, or hard band, around the outside of the drill pipe and the inside of casings to reduce wear and failure rates and accordingly reduce operating costs.

Liquidmetal coatings have also been sold into the power generation industry specifically for the purpose of coating boiler tubes in coal-burning power plants in order to extend the lives of these boilers. Boiler tubes are subject to high heat, erosion, and corrosion and often require costly replacement, both in terms of replacement parts and length of downtime for installation. Additionally, residue build-up in boiler tubes of coal burning power plants creates operating inefficiencies. Historic performance and testing of Liquidmetal coatings have demonstrated that our coatings extend the life of these boiler tubes meaningfully beyond their current average life depending on the specific environment. In addition, our coatings have demonstrated the ability to reduce build-up of residue on boiler tubes, helping to improve the efficiencies of the boilers. Historically, we have not concentrated sales efforts on the boiler tube market in a substantial way. However, given the size of the market and potential opportunities for our coatings, we have recently dedicated greater effort to this area.

## **Defense Applications**

We are working with the U.S. Department of Defense, as well as a variety of defense-related research and development agencies and large defense contractors, to develop various defense-related applications for Liquidmetal alloys. For example, we have successfully developed prototype kinetic energy penetrator rods for use in armor-piercing ammunition systems. Kinetic energy penetrators, or KEPs, are armor piercing munitions that are currently made primarily from depleted uranium (DU) or tungsten heavy alloys (WHA). From inception of our KEP research program in 2002 through 2008, the KEP program has expended approximately \$14 million to replicate the terminal ballistic performance on depleted uranium in medium caliber ammunition.

We have also received Office of Naval Research (ONR) funding totaling approximately \$2 million for the development of ductile dendritic composite material as a replacement of Ti or Ti-6Al-4V material in marine fasteners. In collaboration with the California Institute of Technology, new series of ductile amorphous alloys were designed and successfully produced by a novel semi-solid forging process. Currently, we are manufacturing samples for the

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mechanical properties testing and are developing material database for the application of this composite material in the military and commercial sectors.

In another application of Liquidmetal amorphous alloys and composites, we are currently working under the SBIR II contract with the Naval Surface Warfare Center, Dahlgren Division on the development of reactive material for the inert warheads. In this application, the goal is to replace various warheads inert steel casing with the Liquidmetal's reactive material which, while inert during handling, transportation and storage, releases additional energy upon impact on the target. This would allow a munitions designer to either scale-down the size of a warhead for the same amount of destructive force, or increase the destructive force while maintaining the original warhead size.

We also continue to work with a number of defense-related research and development agencies and large defense companies to identify additional military applications that may benefit from using Liquidmetal alloys. We believe that our alloys can present opportunities that we can capitalize on the trend toward lighter but stronger weapon systems in the U.S. military, and our strategy is to align ourselves with the largest and most significant players in this industry. Product development programs for defense applications are currently underway with several leading defense contractors, including Alliant Techsystems, General Dynamics, and Lockheed Martin Missiles and Fire Control.

## **Going Concern /Liquidity**

We have experienced significant operating losses since our inception. Our net loss for the fiscal years ended December 31, 2008, 2007 and 2006 was \$6.6 million, \$5.6 million, and \$14.5 million, respectively. In the audit report on our financial statements for our fiscal years ended December 31, 2008 and 2007, our auditors included a going-concern qualification indicating that our significant operating losses and working capital deficit cause substantial doubt about

our ability to continue as a going concern. By issuing an opinion stating that there is substantial doubt about our ability to continue as a going concern, our auditors have indicated that they are uncertain as to whether we have the capability to continue our operations without additional funding.

We anticipate that we will not have sufficient funds to pursue our current operating plan beyond the first quarter of 2009 and we will therefore require additional funding. We are actively seeking additional sources of capital and seeking to restructure and/or modify existing indebtedness. The amount of funding that we seek and the timing of such fundraising efforts will depend on the extent to which we are able to increase revenues through obtaining additional purchase orders for our products and/or the extent to which we can restructure or modify our debt. Because we cannot be certain that we will be able to obtain adequate funding from debt, equity, or other traditional financing sources, we are also actively exploring several strategic financing options, including the possible sale of our manufacturing plant in South Korea (which would then be replaced with a smaller facility) and additional licensing and outsourcing of our manufacturing operations.

We cannot guarantee that adequate funds will be available when needed, and if we do not receive sufficient capital, we may be required to alter or reduce the scope of our operations.

Additionally, we have approximately \$1.2 million of principal and accrued interest outstanding as of December 31, 2008, under the 8% unsecured subordinated notes (the "Bridge Notes"), which were due August 17, 2007. We intend to fully repay the amounts due under the Bridge Notes. However, as of the filing of this report we do not have sufficient funds to repay the Bridge Notes. As a result, we are currently in default under the Bridge Notes. Such a default may have material adverse effect on our operations, financial condition, and results of operations. We have not received a formal notice of default and we are currently working to resolve this matter with investors holding our Bridge Notes.

We were required under our amended Security Purchase Agreement, dated April 23, 2007, between our company and holders of our 8% convertible subordinated notes due January 2010 (the "January 2010 Notes"), to repay outstanding debt under previously issued promissory notes, including the Bridge Notes ("Debt Satisfaction Covenant") by October 1, 2007. As we have not yet fully repaid our Bridge Notes, we are in default under the January 2010 Notes under the Debt Satisfaction Covenant. Further, we were required, beginning September 30, 2008 and at the end of each month thereafter, to redeem 1/32nd of the principal amount of the January 2010 Notes. An aggregate payment equal to \$0.6 million was due September 30, 2008. However, we did not have sufficient funds to make this payment, and, accordingly, we are in default under the January 2010 Notes.

The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. As of the filing of this report, we have received a formal notice of default and we are currently working to resolve this matter. As a result, the outstanding principal due under the January 2010 Notes of \$19.1 million is included in current portion of long-term debt and accrued interest and fees of \$1.0 million is included in accounts payable and accrued expenses as of December 31, 2008. Such defaults may have material adverse effect on our operations, financial

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condition, and results of operations. We are currently working to resolve this matter with investors holding our January 2010 Notes.

Approximately \$0.2 million of principal and accrued interest became due from our Korean subsidiary under a loan from Kookmin Bank of South Korea in August 2008. However, as of the filing of this report we did not have sufficient funds to repay the loan and we have received a formal notice of default. Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of our manufacturing plant facility and certain equipment in South Korea. The foreclosure of our manufacturing plant facility and equipment in South Korea would have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with Kookmin Bank by seeking a forbearance until we are able to obtain funding to repay this loan, although there is no assurance that we will be able to obtain any such funding.

We have outstanding liens and judgments on our assets by various creditors for past-due trade payables totaling \$1.4 million, of which \$1.2 million is held by creditors in South Korea, as of December 31, 2008. We are currently working to resolve the matter with each creditor by seeking a forbearance until we are able to obtain funding to repay the amounts due, although there is no assurance that we will be able to obtain any such funding. If we cannot repay the amounts due or obtain forbearance, the creditors may seek to foreclose on the Company's assets. Such a foreclosure would have material adverse effect on our operations, financial condition, and results of operations.

## **Liquidmetal Golf**

From 1997 until September 2001, we were engaged in the retail marketing and sale of golf clubs through a majority owned subsidiary, Liquidmetal Golf. The retail business of Liquidmetal Golf was discontinued in September 2001. Although the retail golf club business has been discontinued, Liquidmetal Golf is engaged in the development of golf club components for golf original equipment manufacturers that will integrate these components into their own clubs and then sell them under their respective brand names. Liquidmetal Technologies owns 79% of the outstanding common stock in Liquidmetal Golf.

Our Liquidmetal Golf subsidiary has the exclusive right and license to utilize our Liquidmetal alloy technology for purposes of golf equipment applications. This right and license is set forth in an intercompany license agreement between Liquidmetal Technologies and Liquidmetal Golf. This license agreement provides that Liquidmetal Golf has a perpetual and exclusive license to use Liquidmetal alloy technology for the purpose of manufacturing, marketing, and selling golf club components and other products used in the sport of golf. In consideration of this license, Liquidmetal Golf has issued 4,500,000 shares of Liquidmetal Golf common stock to Liquidmetal Technologies.

## **Our Intellectual Property**

Our intellectual property consists of patents, trade secrets, know-how, and trademarks. Protection of our intellectual property is a strategic priority for our business, and we intend to vigorously protect our patents and other intellectual property. Our intellectual property portfolio includes 40 owned or licensed U.S. patents and numerous patent applications relating to the composition, processing, and application of our alloys, as well as various foreign counterpart patents and patent applications.

Our initial bulk amorphous alloy technology was developed by researchers at the California Institute of Technology ("Caltech"). We have purchased patent rights that provide us with the exclusive right to commercialize the amorphous alloy and other amorphous alloy technology acquired from Caltech through a license agreement ("Caltech License Agreement") with Caltech. In addition to the patents and patent applications that we license from Caltech, we are building a portfolio of our own patents to expand and enhance our technology position. These patents and patent applications primarily relate to various

applications of our bulk amorphous alloys, the composition of our coatings and powders, and the processing of our alloys. The patents relating to our coatings expire on various dates until 2022 and the patents relating to our bulk amorphous alloys expire on various dates between 2013 and 2025. Our policy is to seek patent protection for all technology, inventions, and improvements that are of commercial importance to the development of our business, except to the extent that we believe it is advisable to maintain such technology or invention as a trade secret.

In order to protect the confidentiality of our technology, including trade secrets, know-how, and other proprietary technical and business information, we require that all of our employees, consultants, advisors and collaborators enter into confidentiality agreements that prohibit the use or disclosure of information that is deemed confidential. The agreements also obligate our employees, consultants, advisors and collaborators to assign to us developments, discoveries and inventions made by such persons in connection with their work with us.

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### **Research and Development**

We are engaged in ongoing research and development programs that are driven by the following key objectives:

- *Enhance Material Processing and Manufacturing Efficiencies.* We plan to continue research and development of processes and compositions that will decrease our cost of making products from Liquidmetal alloys.
- *Optimize Existing Alloys and Develop New Compositions.* We believe that the primary technology driver of our business will continue to be our proprietary alloy compositions. We plan to continue research and development on new alloy compositions to generate a broader class of amorphous alloys with a wider range of specialized performance characteristics. Since 2003, we have successfully expanded our portfolio of bulk amorphous alloys to include additional zirconium-titanium alloys, as well as alloys based on other metals, such as gold and platinum. Although these various compositions are at different stages of development and only a few are currently suitable for commercial use, we believe that a larger alloy portfolio will enable us to increase the attractiveness of our alloys as an alternative to incumbent materials and, in certain cases, drive down product costs. We also believe that our ability to optimize our existing alloy compositions will enable us to better tailor our alloys to our customers' specific application requirements.
- *Develop New Applications.* We will continue the research and development of new applications for Liquidmetal alloys. We believe the range of potential applications will broaden by expanding the forms, compositions, and methods of processing of our alloys.

We conduct our research and development programs internally and also through strategic relationships that we enter into with third parties. Our internal research and development efforts are conducted by a team of 11 scientists and engineers whom we either employ directly or engage as consultants. Included among this team are Professor William Johnson, who discovered our initial bulk amorphous alloy at Caltech in 1993. Professor Johnson was an employee of our company from October 2001 through December 2003 and then became a consultant to our company.

In addition to our internal research and development efforts, we enter into cooperative research and development relationships with leading academic institutions. We have entered into development relationships with other companies for the purpose of identifying new applications for our alloys and establishing customer relationships with such companies. Some of our product development programs are partially funded by our customers. We are also engaged in negotiations with other potential customers regarding possible product development relationships. Our research and development expenses for the years ended December 31, 2008, 2007 and 2006, were \$1.0 million, \$1.1 million, and \$1.0 million, respectively.

### **Manufacturing**

We currently own and operate a 166,000 square foot manufacturing facility in Pyongtaek, South Korea, which became operational in the third quarter of 2002. We believe that the facility will meet our anticipated manufacturing needs for the foreseeable future, although these needs may change depending upon the actual and forecasted orders we receive for our products. We currently intend to develop supplemental research and development, prototyping and manufacturing capabilities elsewhere, including the United States, for purposes of meeting our long-term manufacturing needs and our customers' requirements.

In June 2006, we entered into a joint venture agreement with SAGA, SpA in Padova, Italy, ("SAGA") a specialist precision parts manufacturer. The joint venture is named Liquidmetal SAGA Italy, Srl ("LSI"), under which LSI is currently acting as a contract manufacturer to our company for the purpose of producing prototypes and certain products in Europe. In June 2007, we entered into a licensing agreement with Liquidmetal Korea Co. Ltd, a South Korean company, a 10-year exclusive license to manufacture Liquidmetal alloys for customers whose principal headquarters or major operations are based in South Korea.

### **Raw Materials**

Liquidmetal alloy compositions are comprised of many elements, all of which are available commodity products. We believe that each of these raw materials is readily available in sufficient quantities from multiple sources on commercially acceptable terms. However, any substantial increase in the price or interruption in the supply of these materials could have an adverse effect on our profitability.

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### **Customers**

During 2008, two customers, Grant Prideco and Liquidmetal Korea, accounted for 10% or more of our revenues from continuing operations. During 2007, two customers, Grant Prideco and Liquidmetal Korea, accounted for 10% or more of our revenue from continuing operations. During 2006, one customer, Flextronics Manufacturing LTD, who is a direct supplier to SanDisk, accounted for 10% or more of our revenue from continuing operations. We expect that a significant portion of our revenue may continue to be concentrated in a limited number of customers, even as our bulk Liquidmetal alloy business grows.



## Competition

We are not aware of any other company or business that manufactures, markets, distributes, or sells bulk amorphous alloys or products made from bulk amorphous alloys. We believe it would be difficult to develop a competitive bulk amorphous alloy without infringing our patents. However, our bulk Liquidmetal alloys face competition from other materials, including metals, alloys, plastics and composites, which are currently used in the commercial applications that we pursue. For example, we face significant competition from plastics and zinc in our electronics components business, and titanium and composites will continue to be used widely in medical devices and sporting goods. Based on our experience with developing products for a variety of customers, we believe that the selection of materials by potential customers will continue to be product-specific in nature, with the decision for each product being driven primarily by the performance needs of the application and secondarily by cost considerations and design flexibility. Because of the relatively high strength of our alloys and the design flexibility of our process, we are most competitive when the customer is seeking a higher strength as well as greater design flexibility than currently available with other materials. However, if currently available materials, such as plastics, are strong enough for the application, our alloys are often not competitive those applications with respect to price. We also believe that our alloys are generally not competitive with the cost of some of the basic metals, such as steel, aluminum or copper, when such basic metals can be used in specific applications, but our alloys are generally more competitive with price on more exotic metals, such as titanium. Our alloys could also face competition from new materials that may be developed in the future, including new materials that could render our alloys obsolete.

Our Liquidmetal alloy coatings face competition from industrial coatings currently manufactured or sold by other companies. At present, the primary competitors of our coatings business are Varco International, Inc. and Arnco Technology Trust, Limited. Although we believe, based on market data gathered by us, that our coatings compete favorably with these companies' products and that we continue to maintain the dominant market share with respect to protective coatings for oil drill pipe and casings, these competitors are larger well-established businesses that have substantially greater financial, marketing, and other resources than we do.

We will also experience indirect competition from the competitors of our customers. Because we will rely on our customers to market and sell finished goods that incorporate our components or products, our success will depend in part on the ability of our customers to effectively market and sell their own products and compete in their respective markets.

## Backlog

In our bulk alloy segment, because of the minimal lead-time associated with orders of bulk alloy parts, we generally do not carry a significant backlog. In our coatings segment, we typically ship our coating products shortly after receipt of an order, and our coatings backlog is therefore also insignificant. In both our bulk alloy segment and coatings segment, the backlog as of any particular date gives no indication of actual sales for any succeeding period.

## Sales and Marketing

We direct our marketing efforts towards customers that will incorporate our components and products into their finished goods. To that end, we will continue to hire business development personnel who, in conjunction with engineers and scientists, will actively identify potential customers that may be able to benefit from the introduction of Liquidmetal alloys to their products. In some cases, we will develop applications in conjunction with existing or potential customers. By adopting this strategy, we intend to take advantage of the sales and marketing forces and distribution channels of our customers to facilitate the commercialization of our alloys. We also direct business development efforts toward companies who we believe could be viable candidates for potential partnering transactions, such as licensing relationships, distribution arrangements, joint ventures, and the like.

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## Employees

As of December 31, 2008, we had 52 full-time and 21 part-time employees. As of that date, none of our employees were represented by a labor union. We have not experienced any work stoppages and we consider our employee relations to be favorable.

## Governmental Regulation

Medical instruments incorporating our Liquidmetal alloys will be subject to regulation in the United States by the FDA and corresponding state and foreign regulatory agencies. Any orthopedic devices that we develop will be regulated in a similar manner. Medical device manufacturers to whom we intend to sell our products may need to obtain FDA approval before marketing their medical devices that incorporate our products. Medical device manufacturers may need to obtain similar approvals before marketing these medical device products in foreign countries.

Because we intend to sell our medical device products to medical device manufacturers, we do not believe that we will need to obtain FDA approval or similar foreign approvals before selling products to medical device manufacturers. Nonetheless, as a manufacturer of medical device components, we would be subject to quality control and record keeping requirements of FDA and other federal and state statutes and regulations, as well as similar regulations in foreign countries.

The process of obtaining and maintaining required FDA and foreign regulatory approvals for medical devices that incorporate our products could be lengthy, expensive, and uncertain for our customers. Additionally, regulatory agencies can delay or prevent product introductions. Generally, before a medical device manufacturer can market a product incorporating one of our products, our customer must obtain for their finished product marketing clearance through a 510(k) premarket notification or approval of a pre-market approval application, or PMA. The FDA will typically grant a 510(k) clearance if the applicant can establish that the device is substantially equivalent to a predicate device. It generally takes a number of months from the date of a 510(k) submission to obtain clearance, but it may take longer, particularly if a clinical trial is required.

The FDA may find that a 510(k) is not appropriate for a medical device that incorporates our product or that substantial equivalence has not been shown and as a result will require a PMA. A PMA application must be submitted if a proposed medical device does not qualify for a 510(k) pre-market clearance procedure. PMA applications must be supported by valid scientific evidence to demonstrate the safety and effectiveness of the device, typically including the results of clinical trials, bench tests, and laboratory and animal studies. The PMA process can be expensive, uncertain and lengthy, requires detailed and comprehensive data, and generally takes significantly longer than the 510(k) process. Additionally, the FDA may never approve the PMA.

Similar regulations in foreign countries vary significantly from country to country and with respect to the nature of the particular medical device. The time required to obtain these foreign approvals to market our products may be longer or shorter than that required in the United States, and requirements for such approval may differ from FDA requirements.

## **Environmental Law Compliance**

Our manufacturing operations are subject to national, state, and local environmental laws in each of South Korea and the United States. We believe that we are in material compliance with all applicable environmental regulations. While we continue to incur costs to comply with environmental regulations, we do not believe that such costs will have a material effect on our capital expenditures, earnings, or competitive position.

## **Item 1A. Risk Factors**

This report contains forward-looking statements (within the meaning of the Private Securities Litigation Reform Act of 1995) that are based on management's current expectations, estimates, forecasts, and projections about the Company and its business. In addition, other written or oral statements which constitute forward-looking statements may be made from time to time by or on behalf of Liquidmetal Technologies, Inc. Any statement in this report that is not a statement of historical fact is a forward-looking statement, and in some cases, words such as "believe," "estimate," "project," "expect," "intend," "may," "anticipate," "plans," "seeks," and similar expressions identify forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or result. These statements are not guarantees of future performance, and undue reliance should not be placed on these statements. Liquidmetal Technologies, Inc. undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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Factors that could cause actual results to differ materially from what is expressed or forecasted in our forward-looking statements include, but are not limited to, the following:

#### **We have incurred significant operating losses in the past and may not be able to achieve or sustain profitability in the future.**

We have experienced significant operating losses since our inception. Our net loss for the fiscal years ended December 31, 2008, 2007 and 2006, was \$6.6 million, \$5.6 million, and \$14.5 million, respectively. We had an accumulated deficit of approximately \$162.3 million at December 31, 2008. Of this accumulated deficit, \$44.5 million was attributable to losses generated by our discontinued equipment manufacturing and retail golf operations. We anticipate that we may continue to incur operating losses for the foreseeable future. Consequently, it is possible that we may never achieve positive earnings and, if we do achieve positive earnings, we may not be able to achieve them on a sustainable basis.

#### **We may require additional funding, which may not be available on favorable terms or at all.**

Our future capital requirements will depend on the amount of cash generated by our operations. Our projections of cash flows from operations and, consequently, future cash needs are subject to substantial uncertainty. In addition, in our audit report on our financial statements for our fiscal years ended December 31, 2008 and 2007, our auditors included a going-concern qualification indicating that our significant operating losses and working capital deficit cause substantial doubt about our ability to continue as a going concern. By issuing an opinion stating that there is substantial doubt about our ability to continue as a going concern, our auditors have indicated that they are uncertain as to whether we have the capability to continue our operations without additional funding.

We anticipate that we will not have sufficient funds to pursue our current operating plan beyond the first quarter of 2009 and we will therefore require additional funding. We are actively seeking additional sources of capital and seeking to restructure and/or modify existing indebtedness. The amount of funding that we seek and the timing of such fundraising efforts will depend on the extent to which we are able to increase revenues through obtaining additional purchase orders for our products and/or the extent to which we can restructure or modify our debt. Because we cannot be certain that we will be able to obtain adequate funding from debt, equity, or other traditional financing sources, we are also actively exploring several strategic financing options, including the possible sale of our manufacturing plant in South Korea (which would then be replaced with a smaller facility) and additional licensing and outsourcing of our manufacturing operations. We cannot guarantee that adequate funds will be available when needed, and if we do not receive sufficient capital, we may be required to alter or reduce the scope of our operations. If we raise additional funds by issuing equity securities, existing stockholders may be diluted. In addition, if shares of our common stock or securities convertible into or exercisable for our common stock are issued in consideration of such funds at an effective per share price lower than the conversion and exercise prices of our currently outstanding convertible notes and warrants, then anti-dilution provisions in such convertible notes and warrants would be triggered, thus possibly causing even greater dilution of our then-existing stockholders if the notes are converted or the warrants are exercised. See "RISK FACTORS— Our convertible notes and warrants contain anti-dilution provisions that, if triggered, could cause substantial dilution to our then-existing stockholders."

#### **We have a limited history of developing, manufacturing, and selling products made from our bulk amorphous alloys.**

We have marketed and sold industrial coatings to distributors in the coatings industry since 1987. Prior to the third quarter of 2002, our experience selling products made from bulk amorphous alloys has been limited to our discontinued retail golf business, which had a different marketing strategy than the one we are currently employing. Therefore, we have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production basis. Furthermore, our ability to produce our products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of our control, including the nature and design of the component, the customer's specifications, and required delivery timelines.

#### **We rely on assumptions about the markets for our products and components that, if incorrect, may adversely affect our profitability.**

We have a relatively short history producing bulk amorphous alloy components on a mass-production basis. We have made assumptions regarding the market size for, and the manufacturing requirements of, our products and components based in part on information we received from third parties and also from our limited history. If these assumptions prove to be incorrect, we may not achieve anticipated revenue targets or profitability.

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**If we cannot establish and maintain relationships with customers that incorporate our components and products into their finished goods, we will not be able to increase our revenue and commercialize our products.**

Our business is based upon the commercialization of a new and unique materials technology. Our ability to increase our revenues will depend on our ability to successfully maintain and establish relationships with customers who are willing to incorporate our proprietary alloys and technology into their finished products. However, we believe that the size of our company and the newness of our technology and manufacturing process may continue to make it challenging to maintain and establish such relationships. In addition, we rely and will continue to rely to a large extent on the manufacturing, research, and development capabilities, as well as the marketing and distribution capabilities, of our customers in order to commercialize our products. Our future growth and success will depend in large part on our ability to enter into these relationships and the subsequent success of these relationships. If our products are selected for use in a customer's products, we still may not realize significant revenue from that customer if that customer's products are not commercially successful.

**It may take significant time and cost for us to develop new customer relationships, which may delay our ability to generate additional revenue or achieve profitability.**

Our ability to generate revenue from new customers is generally affected by the amount of time it takes for us to, among other things:

- identify a potential customer and introduce the customer to Liquidmetal alloys;
- work with the customer to select and design the parts to be fabricated from Liquidmetal alloys;
- make the molds and tooling to be used to produce the selected part;
- make prototypes and samples for customer testing;
- work with our customers to test and analyze prototypes and samples; and
- with respect to some types of products, such as medical devices, to obtain regulatory approval.

We currently do not have a sufficient history of selling products made from our bulk amorphous alloys to predict accurately the length of our average sales cycle. We believe that our average sales cycle from the time we deliver an active proposal to a customer until the time our customer fully integrates our bulk amorphous alloys into its product could be a significant period of time. Our history to date has demonstrated that the sales cycle could extend significantly longer than we anticipate. The time it takes to transition a customer from limited production to full-scale production runs will depend upon the nature of the processes and products into which our alloys are integrated. Moreover, we have found that customers often proceed very cautiously and slowly before incorporating a fundamentally new and unique type of material into their products.

**After we develop a customer relationship, it may take a significant amount of time for that customer to develop, manufacture, and sell finished goods that incorporate our components and products.**

Our experience has shown that our customers will perform numerous tests and extensively evaluate our components and products before incorporating them into their finished products. The time required for testing, evaluating, and designing our components and products into a customer's products, and in some cases, obtaining regulatory approval, can take a significant amount of time, with an additional period of time before a customer commences volume production of products incorporating our components and products, if ever. Moreover, because of this lengthy development cycle, we may experience a delay between the time we accrue expenses for research and development and sales and marketing efforts and the time when we generate revenue, if any. We may incur substantial costs in an attempt to transition a customer from initial testing to prototype and from prototype to final product. If we are unable to minimize these transition costs, or to recover the costs of these transitions from our customers, our operating results will be adversely affected.

**A limited number of our customers generate a significant portion of our revenue.**

For the near future, we expect that a significant portion of our revenue will be concentrated in a limited number of customers. For example, for the year ended December 31, 2008, revenues from two customers, Grant Prideco and Liquidmetal Korea, represented approximately 19% of total revenues from continuing operations, for the year ended December 31, 2007, revenues from two customers, Grant Prideco and Liquidmetal Korea, represented approximately 22% of total revenues from continuing operations, and for the year ended December 31, 2006, revenues from one customer, Flextronics Manufacturing LTD, represented approximately 13% of total revenues from continuing operations. Revenues from direct suppliers to SanDisk were approximately 6% and 22% of total revenues for the years ended December 31, 2007 and 2006, respectively. Revenues from direct suppliers to Samsung represented approximately 0%, 12% and 15% of total revenues from continuing operations for the years ended December 31, 2008, 2007 and 2006, respectively. A reduction, delay, or cancellation of orders from one or more of these customers or the loss of one or more customer relationships could significantly reduce our revenue. Unless we establish long-term sales arrangements with these customers, they will have the ability to reduce or discontinue their purchases of our products on short notice.

**We expect to rely on our customers to market and sell finished goods that incorporate our products and components, a process over which we will have little control.**

Our future revenue growth and ultimate profitability will depend in part on the ability of our customers to successfully market and sell their finished goods that incorporate our products. We will have little control over our customers' marketing and sales efforts. These marketing and sales efforts may be unsuccessful for various reasons, any of which could hinder our ability to increase revenue or achieve profitability. For example, our customers may not have or devote sufficient resources to develop, market, and sell their finished goods that incorporate our products. Because we typically will not have exclusive

sales arrangements with our customers, they will not be precluded from exploring and adopting competing technologies. Also, products incorporating competing technologies may be more successful for reasons unrelated to the performance of our customers' products or the marketing efforts of our customers.

**Our growth depends on our ability to identify, develop, and commercialize new applications for our technology.**

Our future growth and success will depend in part on our ability to identify, develop, and commercialize, either alone or in conjunction with our customers, new applications and uses for Liquidmetal alloys. If we are unable to identify and develop new applications, we may be unable to develop new products or generate additional revenue. Successful development of new applications for our products may require additional investment, including costs associated with research and development and the identification of new customers. In addition, difficulties in developing and achieving market acceptance of new products would harm our business.

**We may not be able to effectively compete with current suppliers of incumbent materials or producers of competing products.**

The future growth and success of our bulk amorphous alloy business will depend in part on our ability to establish and retain a technological advantage over other materials for our targeted applications. For many of our targeted applications, we will compete with manufacturers of similar products that use different materials. These different materials may include plastics, titanium alloys, or stainless steel, among others. For example, we have targeted the cellular phone component market as an application for bulk Liquidmetal alloys. In this market, we believe we will compete with other manufacturers of cellular phone components who use plastics or metal to construct their components. These other manufacturers may be able to manufacture their cellular phone components, particularly those made from plastics, at significantly less cost than our alloys. In other markets, we will compete directly with suppliers of the incumbent material. In addition, in each of our targeted markets, our success will depend in part on the ability of our customers to compete successfully in their respective markets. Thus, even if we are successful in replacing an incumbent material in a finished product, we will remain subject to the risk that our customer will not compete successfully in its own market.

**Our bulk amorphous alloy technology is still at an early stage of commercialization relative to many other materials.**

Our bulk amorphous alloy technology is a relatively new technology as compared to many other material technologies, such as plastics and widely-used high-performance crystalline alloys. Historically, the successful commercialization of a new materials technology has required the persistent improvement and refining of the technology over a sometimes lengthy period of time. Accordingly, we believe that our company's future success will be dependent on our ability to

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continue expanding and improving our technology platform by, among other things, constantly refining and improving our manufacturing processes, optimizing our existing amorphous alloy compositions for various applications, and developing and improving new bulk amorphous alloy compositions. Our failure to further expand our technology base could limit our growth opportunities and hamper our commercialization efforts.

**Future advances in materials science could render Liquidmetal alloys obsolete.**

Academic institutions and business enterprises frequently engage in the research and testing of new materials, including alloys and plastics. Advances in materials science could lead to new materials that have a more favorable combination of performance, processing, and cost characteristics than our alloys. The future development of any such new materials could render our alloys obsolete and unmarketable or may impair our ability to compete effectively.

**Our growth depends upon our ability to retain and attract a sufficient number of qualified employees.**

Our business is based upon the commercialization of a new and unique materials technology. Our future growth and success will depend in part on our ability to retain key members of our management and scientific staff, who are familiar with this technology and the potential applications and markets for it. For example, as a result of their experience and knowledge of our alloy technology, we believe that our future growth and success will depend in large part on the efforts of Larry Buffington, our President and Chief Executive Officer. We do not have "key man" or similar insurance on any of these individuals. If we lose their services or the services of other key personnel, our financial results or business prospects may be harmed. Additionally, our future growth and success will depend in part on our ability to attract, train, and retain scientific engineering, manufacturing, sales, marketing, and management personnel. We cannot be certain that we will be able to attract and retain the personnel necessary to manage our operations effectively. Competition for experienced executives and scientists from numerous companies and academic and other research institutions may limit our ability to hire or retain personnel on acceptable terms. In addition, many of the companies with which we compete for experienced personnel have greater financial and other resources than we do. Moreover, the employment of non-citizens may be restricted by applicable immigration laws.

**We may not be able to successfully identify, consummate, or integrate strategic partnerships.**

As a part of our business strategy, we intend to pursue strategic partnering transactions that provide access to new technologies, products, markets, and manufacturing capabilities. These transactions could include licensing agreements, joint ventures, or even business combinations. We believe that these transactions will be particularly important to our future growth and success due to the size and resources of our company and the newness of our technology. For example, we may determine that we may need to license our technology to a larger manufacturer in order to penetrate a particular market. In addition, we may pursue transactions that will give us access to new technologies that are useful in connection with the composition, processing, or application of Liquidmetal alloys. We may not be able to successfully identify any potential strategic partnerships. Even if we do identify one or more potentially beneficial strategic partnering, we may not be able to consummate these transactions on favorable terms or obtain the benefits we anticipate from such a transaction.

**We may encounter manufacturing problems or delays or may be unable to produce high-quality products at acceptable costs.**

We have relatively limited experience in manufacturing our products and may be required to manufacture a range of products in high volumes while ensuring high quality and consistency. Although we currently own and operate a 166,000 square foot manufacturing facility in South Korea, we cannot guarantee that the facility will be able to produce the intended products with production yields, quality controls, and production costs that provide us with acceptable margins or profitability or satisfy the requirements of our customers.

**We expect to derive a substantial portion of our revenue from sales outside the United States, and problems associated with international business operations could affect our ability to manufacture and sell our products.**

We expect that we will continue to manufacture a substantial portion of our initial bulk Liquidmetal alloy products in our South Korean facility and derive a material portion of our revenues from customers in South Korea and revenues from products manufactured by our licensing partner in China. For our fiscal years ended December 31, 2008, 2007 and 2006, approximately 5%, 27% and 12%, of our revenues came from customers located in South Korea, respectively. As a result, our manufacturing operations and financial results are subject to risks of political instability,

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including the risk of conflict between North Korea and South Korea and tensions between the United States and North Korea. In addition, we anticipate that the trend of foreign customers accounting for a significant portion of our total revenues may continue. Specifically, we expect to continue to derive a significant amount of revenue from sales to customers located in Asia. A downturn in the economies of Asian countries where our products will be sold, particularly South Korea's economy, could materially harm our business.

Consequently, our operations and revenue likely will be subject to a number of risks associated with foreign commerce, including:

- staffing and managing our manufacturing facility located in South Korea;
- product or material transportation delays or disruption, including the availability and costs of air and other transportation between our South Korean facility and the United States;
- political and economic instability, including instability involving China and North Korea that may disrupt our operations in South Korea;
- potentially adverse tax consequences, which may reduce the profitability of products manufactured overseas or sold to overseas customers;
- burden of complying with complex foreign laws and treaties, which could limit our ability to conduct our business as contemplated in South Korea; and
- trade protection laws, policies, and measures and other regulatory requirements affecting trade and investment that could adversely affect the profitability of our South Korean Operations, including loss or modification of exemptions for taxes and tariffs.

Moreover, customers may sell finished goods that incorporate our components and products outside of the United States, which exposes us indirectly to additional foreign commerce risks.

**A substantial increase in the price or interruption in the supply of raw materials for our alloys could have an adverse effect on our profitability.**

Our proprietary alloy compositions are comprised of many elements, all of which are available commodity products. Although we believe that each of these raw materials is currently readily available in sufficient quantities from multiple sources on commercially acceptable terms, if the prices of these materials substantially increase or there is an interruption in the supply of these materials, such increase or interruption could adversely affect our profitability. For example, if the price of one of the elements included in our alloys substantially increases, we may not be able to pass the price increase on to our customers.

**We rely on our suppliers for mold making and manufacture of our bulk amorphous alloy parts.**

We have outsourced much of our mold making and manufacturing of our bulk amorphous alloy parts. Therefore, our revenue growth is dependent on our ability to obtain sufficient manufacturing capacity. Our suppliers may allocate their limited capacity to fulfill the production requirements of other customers. In the event of a disruption of the operations of our suppliers, we may not have a secondary manufacturing source immediately available. Such an event could cause significant delays in shipments and may adversely affect our cost of goods sold and our results of operations.

**Our business is subject to the potential adverse consequences of exchange rate fluctuations.**

We expect to conduct business in various foreign currencies and will be exposed to market risk from changes in foreign currency exchange rates and interest rates. Fluctuations in exchange rates between the U.S. dollar and such foreign currencies may have a material adverse effect on our business, results of operations, and financial condition and could specifically result in foreign exchange gains and losses. The impact of future exchange rate fluctuations on our operations cannot be accurately predicted. To the extent that the percentage of our non-U.S. dollar revenue derived from international sales increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates will increase further. Moreover, as a result of operating a manufacturing facility in South Korea, a substantial portion of our costs are and will continue to be denominated in the South Korean won. Adverse changes in the exchange rates of the South Korean won to the U.S. dollar will affect our costs of goods sold and operating margins

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and could result in exchange losses. The average foreign exchange rates for the years ended December 31, 2008, 2007 and 2006 were 1,103, 935 and 967 South Korean Won to the U.S. dollar, respectively. The fluctuations in the exchange rates resulted in foreign currency translation (loss) gains of (\$1.8) million, \$0.2 million and \$0.3 million for the years ended December 31, 2008, 2007 and 2006, respectively.

**Our inability to protect our licenses, patents, and proprietary rights in the United States and foreign countries could harm our business because third parties may take advantage of our research and development efforts.**

We have an exclusive license from the California Institute of Technology, or Caltech, to several patents and patent applications relating to amorphous alloy technology, and we have obtained several of our own patents. Our success depends in part on our ability to obtain and maintain patent and other proprietary



right protection for our technologies and products in the United States and other countries. If we are unable to obtain or maintain these protections, we may not be able to prevent third parties from using our proprietary rights. Specifically, we must:

- protect and enforce our owned and licensed patents and intellectual property;
- exploit our patented technology (owned and licensed); and
- operate our business without infringing on the intellectual property rights of third parties.

Our licensed technology comprises several issued United States patents covering the composition and method of manufacturing of the family of Liquidmetal alloys. We also hold several United States and corresponding foreign patents covering the manufacturing processes of Liquidmetal alloys and their use. The patents relating to our coatings have various expiration dates until 2022, and those relating to our bulk amorphous alloys have expiration dates between 2013 and 2025. We continue to hold other coatings related patents; however, if we are unable to protect our proprietary rights prior to the expiration of these patents, we may lose the advantage we have established as being the first to market bulk amorphous alloy products. In addition, the laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and we may encounter significant problems and costs in protecting our proprietary rights in these foreign countries.

Patent law is still evolving relative to the scope and enforceability of claims in the fields in which we operate. Our patent protection involves complex legal and technical questions. Our patents and those patents for which we have license rights may be challenged, narrowed, invalidated, or circumvented. We may be able to protect our proprietary rights from infringement by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. Furthermore, others may independently develop similar or alternative technologies or design around our patented technologies. Litigation or other proceedings to defend or enforce our intellectual property rights could require us to spend significant time and money and could otherwise adversely affect our business.

**Other companies may claim that we infringe their intellectual property rights, which could cause us to incur significant expenses or prevent us from selling our products.**

Our success depends, in part, on our ability to operate without infringing on valid, enforceable patents or proprietary rights of third parties and not breaching any licenses that may relate to our technology and products. Future patents issued to third parties may contain claims that conflict with our patents and that compete with our products and technologies, and third parties could assert infringement claims against us. Any litigation or interference proceedings, regardless of their outcome, may be costly and may require significant time and attention of our management and technical personnel. Litigation or interference proceedings could also force us to:

- stop or delay using our technology;
- stop or delay our customers from selling, manufacturing or using products that incorporate the challenged intellectual property;
- pay damages; or
- enter into licensing or royalty agreements that may be unavailable on acceptable terms.

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**Our level of indebtedness reduces our financial flexibility and could impede our ability to operate.**

As of December 31, 2008, our long-term debt was \$22.7 million, net of debt discount of \$7.1 million, including the current portion of such debt. Our long-term debt (including the current portion) includes the following:

- \$0.2 million in principal outstanding under our Korean subsidiary's loan from Kookmin Bank of South Korea;
- \$19.1 million in principal outstanding under the 8% Convertible Subordinated Notes due January 2010 (the "January 2010 Notes") issued in our January 3, 2007 private placement, as amended;
- \$1.0 million in principal outstanding under the 8% Unsecured Subordinated Notes issued in May 2006, September 2006, and December 2006 private placements;
- \$2.7 million in principal outstanding under the Bank Midwest term loan issued in July 2007;
- \$0.1 million in principal outstanding under the Bank Midwest capital loans issued in August 2007 and October 2008; and
- \$6.7 million in principal outstanding under the C3 Capital Partners Subordinated Promissory Notes due July 2012 issued in July 2007.

As of December 31, 2008, our short-term debt was \$1.2 million. Our short-term debt included the following:

- \$0.6 million in outstanding advances received under a factoring, loan, and security agreement executed in April 2005, as amended, with a financing company; and
- \$0.6 million in outstanding advances received under a revolving loan from Bank Midwest issued in July 2007.

Under our loan from Kookmin Bank, we are obligated to make equal monthly payments of principal and interest of \$0.1 million each through the period ending in February 2008. As of December 31, 2008 and as of the filing of this report, we have approximately \$0.2 million of principal and accrued interest outstanding. Under our January 2010 Notes we are required to make cash interest payments to the noteholders of \$0.6 million per quarter until such notes are converted or paid.

The \$1.0 million in aggregate principal amount under the 8% Unsecured Subordinated Notes became due in August 2007, and \$19.1 million in aggregate principal amount under our January 2010 Notes became due beginning September 30, 2008 through January 3, 2010.

Our level of debt affects our operations in several important ways, including the following:

- a significant portion of our cash flow from operations is likely to be dedicated to the payment of the principal of and interest on our indebtedness;
- we may be unable to refinance our indebtedness on terms acceptable to us or at all;
- our cash flow may be insufficient to meet our required principal and interest payments; and
- we may be unable to obtain additional loans as a result of covenants and agreements with existing debt holders.

In addition, our convertible notes and related documents contain restrictive covenants pursuant to which we generally may not incur any indebtedness that would be senior to, or on the same rank as, the convertible notes with respect to payment or security. These covenants may curtail our ability to raise capital in the future or otherwise restrict our ability to enter into a transaction that we believe would be in the best interest of our stockholders.

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### **We are in default under various debt obligations.**

We have approximately \$1.2 million of principal and accrued interest outstanding as of December 31, 2008, under the 8% unsecured subordinated notes ("Bridge Notes"), which were due August 17, 2007. We intend to fully repay the amounts due under Bridge Notes. However, as of the filing of this report we do not have sufficient funds to repay the Bridge Notes. As a result, we are currently in default under the Bridge Notes. Such defaults may have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with investors holding our Bridge Notes by seeking a forbearance until we are able to obtain funding to repay the Bridge Notes, although there is no assurance that we will be able to obtain any such funding.

We were required under our amended Security Purchase Agreement, dated April 23, 2007, between our company and holders of our 8% convertible subordinated notes due January 2010 (the "January 2010 Notes"), to repay outstanding debt under previously issued promissory notes, including the Bridge Notes ("Debt Satisfaction Covenant") by October 1, 2007. As we have not yet fully repaid our Bridge Notes, we are in default under the January 2010 Notes under the Debt Satisfaction Covenant. Further, we were required, beginning September 30, 2008 and at the end of each month thereafter, to redeem 1/32nd of the principal amount of the January 2010 Notes. An aggregate payment equal to \$0.6 million was due September 30, 2008. However, we did not have sufficient funds to make this payment, and, accordingly, we are in default under the January 2010 Notes.

The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. As of the filing of this report, we have received a formal notice of default and we are currently working to resolve this matter. The outstanding principal due under the January 2010 Notes of \$19.1 million is included in current portion of long-term debt and accrued interest and fees of \$1.0 million is included in accounts payable and accrued expenses as of December 31, 2008. Such defaults may have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with investors holding our January 2010 Notes by a combination of seeking to amend the terms of certain January 2010 Notes held by persons indicating a willingness to do so and seeking to sell certain assets of our company in order to fund payments under the January 2010 Notes. However, there is no assurance that we will be able to sell sufficient assets or complete such amendments as may be necessary to bring the company out of default.

Additionally, approximately \$0.2 million of principal and accrued interest became due from our Korean subsidiary under a loan from Kookmin Bank of South Korea in August 2008. However, as of the filing of this report we did not have sufficient funds to repay the loan and we have received a formal notice of default. Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of our manufacturing plant facility and certain equipment in South Korea. The foreclosure of our manufacturing plant facility and equipment in South Korea would have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with Kookmin Bank by seeking a forbearance until we are able to obtain funding to repay this loan, although there is no assurance that we will be able to obtain any such funding.

### **Evolving regulation of corporate governance and public disclosure may result in additional expenses and continuing uncertainty.**

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002 and new SEC regulations, are creating uncertainty for public companies. As a result of these new rules and the size and limited resources of our company, we will incur additional costs associated with our public company reporting requirements, and we may not be able to comply with some of these new rules. For example, we were not able to comply with Section 404 of the Sarbanes-Oxley Act of 2002 for our 2005 and 2004 fiscal years. In addition, these new rules could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and this could make it difficult for us to attract and retain qualified persons to serve on our board of directors.

We are presently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs. These new or changed laws, regulations, and standards are subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from

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revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and we may be harmed.

### **The time and cost associated with complying with government regulations to which we could become subject could have a material adverse effect on our business.**

Some of the applications that we have identified or may identify in the future may be subject to government regulations. For example, any medical devices such as precision ophthalmic instruments and orthopedic devices made from our alloys likely will be subject to extensive government regulation in the United States by the Food and Drug Administration, or FDA. Any medical device manufacturers to whom we sell Liquidmetal alloy products may need to comply with FDA requirements, including premarket approval or clearance under Section 510(k) of the Food Drug and Cosmetic Act before marketing in the United States Liquidmetal alloy medical device products. These medical device manufacturers may be required to obtain similar approvals before marketing these medical devices in foreign countries. Any medical device manufacturers with which we jointly develop and sell medical device products may not provide significant assistance to us in obtaining required regulatory approvals. The process of obtaining and maintaining required FDA and foreign regulatory approvals could be lengthy, expensive, and uncertain. Additionally, regulatory agencies can delay or prevent product introductions. The failure to comply with applicable regulatory requirements can result in substantial fines, civil and criminal penalties, stop sale orders, loss or denial of approvals, recalls of products, and product seizures.

In addition, the processing of beryllium, a minor constituent element of some of our alloys, can result in the release of beryllium into the workplace and the environment and in the creation of beryllium oxide as a by-product. Beryllium is classified as a hazardous air pollutant, a toxic substance, a hazardous substance, and a probable human carcinogen under environmental, safety, and health laws, and various acute and chronic health effects may result from exposure to beryllium. We are required to comply with certain regulatory requirements and to obtain a permit from the U.S. Environmental Protection Agency or other government agencies to process beryllium. Our failure to comply with present or future governmental regulations related to the processing of beryllium could result in suspension of manufacturing operations and substantial fines or criminal penalties.

To the extent that our products have the potential for dual use, such as military and non-military applications, they may be subject to import and export restrictions of the U.S. government, as well as other countries. The process of obtaining any required U.S. or foreign licenses or approvals could be time-consuming, costly, and uncertain. Failure to comply with import and export regulatory requirements can lead to substantial fines, civil and criminal penalties, and the loss of government contracting and export privileges.

### **The existence of minority stockholders in our Liquidmetal Coatings and Liquidmetal Golf subsidiaries creates potential for conflicts of interest.**

We directly own 69.25% of outstanding common membership units of Liquidmetal Coatings, LLC, our subsidiary that has exclusive right over industrial coatings market and 79% of the outstanding capital stock of Liquidmetal Golf, our subsidiary that has the exclusive right to commercialize our technology in the golf market. The remaining 30.75% of Liquidmetal Coatings, LLC common membership units are owned by 4 members and the remaining 21% of Liquidmetal Golf stock is owned by approximately 95 stockholders of record. As a result, conflicts of interest may develop between us and the minority members of Liquidmetal Coatings and stockholders of Liquidmetal Golf. To the extent that our officers and directors are also officers or directors of Liquidmetal Coatings and Liquidmetal Golf, matters may arise that place the fiduciary duties of these individuals in conflicting positions. John Kang, our Chairman, is also a member of the Board of Liquidmetal Coatings and of Liquidmetal Golf.

### **Our stock price has experienced volatility and may continue to experience volatility.**

During 2008, the highest bid price for our common stock was \$0.75 per share, while the lowest bid price during that period was \$0.06 per share. The trading price of our common stock could continue to fluctuate widely due to:

- quarter-to-quarter variations in results of operations;
- loss of a major customer;
- announcements of technological innovations by us or our potential competitors;

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- changes in, or our failure to meet, the expectations of securities analysts;
- new products offered by us or our competitors;
- announcements of strategic relationships or strategic partnerships; or
- other events or factors that may be beyond our control.

In addition, the securities markets in general have experienced extreme price and trading volume volatility in the past. The trading prices of securities of many companies at our stage of growth have fluctuated broadly, often for reasons unrelated to the operating performance of the specific companies. These general market and industry factors may adversely affect the trading price of our common stock, regardless of our actual operating performance. If our stock price is volatile, we could face securities class action litigation, which could result in substantial costs and a diversion of management's attention and resources and could cause our stock price to fall.

### **Our convertible notes and warrants contain anti-dilution provisions that, if triggered, could cause substantial dilution to our then-existing stockholders.**

The convertible notes and warrants issued in our January 2007 private placement contain “full-ratchet” anti-dilution rights. As a result of these anti-dilution rights, under our January 2010 Notes, if we issue or grant in the future any rights to purchase any of our common stock, or other security convertible into our common stock, for an effective per share price less than the conversion price then in effect, the conversion price of all unconverted January 2010 Notes will be decreased to equal such lower price. With regard to the warrants issued in connection with the January 2010 Notes, if we, in the future, issue or grant any rights to purchase any of our common stock, or other security convertible into our common stock, for a per share price less than the conversion price of the January 2010 Notes then in effect, the exercise price of the warrants will be reduced to equal such lower price and the number of shares of our common stock for which the warrants may be exercised will be increased so that the total aggregate exercise price remains constant. The foregoing adjustments to the conversion price of the notes and the exercise price of the warrants will not apply to certain exempt issuances, including issuances pursuant to employee stock option plans and strategic transactions

In addition to the above-described full-ratchet anti-dilution rights, certain other notes and warrants previously issued by us contain “weighted-average” anti-dilution provisions. As of December 31, 2006, we had warrants to purchase 973,064 shares at an exercise price of \$2.58 per share, and warrants to purchase 3,777,714 shares at an exercise price of \$2.00 per share, each of which notes and warrants contain weighted-average anti-dilution provisions. Under these provisions, if we issue shares in the future for consideration below the conversion or exercise prices then in effect, then (with certain exceptions, including the issuance of stock options) the conversion price for our convertible notes would automatically be reduced (allowing the holders of the notes to receive additional shares of common stock upon conversion) and the exercise price of the warrants would automatically be reduced (with a corresponding increase in the number of shares issuable pursuant to such warrants). To illustrate the impact of these weighted-average anti-dilution provisions, because of the issuance of the January 2010 Notes in January 2007 and the reduction of the conversion price of certain previously issued convertible notes in February 2007, the above-described warrants outstanding as of December 31, 2006 have been adjusted to represent warrants to purchase 860,521 shares at an exercise price of \$2.07 per share, and warrants to purchase 4,845,600 shares at an exercise price of \$1.72 per share as of December 31, 2007. Thus, an aggregate of 955,343 additional shares of our common stock have become issuable pursuant to such previously granted warrants as a result of the operation of these weighted-average anti-dilution provisions. It is also possible that a future triggering of the full-ratchet anti-dilution rights in our January 2010 Notes could result in a corresponding triggering of the above-described weighted-average anti-dilution provisions in the other notes and warrants.

If our available funds and cash generated from operations are insufficient to satisfy our liquidity requirements in the future, then we may need to raise substantial additional funds in the future to support our working capital requirements and for other purposes. If shares of our common stock or securities convertible into or exercisable for our common stock are issued in consideration of such funds at an effective per share price lower than the conversion and exercise prices of our convertible notes and warrants, then these anti-dilution provisions would be triggered, thus possibly causing substantial dilution to our then-existing stockholders if the notes are converted or the warrants are exercised. Further, subsequent sales of the shares in the public market could depress the market price of our stock by creating an excess in supply of shares for sale.

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**We have never paid dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future.**

We have paid no cash dividends on our common stock to date. We currently intend to retain our future earnings, if any, to fund the development and growth of our businesses, and upon the completion of this offering, we do not anticipate paying any cash dividends on our capital stock for the foreseeable future. In addition, the terms of existing or any future debts may preclude us from paying dividends on our stock. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

**Antitakeover provisions of our certificate of incorporation and bylaws and provisions of applicable corporate law could delay or prevent a change of control that you may favor.**

Provisions in our certificate of incorporation, our bylaws, and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders. These provisions could discourage potential takeover attempts and could adversely affect the market price of our shares. Because of these provisions, you might not be able to receive a premium on your investment. These provisions:

- authorize our board of directors, without stockholder approval, to issue up to 10,000,000 shares of “blank check” preferred stock that could be issued by our board of directors to increase the number of outstanding shares and prevent a takeover attempt;
- limit stockholders’ ability to call a special meeting of our stockholders;
- provide for a classified board of directors; and
- establish advance notice requirements to nominate directors for election to our board of directors or to propose matters that can be acted on by stockholders at stockholder meetings.

The provisions described above could delay or make more difficult transactions involving a change in control of us or our management.

**Item 1B. Unresolved Staff Comments**

None

**Item 2. Properties**

Our principal executive offices and principal research and development offices are located in Rancho Santa Margarita, California and consist of approximately 15,000 square feet. This facility is occupied pursuant to a lease agreement that expires in April 20, 2012.

In Kingwood, Texas, we lease an office for our coatings business segment. This facility, which is approximately 432 square feet, is leased through August 1, 2012.

In Huntsville, Texas, we lease a warehouse for our coatings business segment. This facility, which is approximately 4,500 square feet, is leased through August 1, 2012.

In Dothan, Alabama, we lease an application facility for our coatings business segment. This facility, which is approximately 5,000 square feet, is leased through June 30, 2010.

Our principal prototyping and manufacturing facility is in Pyongtaek, South Korea, and consists of approximately 166,000 square feet. We lease the land on which this facility is located, although we own the buildings, fixtures, and all personal property located on the land. The parcel of land consists of approximately four acres and is leased through 2022.

We currently expect that the foregoing facilities will meet our anticipated internal manufacturing, research, warehousing, and administrative needs for the foreseeable future.

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### Item 3. Material Legal Proceedings

None

### Item 4. Submission of Matters to a Vote of Security Holders

None

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## PART II

### Item 5. Market For Registrant's Common Equity and Related Stockholder Matters

Our common stock is currently quoted on the OTC Bulletin Board under the symbol "LQMT." On April 3, 2009, the last reported sales price of our common stock was \$0.27 per share. As of April 3, 2009, we had 248 record holders of our common stock.

The following table sets forth, on a per share basis, the range of high and low bid information for the shares of our common stock for each full quarterly period within the two most recent fiscal years and any subsequent interim period for which financial statements are included. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

2008	High	Low
Fourth Quarter	\$ 0.33	\$ 0.06
Third Quarter	\$ 0.57	\$ 0.20
Second Quarter	\$ 0.75	\$ 0.50
First Quarter	\$ 0.75	\$ 0.53
2007	High	Low
Fourth Quarter	\$ 0.72	\$ 0.68
Third Quarter	\$ 0.81	\$ 0.76
Second Quarter	\$ 0.86	\$ 0.84
First Quarter	\$ 1.01	\$ 0.96

We have never paid a cash dividend on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future, and we plan to retain our earnings to finance future growth.

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### Item 6. Selected Consolidated Financial Data

The following table shows our selected consolidated financial data as of and for the years ended December 31, 2004 through 2008.

	For the Years Ended December 31,				
	2008	2007	2006	2005 (Restated)	2004 (Restated)
	(in thousands, except per share data)				
<b>Consolidated Statement of Operations Data:</b>					
Revenue	\$ 22,083	\$ 29,022	\$ 27,669	\$ 16,365	\$ 17,429
Cost of sales	17,131	26,459	22,418	15,129	12,168
Gross profit	4,952	2,563	5,251	1,236	5,261
Operating expenses:					
Selling, general and administrative expenses	6,529	8,921	9,962	8,534	11,591
Research and development expenses	1,022	1,123	950	1,120	1,467



Impairment of long-lived assets	132	—	—	4,487	—
Total operating expenses	7,683	10,044	10,912	14,141	13,058
Loss before interest, other income, income taxes, minority interest and discontinued operations	(2,731)	(7,481)	(5,661)	(12,905)	(7,797)
Loss from extinguishments of debt	—	(648)	—	(1,247)	(2,941)
Change in value of warrants, gain	1,890	4,923	279	3,985	747
Change in value of conversion feature, gain (loss)	1,987	6,965	(226)	9,118	2,093
Other expense	(17)	—	—	—	—
Other income	429	226	572	—	302
Interest expense	(7,712)	(9,364)	(9,509)	(6,021)	(6,577)
Interest income	3	123	23	17	37
Loss before income taxes, minority interest and discontinued operations	(6,151)	(5,256)	(14,522)	(7,053)	(14,136)
Income taxes	—	—	—	—	—
Minority interests	(421)	(384)	—	—	—
Loss from continuing operations	(6,572)	(5,640)	(14,522)	(7,053)	(14,136)
Loss from operations of discontinued operations, net	—	—	—	—	(749)
Net loss	\$ (6,572)	\$ (5,640)	\$ (14,522)	\$ (7,053)	\$ (14,885)
Loss per share from continuing operations - basic and diluted	\$ (0.15)	\$ (0.13)	\$ (0.33)	\$ (0.17)	\$ (0.34)
Loss per share from discontinued operations	\$ —	\$ —	\$ —	\$ —	\$ (0.02)
Net loss per share	\$ (0.15)	\$ (0.13)	\$ (0.33)	\$ (0.17)	\$ (0.36)
Weighted average common shares - basic and diluted	44,735	44,730	43,809	41,833	41,610

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	As of December 31,				
	2008	2007	2006	2005 (Restated)	2004 (Restated)
	(in thousands)				
<b>Consolidated Balance Sheet Data:</b>					
Cash and cash equivalents	\$ 157	\$ 1,180	\$ 144	\$ 1,392	\$ 742
Working capital (deficiency)	(20,755)	(12,324)	(23,157)	(10,993)	(14,910)
Total assets	13,240	22,513	22,244	21,563	28,508
Long-term debt, including current portion, net of discount	22,693	20,724	14,705	6,776	6,628
Shareholders' equity (deficiency)	(21,031)	(14,580)	(10,363)	(1,320)	4,191

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**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

*This management's discussion and analysis should be read in the conjunction with the condensed consolidated financial statements and notes included elsewhere in this report on Form 10-K.*

*This management's discussion and analysis, as well as other sections of this report on Form 10-K, may contain "forward-looking statements" that involve risks and uncertainties, including statements regarding our plans, future events, objectives, expectations, forecasts, or assumptions. Any statement that is not a statement of historical fact is a forward-looking statement, and in some cases, words such as "believe," "estimate," "project," "expect," "intend," "may," "anticipate," "plans," "seeks," and similar expressions identify forward-looking statements. These statements involve risks and uncertainties that could cause actual outcomes and results to differ materially from the anticipated outcomes or results, and undue reliance should not be placed on these statements. These risks and uncertainties include, but are not limited to, the matters discussed under the caption "Risk Factors" in Item 1A of this report and other risks and uncertainties discussed in filings made with the Securities and Exchange Commission (including risks described in subsequent reports on Form 10-Q, Form 10-K, Form 8-K, and other filings). Liquidmetal Technologies, Inc. disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.*

**OVERVIEW**

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary coatings, powders, bulk alloys, and composites that utilize the advantages offered by amorphous alloy technology. We develop, manufacture, and sell products and components from bulk amorphous alloys to customers in various industries, and we also partner with third-party licensees to develop and commercialize bulk Liquidmetal alloy products. We believe that our proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace. In addition to our bulk alloys, we market and sell a line of proprietary amorphous alloy-based industrial coatings under the Liquidmetal Armacor™ coatings brand.

Amorphous alloys are unique materials that are distinguished by their ability to retain a random atomic structure when they solidify, in contrast to the crystalline atomic structure that forms in other metals and alloys when they solidify. Liquidmetal alloys possess a combination of performance, processing, and potential cost advantages that we believe can make them preferable to other materials in a variety of applications. The amorphous atomic structure of our alloys enables them to overcome certain performance limitations caused by inherent weaknesses in crystalline atomic structures, thus facilitating performance and processing characteristics superior in many ways to those of their crystalline counterparts. For example, our zirconium-titanium Liquidmetal alloys are approximately 250% stronger than commonly used titanium alloys such as Ti-6Al-4V, but they also have some of the beneficial processing characteristics more commonly associated with plastics. We believe these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, we believe these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

Our revenues are derived from two principal operating segments: Liquidmetal alloy industrial coatings and bulk Liquidmetal alloy products. Liquidmetal alloy industrial coatings are used primarily as a protective coating for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used in coal-burning power plants. Bulk Liquidmetal alloy segment revenue includes sales of parts or components of electronic devices, medical products, and sports and leisure goods; tooling and prototype parts (including demonstration parts and test samples) for customers with products in development, product licensing and arrangements, and research and development revenue relating primarily to defense and medical applications. We expect that these sources of revenue will continue to significantly change the character of our revenue mix.

The cost of sales for our Liquidmetal coatings segment consists primarily of the costs of outsourcing our manufacturing to third parties. Consistent with our expectations, our cost of sales has been increasing over historical results as we further build our bulk Liquidmetal alloy business. Although we plan to continue outsourcing the manufacturing of our coatings, we will internally manufacture many products derived from our bulk Liquidmetal alloys.

Selling, general, and administrative expenses currently consist primarily of salaries and related benefits, severance costs, travel, consulting and professional fees, depreciation and amortization, insurance, office and administrative expenses, and other expenses related to our operations.

Research and development expenses represent salaries, related benefits expense, stock-based compensation, depreciation of research equipment, consulting and contract services, expenses incurred for the design and testing of new processing methods, expenses for the development of sample and prototype products, and other expenses related to

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the research and development of Liquidmetal alloys. Costs associated with research and development activities are expensed as incurred. We plan to enhance our competitive position by improving our existing technologies and developing advances in amorphous alloy technologies. We believe that our research and development efforts will focus on the discovery of new alloy compositions, the development of improved processing technology, and the identification of new applications for our alloys.

Impairment of Long-Lived Assets consists of a write-down of \$0.1 million of idle equipment held by our South Korean subsidiary, Liquidmetal Technologies Co., Ltd. While we have actively marketed the idle equipment for ultimate sale since early 2004, we were unable to sell this equipment and determined that the carrying value of the idle equipment exceeded its fair value in the amount of \$0.1 million during the fourth quarter of fiscal year 2008.

Change in Value of Warrants consists of changes to the fair value of warrants outstanding at each period. The warrants have been accounted for as a liability in accordance with Emerging Issues Task Force Issue No. 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock," with the change in fair values reported in earnings. The fair values are determined using a Black-Scholes pricing model and fluctuations in our stock price have had the greatest impact on the valuation of outstanding warrants.

Change in Value of Conversion Feature consists of changes to the fair value of the embedded conversion feature of our senior convertible notes. The embedded conversion feature has been accounted for as a separate derivative instrument in accordance with SFAS 133 with a change in fair values reported in earnings. The change in fair values is determined using a Black-Scholes pricing model and fluctuations in our stock price have had the greatest impact on the valuation of outstanding conversion features.

On May 21, 2003, we completed a reincorporation by transitioning from a California corporation to a Delaware corporation. The reincorporation was effected through the merger of the former California entity into a newly created wholly owned Delaware subsidiary. The reincorporation changed the legal domicile of our company but did not result in any change to our business, management, employees, fiscal year, assets or liabilities, or location of facilities. As part of the reincorporation, each share of the California corporation was automatically converted into one share of the Delaware corporation. In addition, total authorized shares decreased from 200,000,000 shares to 100,000,000 shares.

On June 26, 2006, we entered into a joint venture agreement with SAGA, SpA in Padova, Italy, ("SAGA") a specialist precision parts manufacturer. The joint venture is named Liquidmetal SAGA Italy, Srl ("LSI"). We also entered into an exclusive manufacturing license agreement for the eyewear industry with LSI. Under the joint venture agreement, we have the option to buy ownership interest in LSI, initially, of 19.9% to up to 50%. In December 2006, we have purchased 19.9% interest in the joint venture. In January 2007 and June 2007, we contributed additional \$0.2 million and \$0.1 million, respectively, into LSI as additional investment. The contribution did not change the Company's 19.9% interest in LSI. Under the licensing agreement, at any time following 18 months after the effective date of the agreement, LSI may exercise its option to sell to the Company certain business assets including manufacturing equipment acquired under the joint venture. During the years ended December 31, 2008, 2007 and 2006, the Company recognized revenues of \$0, \$0.1 million and \$0.7 million, respectively, of Liquidmetal alloys sold to SAGA for use in the joint venture.

In a connection to an equipment purchase agreement entered into with Grace Metal, currently Liquidmetal Korea Co., Ltd. ("LMK"), a South Korean corporation, effective June 1, 2007, we discontinued our post-processing operation in Weihai, China and transferred our manufacturing staff and equipment in Weihai to LMK under an amendment to the equipment purchase agreement with LMK. Further, we transferred certain of our manufacturing staff from our South Korean plant to LMK. LMK was formed by an investor group that includes the former director and officer of our company, James Kang, who is also the brother of John Kang, Chairman of the Board of our company.

On July 24, 2007, we transferred substantially all of the assets of our Liquidmetal alloy industrial coatings business to a newly formed, newly capitalized subsidiary named Liquidmetal Coatings, LLC, a Delaware limited liability company ("LMC"), and LMC assumed substantially all of the liabilities of the

coatings business. The transfer included the thermal spray coatings assets and liabilities acquired under a purchase agreement with Foster Wheeler Energy Services in June 2007. We hold a 69.25% ownership interest in LMC. The results of operation of LMC are consolidated and comprise our Liquidmetal alloy industrial coatings segment for financial reporting purposes.

## Results of Operations

### Comparison of the years ended December 31, 2008 and 2007

*Revenue.* Revenue decreased \$6.9 million to \$22.1 million for the twelve months ended December 31, 2008 from \$29.0 million for the twelve months ended December 31, 2007. The decrease included \$5.0 million decrease in sales and

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prototyping of parts manufactured from bulk Liquidmetal alloys to consumer electronics customers as a result of increased reliance on licensees to manufacture and sell bulk Liquidmetal alloy parts and a decrease of \$1.9 million from sales of our coating products as a result of decrease in demand from oil drilling applications.

*Cost of Sales.* Cost of sales decreased to \$17.1 million, or 78% of revenue, for the twelve months ended December 31, 2008 from \$26.5 million, or 91% of revenue, for the twelve months ended December 31, 2007. The decreases were a result of a change in revenue mix during the twelve months ended December 31, 2008 primarily from increased royalty revenues. We also believe that higher manufacturing volumes and greater mix of higher-margin products in the future will cause the gross profit to improve over time. The cost to manufacture parts from our bulk Liquidmetal alloys is variable and differs based on the unique design of each product. However, the cost of sales for the products sold by the coatings business segment is generally consistent because the Liquidmetal coatings products are produced by third parties and sold wholesale to various industries.

*Selling, General, and Administrative Expenses.* Selling, general, and administrative expenses decreased to \$6.5 million, or 30% of revenue, for the twelve months ended December 31, 2008 from \$8.9 million, or 31% of revenue, for the twelve months ended December 31, 2007. The decrease was primarily a result of decrease in wages and expenses of \$0.4 million, decrease in professional and consulting fees of \$1.3 million, decrease in bad debt expense of \$0.3 million, decrease in depreciation and amortization expense of \$0.1 million, and decrease in office and equipment rent expense of \$0.1 million.

*Research and Development Expenses.* Research and development expenses decreased to \$1.0 million, or 5% of revenue, for the twelve months ended December 31, 2008 from \$1.1 million, or 4% of revenue, for the twelve months ended December 31, 2007. The decrease was primarily due to decrease in wages and related expenses. We continue to perform research and development of new Liquidmetal alloys and related processing capabilities, develop new manufacturing techniques, and contract with consultants to advance the development of Liquidmetal alloys.

*Impairment of Long-Lived Assets.* Impairment of long-lived assets was \$0.1 million, or 1% of revenue, for the twelve months ended December 31, 2008 from of a write-down of idle equipment held by our South Korean subsidiary, Liquidmetal Technologies Co., Ltd. While we have actively marketed the idle equipment for ultimate sale since early 2004, we were unable to sell this equipment and determined that the carrying value of the idle equipment exceeded its fair value in the amount of \$0.1 million during the fourth quarter of fiscal year 2008. There was no impairment of long-lived assets recognized during the twelve months ended December 31, 2007.

*Loss from Extinguishments of Debts.* Loss from extinguishments of debt decreased to \$0 for the twelve months ended December 31, 2007 from \$0.6 million, or 2% of revenue, for the twelve months ended December 31, 2007. The \$0.6 million loss was recognized from the extinguishment of certain of our convertible and subordinated notes in 2007.

*Change in Value of Warrants.* Change in value of warrants decreased to a gain of \$1.9 million, or 9% of revenue, during the twelve months ended December 31, 2008 from a gain of \$4.9 million, or 17% of revenue, during the twelve months ended December 31, 2007. The change in value of warrants consisted of warrants issued from convertible notes and subordinated notes funded between 2004 and 2007 primarily as a result of fluctuations in our stock price.

*Change in Value of Conversion Feature.* Change in the value of our conversion feature liability from our convertible notes funded between 2004 and 2007 resulted in gain of \$2.0 million, or 9% of revenue, during the twelve months ended December 31, 2008 from a gain of \$7.0 million, or 24% of revenue, during the twelve months ended December 31, 2007 primarily as a result of fluctuation in our stock prices.

*Other Expense.* Other expense was \$17 thousand for the twelve months ended December 31, 2008, primarily from loss on disposal of assets. There was no other expense recognized for the twelve months ended December 31, 2007.

*Other Income.* Other income was \$0.4 million, or 2% of revenue, for the twelve months ended December 31, 2008, primarily from gain \$0.2 million recognized from deferred gain on sale of equipment from 2007 and \$0.2 million from write off accounts payables. Other income was \$0.2 million, or 1% of revenue, for the twelve months ended December 31, 2007, primarily from gain recognized from sale of equipment.

*Interest Expense.* Interest expense was \$7.7 million, or 35% of revenue, for the twelve months ended December 31, 2008 and was \$9.4 million, or 32% of revenue, for the twelve months ended December 31, 2007. Interest expense consists primarily of debt amortization and interest accrued on outstanding convertible and subordinated notes, borrowings under the April 2005 factoring, loan, and security agreement, the Kookmin loan, the Bank Midwest loans, and late registration and late filing fee penalties.

*Interest Income.* Interest income was \$3 thousand for the twelve months ended December 31, 2008 and \$0.1 million for the twelve months ended December 31, 2007, from interest earned on cash deposits.

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## Comparison of the years ended December 31, 2007 and 2006

**Revenue.** Revenue increased \$1.4 million to \$29.0 million for the twelve months ended December 31, 2007 from \$27.7 million for the twelve months ended December 31, 2006. The increase included \$3.6 million decrease in sales and prototyping of parts manufactured from bulk Liquidmetal alloys to consumer electronics customers as a result of increased reliance on licensees to manufacture and sell bulk Liquidmetal alloy parts to customers based in South Korea, offset by an increase of \$5.0 million from sales of our coating products as a result of increase in demand from oil drilling applications.

**Cost of Sales.** Cost of sales increased to \$26.5 million, or 91% of revenue, for the twelve months ended December 31, 2007 from \$22.4 million, or 81% of revenue, for the twelve months ended December 31, 2006. The increases were a result of higher manufacturing costs of new production items in our Liquidmetal bulk alloy business during the first three quarters of 2007. We believe that higher manufacturing volumes and greater mix of higher-margin products in the future will cause the gross profit to improve over time. The cost to manufacture parts from our bulk Liquidmetal alloys is variable and differs based on the unique design of each product. However, the cost of sales for the products sold by the coatings business segment is generally consistent because the Liquidmetal coatings products are produced by third parties and sold wholesale to various industries.

**Selling, General, and Administrative Expenses.** Selling, general, and administrative expenses decreased to \$8.9 million, or 31% of revenue, for the twelve months ended December 31, 2007 from \$10.0 million, or 36% of revenue, for the twelve months ended December 31, 2006. This decrease was primarily a result of decreases in wages and expenses of \$1.2 million and decreases in travel expenses of \$0.2 million, offset by increases in professional and consulting fees of \$0.3 million.

**Research and Development Expenses.** Research and development expenses increased to \$1.1 million, or 4% of revenue, for the twelve months ended December 31, 2007 from \$1 million, or 3% of revenue, for the twelve months ended December 31, 2006. The increase was primarily due to increase in professional fees. We continue to perform research and development of new Liquidmetal alloys and related processing capabilities, develop new manufacturing techniques, and contract with consultants to advance the development of Liquidmetal alloys.

**Loss from Extinguishments of Debts.** Loss from extinguishments of debt increased to \$0.6 million, or 2% of revenue, for the twelve months ended December 31, 2007 from \$0 for the twelve months ended December 31, 2006. The \$0.6 million loss was recognized from the extinguishment of certain of our convertible and subordinated notes in 2007.

**Change in Value of Warrants.** Change in value of warrants increased to a gain of \$4.9 million, or 17% of revenue, during the twelve months ended December 31, 2007 from a gain of \$0.3 million, or 1% of revenue, during the twelve months ended December 31, 2006. The change in value of warrants consisted of warrants issued from convertible notes and subordinated notes funded between 2004 and 2007 primarily as a result of fluctuations in our stock price.

**Change in Value of Conversion Feature.** Change in the value of our conversion feature liability from our convertible notes funded between 2004 and 2007 resulted in gain of \$7.0 million, or 24% of revenue, during the twelve months ended December 31, 2007 from a loss of \$0.2 million, or 1% of revenue, during the twelve months ended December 31, 2006 primarily as a result of fluctuation in our stock prices.

**Other Income.** Other income was \$0.2 million, or 1% of revenue, for the twelve months ended December 31, 2007, primarily from gain recognized from sale of equipment. Other income for the twelve months ended December 31, 2006 was \$0.6 million, or 2% of revenue, as result of \$0.1 million gain recognized from disposal of idle equipment and \$0.5 million gain recognized from termination of a distribution agreement with a Japanese sporting goods distributor originally entered into in March 1996.

**Interest Expense.** Interest expense was \$9.4 million, or 32% of revenue, for the twelve months ended December 31, 2007 and was \$9.5 million, or 34% of revenue, for the twelve months ended December 31, 2006. Interest expense consists primarily of debt amortization and interest accrued on outstanding convertible and subordinated notes, borrowings under the April 2005 factoring, loan, and security agreement, the Kookmin loan and late registration and late filing fee penalties.

**Interest Income.** Interest income was \$0.1 million for the twelve months ended December 31, 2007 and \$23 thousand for the twelve months ended December 31, 2006, from interest earned on cash deposits.

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### QUARTERLY RESULTS

The following information presents our unaudited quarterly operating results for 2008 and 2007. The data has been prepared by Liquidmetal Technologies, Inc. on a basis consistent with the Consolidated Financial Statements included elsewhere in this Form 10-K, and includes all adjustments, consisting of normal recurring accruals, that we consider necessary for a fair presentation thereof. These operating results are not necessarily indicative of our future performance.

	For the Three Months Ended			
	12/31/08	09/30/08	06/30/08	03/31/08
	(In thousands, except per share data) (Unaudited)			
<b>Consolidated Statements of Operations Data:</b>				
Revenue	\$ 4,605	\$ 5,041	\$ 5,669	\$ 6,768
Cost of sales	3,806	3,791	4,633	4,901
Gross profit	799	1,250	1,036	1,867
Operating expenses				
Selling, general, and administrative	1,912	1,417	1,326	1,874
Research and development	207	279	278	258
Impairment of long-lived assets	132	—	—	—
Total operating expenses	2,251	1,696	1,604	2,132
Loss from operations	(1,452)	(446)	(568)	(265)

Change in value of warrants, (loss) gain	(495)	989	1,290	106
Change in value of conversion feature, (loss) gain	(117)	642	1,240	222
Other expense	—	—	—	(17)
Other income	182	—	247	—
Interest expense	(2,432)	(1,860)	(1,717)	(1,703)
Interest income	—	—	1	2
(Loss) income before minority interests	(4,314)	(675)	493	(1,655)
Minority interests	(80)	(115)	(65)	(161)
(Loss) income from operations before income taxes	(4,394)	(790)	428	(1,816)
Income taxes	—	—	—	—
Net (loss) income	(4,394)	(790)	428	(1,816)
Net (loss) income per share from continuing operations - basic and diluted	\$ (0.10)	\$ (0.02)	\$ 0.01	\$ (0.04)
Weighted average common shares used to compute (loss) income per share from continuing operations - basic and diluted	44,759	44,726	44,726	44,726

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	For the Three Months Ended			
	12/31/07	09/30/07	06/30/07	03/31/07
	(In thousands, except per share data) (Unaudited)			
<b>Consolidated Statements of Operations Data:</b>				
Revenue	\$ 8,518	\$ 7,106	\$ 8,331	\$ 5,067
Cost of sales	7,138	5,194	7,686	6,441
Gross profit (loss)	1,380	1,912	645	(1,374)
Operating expenses				
Selling, general, and administrative	2,041	1,853	2,495	2,532
Research and development	236	331	293	263
Total operating expenses	2,277	2,184	2,788	2,795
Loss from operations	(897)	(272)	(2,143)	(4,169)
Loss from extinguishments of debt	—	—	—	(648)
Change in value of warrants, gain	447	220	564	3,692
Change in value of conversion feature, gain	828	625	1,168	4,344
Other income	177	—	49	—
Interest expense	(1,910)	(1,991)	(2,700)	(2,763)
Interest income	2	14	46	61
(Loss) income before minority interests	(1,353)	(1,404)	(3,016)	517
Minority interests	(318)	(66)	—	—
(Loss) income from operations before income taxes	(1,671)	(1,470)	(3,016)	517
Income taxes	—	—	—	—
Net (loss) income	(1,671)	(1,470)	(3,016)	517
Net (loss) income per share from continuing operations - basic and diluted	\$ (0.04)	\$ (0.03)	\$ (0.07)	\$ 0.01
Weighted average common shares used to compute (loss) income per share from continuing operations - basic and diluted	44,711	44,652	44,632	44,925

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**LIQUIDITY AND CAPITAL RESOURCES**

Since our inception, we have funded our operations through the sale of equity securities in private placements and our initial public offering, the sale of convertible notes and warrants in private placements, debt financing, and cash generated from operations.

Our cash provided by (used for) operating activities was \$0.4 million and (\$10.2) million for the years ended December 31, 2008 and 2007, respectively. Our working capital deficit increased from \$12.3 million at December 31, 2007 to \$20.8 million at December 31, 2008. Our working capital deficit increase of \$8.5 million was primarily attributable to a decrease in cash and cash equivalents of \$1.0 million, decrease in trade accounts receivables of \$2.9 million, decrease in inventories of \$1.5 million, an increase in accounts payable and accrued expenses of \$0.5 million, increase in current portion of long-term debt of



\$8.0 million, offset by decrease in deferred revenue of \$0.3 million, decrease in short-term debt of \$1.0 million, decrease in warrant liabilities of \$1.9 million, decrease in conversion feature liabilities of \$1.9 million, and decrease of current portion of other liabilities of \$0.3 million.

Our cash used for investing activities was \$1.2 million for the year ended December 31, 2008 primarily from purchase of property and equipment.

Our cash used for financing activities was \$1.2 million for the year ended December 31, 2008 primarily from repayment of borrowings and distributions made to minority interest holders of our subsidiary, Liquidmetal Coatings, LLC. As of December 31, 2008, we had cash of \$0.2 million.

Our capital requirements during the next twelve months will depend on numerous factors, including the success of existing products either in manufacturing or development, the development of new applications for Liquidmetal alloys, the resources we devote to develop and support our Liquidmetal alloy products, the success of pursuing strategic licensing and funded product development relationships with external partners.

We have experienced significant operating losses since our inception. Our net loss for the fiscal years ended December 31, 2008, 2007 and 2006 was \$6.6 million, \$5.6 million, and \$14.5 million, respectively. In the audit report on our financial statements for our fiscal years ended December 31, 2008 and 2007, our auditors included a going-concern qualification indicating that our significant operating losses and working capital deficit cause substantial doubt about our ability to continue as a going concern. By issuing an opinion stating that there is substantial doubt about our ability to continue as a going concern, our auditors have indicated that they are uncertain as to whether we have the capability to continue our operations without additional funding.

We anticipate that we will not have sufficient funds to pursue our current operating plan beyond the first quarter of 2009 and we will therefore require additional funding. We are actively seeking additional sources of capital and seeking to restructure and/or modify existing indebtedness. The amount of funding that we seek and the timing of such fundraising efforts will depend on the extent to which we are able to increase revenues through obtaining additional purchase orders for our products and/or the extent to which we can restructure or modify our debt. Because we cannot be certain that we will be able to obtain adequate funding from debt, equity, or other traditional financing sources, we are also actively exploring several strategic financing options, including the possible sale of our manufacturing plant in South Korea (which would then be replaced with a smaller facility) and additional licensing and outsourcing of our manufacturing operations.

We cannot guarantee that adequate funds will be available when needed, and if we do not receive sufficient capital, we may be required to alter or reduce the scope of our operations.

Additionally, we have approximately \$1.2 million of principal and accrued interest outstanding as of December 31, 2008, under the 8% unsecured subordinated notes (the "Bridge Notes"), which were due August 17, 2007. We intend to fully repay the amounts due under the Bridge Notes. However, as of the filing of this report we do not have sufficient funds to repay the Bridge Notes. As a result, we are currently in default under the Bridge Notes. Such a default may have material adverse effect on our operations, financial condition, and results of operations. We have not received a formal notice of default and we are currently working to resolve this matter with investors holding our Bridge Notes.

We were required under our amended Security Purchase Agreement, dated April 23, 2007, between our company and holders of our 8% convertible subordinated notes due January 2010 (the "January 2010 Notes"), to repay outstanding debt under previously issued promissory notes, including the Bridge Notes ("Debt Satisfaction Covenant") by October 1, 2007. As we have not yet fully repaid our Bridge Notes, we are in default under the January 2010 Notes under the Debt Satisfaction Covenant. Further, we were required, beginning September 30, 2008 and at the end of each month thereafter, to redeem 1/32nd of the principal amount of the January 2010 Notes. An aggregate payment equal to \$0.6 million was due September 30, 2008. However, we did not have sufficient funds to make this payment, and, accordingly, we are in default under the January 2010 Notes.

The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. As of the filing of this report, we have received a formal notice of default and we are currently working to resolve this matter. As a result,

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the outstanding principal due under the January 2010 Notes of \$19.1 million is included in current portion of long-term debt and accrued interest and fees of \$1.0 million is included in accounts payable and accrued expenses as of December 31, 2008. Such defaults may have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with investors holding our January 2010 Notes.

Approximately \$0.2 million of principal and accrued interest became due from our Korean subsidiary under a loan from Kookmin Bank of South Korea in August 2008. However, as of the filing of this report we did not have sufficient funds to repay the loan and we have received a formal notice of default. Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of our manufacturing plant facility and certain equipment in South Korea. The foreclosure of our manufacturing plant facility and equipment in South Korea would have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with Kookmin Bank by seeking a forbearance until we are able to obtain funding to repay this loan, although there is no assurance that we will be able to obtain any such funding.

We have outstanding liens and judgments on our assets by various creditors for past-due trade payables totaling \$1.4 million, of which \$1.2 million is held by creditors in South Korea, as of December 31, 2008. We are currently working to resolve the matter with each creditor by seeking forbearance until we are able to obtain funding to repay the amounts due, although there is no assurance that we will be able to obtain any such funding. If we cannot repay the amounts due or obtain forbearance, the creditors may seek to foreclose on the Company's assets. Such a foreclosure would have material adverse effect on our operations, financial condition, and results of operations.

## **Initial Public Offering Proceeds**

Pursuant to our Registration Statement on Form S-1 (Registration No. 333-73716), as amended, initially filed with the Securities and Exchange Commission on November 20, 2001 and declared effective May 21, 2002, we closed an initial public offering of 5,000,000 shares of common stock on May 28, 2002, plus an additional 229,000 shares on June 10, 2002 pursuant to an over allotment option, at a price of \$15.00 per share (which sale is referred to herein as the "Offering"). The Offering generated aggregate cash proceeds during the second quarter 2002 of \$78.4 million. The net proceeds were \$70.7 million after deducting underwriting commissions of \$5.5 million and other transaction fees of \$2.2 million. As of December 31, 2003, we used \$70.7 million of net proceeds from the Offering.

## Private Placements of Convertible Notes and Bridge Notes

The following private placement of convertible notes and bridge notes are outstanding as of December 31, 2008.

On May 17, 2006, September 21, 2006, and December 1, 2006, we completed a private placement of 8% Unsecured Subordinated Notes in the aggregate principal amount of \$4.6 million (the "Bridge Notes"), together with warrants to purchase up to an aggregate of 973,064 shares of our common stock. The Bridge Notes were unsecured and were scheduled to become due on the earlier of August 17, 2007 or the consummation of a follow-on equity or debt offering pursuant to which we receive gross proceeds of at least \$6.0 million, but in no event will the Bridge Notes become due any earlier than the payment in full of the previously issued promissory notes, including 7% Senior Secured Notes Due August 2007 (the "August 2007 Notes") and 6% Senior Secured Notes Due July 2007 (the "July 2007 Notes"). As a part of the private placement of the Bridge Notes, we issued warrants to the purchasers of the Bridge Notes giving them the right to purchase up to an aggregate of 890,990 shares of our common stock, and warrants to purchase 82,074 shares of our common stock were issued to the placement agent in the transaction. The warrants have an exercise price of \$2.58 per share and will expire on May 17, 2011.

On January 3, 2007, we completed a private placement of new 8% Convertible Subordinated Notes due January 2010 (the "January 2010 Notes"). As a result of an April 2007 amendment to this transaction, we ultimately issued \$16.3 million in principal amount of January 2010 Notes, which supersedes the aggregate note amount indicated in our prior announcements regarding the private placement. Under the amended transaction, the January 2010 Notes were issued for aggregate cash in the amount of \$12.9 million and in payment of a total of \$3.4 million in principal and accrued but unpaid interest under the August 2007 Notes and Bridge Notes. The January 2010 Notes have a maturity date of January 3, 2010.

The January 2010 Notes were issued pursuant to a Securities Purchase Agreement, dated January 3, 2007, between our company and the purchasers of the January 2010 Notes (the "January Purchase Agreement"). Under the terms of the original January Purchase Agreement, we agreed to repay or otherwise satisfy, within 5 days after the closing of the private placement, approximately \$15.5 million of our outstanding debt under previously issued promissory notes, including the August 2007 Notes, 10% Subordinated Promissory Note due October 2006 (the "October 2006 Note"), and Bridge Notes (the "Debt Satisfaction Covenant"). We originally agreed to this covenant based on assurances that a substantial number of holders of the August 2007 Notes would elect to convert their August 2007 Notes at a reduced conversion price following the private placement under a note conversion agreement proposed by us, but most of such holders ultimately elected not to proceed with such conversion. Accordingly, in an effort to preserve funds, we have not yet repaid the indebtedness as required by the original January Purchase Agreement, and in April 2007, we entered into an amendment to the January Purchase Agreement providing that we will have until October 1, 2007 (or such earlier date on which the indebtedness to be repaid is due) to comply with the Debt Satisfaction

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Covenant. In addition, the April 2007 amendment provides that the purchasers of the January 2010 Notes have the right to require us to redeem such notes prior to maturity in the event that we sell our Liquidmetal Coatings business unit, sell our manufacturing facility in South Korea, and/or engage in any debt or equity financing, provided that the foregoing transactions result in aggregate cumulative proceeds of \$25,000, and it also provides that we will be obligated to grant to the purchasers of such notes a *par passu* security interest in any collateral (if any) that is used to secure our next private placement of convertible notes. As required by the January Purchase Agreement, the April 2007 amendment was executed by the holders of more than fifty percent (50%) of the outstanding principal amount of the Notes.

The January 2010 Notes, as amended by the April 2007 amendment, are convertible at any time at the option of the holder into shares of our common stock at a conversion price of \$1.10 per share (compared to an original conversion price of \$1.55 per share), subject to adjustment for anti-dilution. The January 2010 Notes bear interest at 8% per annum with interest payable quarterly in arrears in cash, or, at our option, in the form of additional January 2010 Notes (in which case the interest rate will be 10% per annum). Our ability to pay interest with additional January 2010 Notes is subject to specified conditions, including the existence of an effective registration statement covering the resale of the shares issued in payment of interest and certain minimum trading volumes in the stock to be issued. From and after an event of default under the January 2010 Notes and for so long as the event of default is continuing, the January 2010 Notes will bear default interest at a rate of 12% per annum (or 15% per annum if we elect to pay interest with additional January 2010 Notes).

Beginning July 31, 2008 and at the end of each month thereafter, we were required to redeem 1/36th of the principal amount of the January 2010 Notes in cash or, at our election, with shares of our common stock. On July 31, 2008, we obtained an agreement with the majority of the January 2010 Note holders to defer the amortization date of the principal to September 30, 2008 and to amend the redemption amount at each amortization date to be 1/32nd of the principal amount. Our ability to pay the redemption amounts with shares of our common stock will be subject to specified conditions, including the existence of an effective registration statement covering the resale of the shares issued in payment of the redemption amount and certain minimum trading volumes in the stock to be issued. Any unconverted January 2010 Notes will become due on January 3, 2010, although we will have the right at any time after 18 months following the issuance of the January 2010 Notes to redeem the January 2010 Notes in whole or in part for a cash redemption price of 105% of the portion of the principal amount being redeemed plus all accrued and unpaid interest thereon. The January 2010 Notes are unsecured and are subordinate to our July 2007 Notes and to certain secured financing from commercial lenders incurred by us in the future. The terms of the 2010 Notes also provide that we will be required to maintain a sufficient bank balance to provide for the timely repayment of our July 2007 Notes.

As a part of the January 2007 private placement, we issued warrants to the purchasers of the January 2010 Notes giving them the right following the April 2007 amendment to purchase up to an aggregate of 7,408,881 shares of our common stock at an exercise price of \$1.55 per share. In connection with the private placement, we also issued to the placement agent for the transaction warrants to purchase an aggregate of 248,710 shares of our common stock at an exercise price of \$1.55 per share. All of the warrants (including the warrants granted to the placement agent in the transaction) are immediately exercisable and will expire in January 2012.

In connection with the January 2007 private placement, we entered into a Registration Rights Agreement with the purchasers of the January 2010 Notes under which we are required, on or before 45 days after the closing of the private placement, to use our commercially reasonable efforts to file a registration statement with the SEC covering the resale of the shares of our common stock issuable pursuant to the January 2010 Notes and warrants and to use our commercially reasonable efforts to have the registration declared effective at the earliest date (but in no event later than 90 days after filing if there is no SEC review of the registration statement, or 120 days if there is an SEC review). We will be subject to certain monetary penalties, as set forth in the Registration Rights Agreement, up to a maximum amount of 18% of the aggregate amount of Notes sold in the Private Placement if the registration statement is not filed or does not become effective on a timely basis. The monetary penalties will accrue at the rate of 1% per month of the then-outstanding principal amount of the January 2010 Notes. In the event that we are unable to include in the registration statement all shares of our common stock issuable pursuant to the January 2010 Notes and warrants, then we will be required to file up to two additional registration statements to register the resale of any shares excluded from the originally filed registration statement and to pay the foregoing monetary penalties on the January 2010 Notes convertible into the excluded shares

until the resale of such excluded shares is covered by an effective registration statement or until such shares can be sold under SEC Rule 144. As of December 31, 2008, an aggregate of \$0.7 million in monetary penalties under the Registration Rights Agreement had already been paid to investors, while an additional \$0.3 million in such penalties were accrued but unpaid.

On October 1, 2007, we issued \$1.0 million of additional January 2010 Notes for accrued interest and late registration fees.

On December 28, 2007, we issued \$1.0 million of January 2010 Notes, together with warrants to purchase up to an aggregate of 681,818 and 200,000 of the Company's common stock to purchasers of the notes and placement agents. The warrants will expire on December 28, 2012 and are exercisable at \$1.55 per share.

During 2008, we issued \$0.4 million, \$0.5 million, and \$0.5 million of additional January 2010 Notes, dated April 1, 2008, July 1, 2008, and October 1, 2008, respectively, for accrued interest due under the notes in lieu of cash payments.

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As of December 31, 2008, \$19.1 million in aggregate principal amount of January 2010 Notes were still outstanding with accrued but unpaid interest and late registration fees in the amount of approximately \$1.0 million, and \$1.0 million in aggregate principal amount of Bridge Notes were also outstanding with accrued but unpaid interest in the amount of approximately \$0.2 million.

### **Loan from Kookmin Bank**

Our Liquidmetal Technologies Co., Ltd. subsidiary has an outstanding loan from Kookmin Bank in the Republic of Korea. As of December 31, 2008, the outstanding balance under this loan was \$0.2 million. The loan was payable in monthly installments of \$0.11 million per month through February 2008.

### **OFF-BALANCE SHEET ARRANGEMENTS**

An off-balance sheet arrangement is any transaction, agreement or other contractual arrangement involving an unconsolidated entity under which a company has (1) made guarantees, (2) a retained or a contingent interest in transferred assets, (3) an obligation under derivative instruments classified as equity, or (4) any obligation arising out of a material variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to our company, or that engages in leasing, hedging, or research and development arrangements with our company.

On June 26, 2006, we entered into a joint venture agreement with SAGA, SpA in Padova, Italy, ("SAGA") a specialist precision parts manufacturer. The joint venture is named Liquidmetal SAGA Italy, Srl ("LSI"). We also entered into an exclusive manufacturing license agreement for the eyewear industry with LSI. Under the joint venture agreement, we have the option to buy ownership interest in LSI, initially, of 19.9% to up to 50%. In December 2006, we have purchased 19.9% interest in the joint venture. Under the licensing agreement, at any time following 18 months after the effective date of the agreement, LSI may exercise its option to sell us certain business assets including manufacturing equipment acquired under the joint venture. During the years ended December 31, 2008, 2007 and 2006, we recognized revenues of \$0, \$0.1 million and \$0.7 million, respectively, of Liquidmetal alloys sold to SAGA for use in the joint venture. We anticipate the alloys to be fully utilized by the joint venture prior to the 18 month period.

### **CONTRACTUAL OBLIGATIONS**

The following table summarizes our company's obligations and commitments as of December 31, 2008:

Contractual Cash Obligations	Payments Due by Period (in thousands)				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	After 5 Years
Long-term debt (2)	\$ 20,273	\$ 20,273	\$ —	\$ —	\$ —
Long-term debt of consolidated subsidiary (2)	9,549	1,028	1,792	6,729	—
Short-term debt (3)	580	580	—	—	—
Short-term debt of consolidated subsidiary	597	597	—	—	—
Interest payments (4)	7,536	1,740	4,824	972	—
Operating leases and rents	1,059	324	617	118	—
Consulting services payable	126	126	—	—	—
Foster Wheeler	150	150	—	—	—
Dongyang	9	9	—	—	—
Nichimen	315	315	—	—	—
Totals (1)	<u>\$ 40,194</u>	<u>\$ 25,142</u>	<u>\$ 7,233</u>	<u>\$ 7,819</u>	<u>\$ —</u>

- (1) Contractual cash obligations include Long-term debt comprised of \$1,009 of Unsecured Subordinated Notes issued in 2006, \$19,113 of Convertible Unsecured Notes originally issued in 2007, and \$151 of Kookmin Bank Loan; Long-term debt of consolidated subsidiary comprised of \$2,729 of Bank Midwest Term Loan, \$6,690 of C3 Capital Partners Subordinated Notes, and \$129 of Bank Midwest Promissory Notes; Short-term debt comprised of \$580 outstanding advances received under factoring, loan, and security agreement; Short-term debt of consolidated subsidiary comprised of \$597 of Bank Midwest revolving loan; future minimum lease payments under capital and operating leases; purchase commitments from consultants; payments due from assets purchased from Foster Wheeler thermal spray coatings business;

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payments due from our discontinued equipment manufacturing business; and minimum payments due under a distribution agreement.

- (2) Does not include accrued and scheduled interest payments of \$7,536; and un-amortized cash discount and discounts for conversion feature and warrants of \$7,128 of our convertible notes.
- (3) Does not include minimum interest and fee payments of \$30.
- (4) Interest payments include accrued and scheduled payments due on long-term debt and long-term debt of consolidated subsidiary with annual interest rates between 8% to 14%. Interest payments also include estimated interest on short-term debt and short-term debt of majority owned subsidiary with annual interest rates between 6.5% to 8.48% with expected maturity of approximately 1 year.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates and assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions.

We believe that the following accounting policies are the most critical to our consolidated financial statements since these policies require significant judgment or involve complex estimates that are important to the portrayal of our financial condition and operating results:

- Our earnings and cash flows are subject to fluctuations due to changes in non-U.S. currency exchange rates. We are exposed to non-U.S. exchange rate fluctuations as the financial results of non-U.S. subsidiary in Korea are translated into U.S. dollars. As exchange rates vary, those results, when translated, may vary from expectations and adversely impact overall expected profitability. The cumulative translation effects for subsidiaries using functional currencies other than the U.S. dollar are included in accumulated foreign exchange translation in stockholders' equity. Movements in non-U.S. currency exchange rates may affect our competitive position, as exchange rate changes may affect business practices and/or pricing strategies of non-U.S. based competitors.
- We record an accrual for potential product warranty costs. Due to the lack of historical information for warranty expense related to bulk alloy products, management estimates product warranties as a percentage of bulk alloy product sales earned during the period. In the event in future periods the actual product warranty costs consistently exceed the estimate for product warranty costs, an adjustment would be made and income would decrease in the period of such determination. Likewise, in the event we determine that actual product warranty costs are consistently lower than the estimate for product warranty costs, an adjustment would be made and income would increase in the period of such determination.
- We record an allowance for doubtful accounts as a contra-asset to our trade receivables for estimated uncollectible accounts. Management estimates the amount of potentially uncollectible accounts by reviewing significantly past due customer balances relative to historical information available for those customers. In the event, in future periods, actual uncollectible accounts exceed the estimate for uncollectible accounts, an adjustment would be made and income would decrease in the period of such determination. Likewise, in the event, in future periods, actual uncollectible accounts are lower than the estimate for uncollectible accounts, an adjustment would be made and income would increase in the period of such determination.
- We value inventories at lower of cost or net realizable value. Management has determined net realizable value to be equal to the selling price of the products to be produced and sold less the cost of disposal. In the event, in future periods, the actual selling prices exceed the estimate for selling prices less cost to sell, an adjustment would be made and income would increase in the period of such determination. Likewise, in the event, in future periods, actual selling prices are lower than the estimate for selling prices, an adjustment would be made and income would decrease in the period of such determination.
- We value our assets at lower of cost or fair market value. Management has determined fair market to be equal to the selling price of the assets to be sold less the cost of disposal. In the event, in future periods, actual selling prices are lower than the estimate for selling prices, an adjustment would be made and income would decrease in the period of such determination.
- We record valuation allowances to reduce the deferred tax assets to the amounts estimated to be realized. While we consider taxable income in assessing the need for a valuation allowance, in the event we determine we would be able to realize our deferred tax assets in the future in excess of the net recorded amount, an adjustment would be made and income increased in the period of such determination. Likewise, in the event we determine

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we would not be able to realize all or part of our deferred tax assets in the future, an adjustment would be made and charged to income in the period of such determination.

- We account for the warrants and the embedded conversion feature of our senior convertible notes as derivatives in accordance with Statement of Financial Accounting Standards No. 133, Accounting for Derivative Instruments and Hedging Activities, and Emerging Issues Task Force Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock. Fair values of warrants and embedded conversion features are measured at each period end using Black-Scholes pricing models and changes in fair value during the period are reported in our earnings
- We adopted Statement of Financial Accounting Standards No. 123, Share-Based Payment ("SFAS 123R"), on January 1, 2006. This new standard requires companies to expense the fair value of employee stock options and similar awards. We adopted SFAS 123R using the modified prospective transition method. Therefore, stock based compensation expense measured in accordance with SFAS 123R was recorded starting with the first quarter of 2006, but the prior year consolidated statement of income was not restated. The adoption of SFAS 123R resulted in incremental expense of \$0.6 million, \$0.6 million and \$1.1 million for the years ended December 31, 2008, 2007 and 2006.

## RECENT ACCOUNTING PRONOUNCEMENTS

In December 2007, the FASB issued SFAS No. 141R, "Business Combinations" ("SFAS 141R"). SFAS 141R amends the requirements for accounting for business combinations. SFAS 141R will be effective after the beginning of the first annual reporting period beginning on or after December 15, 2008. We are



currently evaluating the potential impact of the adoption of SFAS 141R on our company's consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51 ("SFAS 160"). This statement establishes accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. Minority interests will be recharacterized as noncontrolling interests and classified as a component of shareholders' equity separate from the parent's equity. In addition, SFAS 160 establishes reporting requirements that provide sufficient disclosures that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. This statement is effective prospectively, except for certain retrospective disclosure requirements, for fiscal years beginning after December 15, 2008. Accordingly, we will adopt SFAS 160 in 2009. The presentation and disclosure requirements of this standard must be applied retrospectively for all periods presented and will impact how we present and disclose noncontrolling interests and income from noncontrolling interests in our company's consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities — An Amendment of SFAS No. 133" ("SFAS 161"). SFAS 161 seeks to improve financial reporting for derivative instruments and hedging activities by requiring enhanced disclosures regarding the impact on financial position, financial performance, and cash flows. SFAS 161 will be effective for financial statements issued for fiscal years beginning after November 15, 2008. We are currently evaluating the potential impact of the adoption of SFAS 161 on our company's consolidated financial statements.

In April 2008, the FASB issued FASB Staff Position No. 142-3, "Determination of the Useful Life of Intangible Assets" ("FSP 142-3"). FSP 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, "Goodwill and Other Intangible Assets." The intent of FSP 142-3 is to improve the consistency between the useful life of a recognized intangible asset under SFAS 142 and the period of expected cash flows used to measure the fair value of an asset under SFAS 141(R) and other U.S. generally accepted accounting principles. FSP 142-3 applies to intangible assets that are acquired individually or with a group of other assets acquired in business combinations and asset acquisitions. FSP 142-3 also requires expanded disclosure related to the determination of intangible asset useful lives. FSP 142-3 is effective for fiscal years beginning after December 15, 2008. We are currently evaluating the potential impact of FSP 142-3 on our company's consolidated financial statements.

In May 2008, the FASB issued FASB Staff Position No. APB 14-1, "Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)" ("FSP APB 14-1") which clarifies that convertible debt instruments that may be settled in cash or other assets upon conversion are not addressed by APB No. 14, "Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants." Additionally, FSP APB 14-1 requires an entity to separately account for the liability and equity components of a convertible instrument to reflect an entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB 14-1 also expands the disclosure requirements regarding convertible debt instrument terms and how the instrument is reflected in an entity's financial statements. FSP APB 14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. We are currently evaluating the potential impact of FSP APB 14-1 on our company's consolidated financial statements.

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In May 2008, the FASB issued SFAS No. 162, "The Hierarchy of Generally Accepted Accounting Principles" ("SFAS 162"). SFAS 162 is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles for nongovernmental entities. SFAS 162 will become effective 60 days following the SEC's approval of the Public Company Accounting Oversight Board Auditing amendments to AU Section 411, "The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles." We are currently evaluating the impact of SFAS 162.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the AICPA and the SEC did not or are not believed by management to have a material impact on our company's present or future consolidated financial statements.

### **Item 7A. Quantitative and Qualitative Disclosures About Market Risks**

We are exposed to various market risks in conducting the business of the company, and we anticipate that this exposure will increase as a result of our planned growth. In an effort to mitigate losses associated with these risks, we may at times enter into derivative financial instruments, although we have not historically done so. These may take the form of forward sales contracts, option contracts, foreign currency exchange contracts, and interest rate swaps. We have not, and do not intend to, engage in the practice of trading derivative securities for profit.

*Interest Rates.* We are exposed to market risks relating to changes in interest rates. Although we do not currently have any borrowings with variable interest rates, fluctuations in interest rates may have a negative impact to any future borrowings.

*Commodity Prices.* We are exposed to price risk related to anticipated purchases of certain commodities used as raw materials by our businesses, including titanium and zirconium. Although we do not currently enter into commodity future, forward, and option contracts to manage the fluctuations in prices of anticipated purchases, we may enter into such contracts in the future as our business grows and as our purchases of these raw materials increases.

*Foreign Exchange Rates.* As a result of our manufacturing presence in South Korea, a substantial portion of our costs will be denominated in South Korean won. Consequently, fluctuations in the exchange rates of the South Korean won to the U.S. dollar will affect our costs of goods sold and operating margins and could result in exchange losses. Although we do not currently enter into foreign exchange hedge transactions, we may do so in the future as our business grows. Fluctuations in exchange rates resulted in foreign currency translation (loss) gains of (\$1.8) million, \$0.2 million and \$0.3 million for the years ended December 31, 2008, 2007 and 2006, respectively.

### **Item 8. Financial Statements and Supplementary Data**

The financial statements required by this item are located in Consolidated Financial Statements in Item 15 of this report. The supplementary financial information required by this item is located under the caption "QUARTERLY RESULTS" in Item 7 of this report.

### **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures**

None



## Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Based on an evaluation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2008, the end of the period covered by this report, our Chief Executive Officer and Chief Financial Officer have concluded that the disclosure controls and procedures were effective.

Changes in Internal Controls. During the quarter ended December 31, 2008, there was no change in our internal controls over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting. The company's management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the

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maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the company's assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the company's receipts and expenditures are being made only in accordance with authorizations of the company's management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and the related rule of the SEC, management assessed the effectiveness of the company's internal control over financial reporting using the Internal Control-Integrated Framework developed by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, management concluded that the company's internal control over financial reporting was effective as of December 31, 2008. Management has not identified any material weaknesses in the company's internal control over financial reporting as of December 31, 2008.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

## Item 9B. Other Information

On November 28, 2008, we issued \$0.5 million of new 8% Convertible Subordinated Notes Due January 2010 (the "New Notes"). The New Notes were dated October 1, 2008 and were issued in satisfaction of accrued interest due under (i) the original 8% Convertible Subordinated Notes issued by the Company in January 2007 (the "Original Notes") and (ii) 8% Convertible Subordinated Notes that were subsequently issued by the Company in satisfaction of interest due under the Original Notes through July 1, 2008 (the "Interest Notes"). The New Notes become due in January 2010 with monthly payments of 1/36th of the principal amount beginning on October 31, 2008. The New Notes and the Interest Notes (but not the Original Notes) are subject to accelerated repayment in the event of any sale of company assets exceeding \$5.0 million (excluding sales of inventory in the ordinary course). In addition, the New Notes and the Interest Notes (but not the Original Notes), may be redeemed by the holder if the Company receives financing involving an amount of \$25.0 million or more in net proceeds at any time. The New Notes bear interest at 8% per annum with interest payable quarterly in arrears in cash and are subordinate to certain secured financing from commercial lenders incurred by us in the future.

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## PART III

### Item 10. Directors and Executive Officers of the Registrant

Set forth below is a table identifying our directors and executive officers as of April 3, 2009:

Name	Age	Position
Larry Buffington	62	President and Chief Executive Officer
Tony Chung	39	Chief Financial Officer
John Kang	45	Chairman of the Board
Dean Tanella	47	Director
Robert Biehl	63	Director
CK Cho	52	Director

*Larry Buffington* was elected by our Board of Directors to serve as the President and Chief Executive Officer in October 2006. Mr. Buffington has been serving as full-time consultant to the Company since July 2006. He is also the president of Buffington Consulting, a consulting firm that Mr. Buffington started in 1997 focusing on the assessment and turnaround of manufacturing operations. Prior to starting Buffington Consulting, Mr. Buffington was the General Manager of the Communications Products Business Unit of Augat, Inc., a public company with worldwide manufacturing operations in communication, automotive and electronic products. Mr. Buffington received a bachelor's degree in Industrial Engineering from Pennsylvania State University in 1969.

*Tony Chung* was elected by our Board of Directors to serve as the Chief Financial Officer in December 2008. Mr. Chung previously served the Company in various capacities between May of 2004 and January of 2007 including as the Company's Vice President of Finance, Vice President of Legal and Administration and Director of Finance. Between November of 2004 and April of 2005, Mr. Chung was the Company's principal financial officer. Mr. Chung most recently served as Chief Financial Officer at BETEK Corporation, a real estate and investment subsidiary of SK Engineering and Construction, and as Chief Financial Officer of Solar City, a company providing advanced solar technology and installation services. From September 1992 to May 2004, Mr. Chung served in a variety of senior finance capacities at various companies including Everdream Corporation, a startup venture specializing in IT outsourcing, and MAI Systems Corporation, a publicly traded company that developed and licensed hotel management software. Mr. Chung is a Certified Public Accountant and served eight years at KPMG as an Audit and Consulting Manager for several large multinational companies. He received his B.S. degree in Business Administration from University of California at Berkeley, Haas School of Business in 1992. Mr. Chung also holds a J.D. degree from Pacific Coast University School of Law which he received in June of 2006.

*John Kang* was re-elected as Chairman of our Board of Directors in November 2007. Mr. Kang has served as a director of our company since 1994. From December 1994 to June 2001, he served as Chairman of our Board of Directors in various capacities. From June 2001 until December 30, 2005, Mr. Kang had served variously as our Chief Executive Officer and President. From July 1996 to September 2000, Mr. Kang served variously as Chief Executive Officer, President, and a director of Medical Manager Corporation, a public company traded on the Nasdaq National Market until its sale in September 2000 to WebMD Corporation. From 1988 to 1995, he was Chairman of the board of directors of Clayton Group, Inc., a private company engaged in the distribution of waterworks equipment. Mr. Kang received a B.A. degree in Economics from Harvard College in 1985. On December 15, 2005, an indictment naming as defendants ten former officers and directors of Medical Manager Corporation, including Mr. Kang, was filed in the United States District Court for the District of South Carolina (Beaufort Division). The indictment includes counts for conspiracy, conspiracy to launder money instruments, and money laundering relating to a series of acquisitions that were made by Medical Manager during the years the years 1996 through 2003, the accounting practices of Medical Manager during that time frame, and the filing of various financial statements during that time frame. The indictment is unrelated to Mr. Kang's service as a director and officer of our company. Mr. Kang resigned as our President and Chief Executive Officer on December 30, 2005, although he continues to serve as Chairman of the Board of our company and continues to work for our company on a full-time basis.

*Dean Tanella* was re-elected as a director in November 2007. Mr. Tanella has served as a director of our company since 2004. Mr. Tanella is a 20-year veteran of the institutional investment business and has worked for such leading firms as Raymond James & Associates, CS First Boston Corp., Adams Harkness & Hill, Drexel Burnham Lambert, Inc., Kidder Peabody & Co. and

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the Vanguard Group. Since 1999, Mr. Tanella has served as President of Safe Harbor Capital, LLC and, since 2003, as President of HarborLight Capital, LLC, both of which are private investment firms. Mr. Tanella received his bachelors degree from Princeton University and his MBA from the Harvard Graduate School of Business Administration. In December 2004, Mr. Tanella was also named Executive Vice President — Capital Markets Group and a member of the Board of Directors at GunnAllen Financial Inc., a leading independent brokerage firm headquartered in Tampa, Florida.

*Robert Biehl* was re-elected as a director in November 2007. Mr. Biehl has served as a director since 2005. Mr. Biehl founded the Masterplanning Group International and as President, personally consulted over 400 clients and mentored over 2,500 executives and world leaders. Prior to starting Masterplanning Group, Mr. Biehl was an executive staff of World Vision International where he designed and developed the Love Loaf Program, which has raised millions of dollars worldwide. He has also published many books in the area of personal and organizational development. Mr. Biehl received his B.A. degree in Psychology and a Masters Degree in Counseling from Michigan State University.

*CK Cho* was re-elected as a director in November 2007. Mr. Cho has served as a director since 2005. Mr. Cho has over 18 years of experience with Samsung Electronics and managed over \$700 million annual procurement budget responsible for semi-conductor and telecommunication equipment and other electronic components. He also served as CEO and President of Winvest Venture Partners Inc. and is currently serving as President and CEO of ATIC, an IT Venture Capital Company based in Korea. Mr. Cho received his bachelor's degree majoring in Business Administration and Material Sciences from the Korea University of Seoul.

### **Change in Principal Financial Officer**

On December 1, 2008 Gerald Morrow ceased to be our company's Chief Financial Officer upon appointment of Tony Chung as our Chief Financial Officer by our Board of Directors. Mr. Morrow was previously elected to serve as our Chief Financial Officer on January 13, 2008 by our Board of Directors. Additional information regarding Mr. Chung is set forth above in this Item 10.

## **BOARD OF DIRECTORS**

### **Terms of Directors**

Our board of directors is divided into three classes (designated "CLASS I," "CLASS II," and "CLASS III"), as nearly equal in number as possible, with each class serving three-year terms expiring at the third annual meeting of stockholders after their elections or until their respective successors have been elected and qualified. CLASS I currently consist of the following directors whose term is scheduled to expire at the 2009 annual meeting of stockholders or the first annual meeting thereafter: Robert Biehl and John Kang. CLASS II currently consists of the following directors whose term is scheduled to expire at the 2010 annual meeting of stockholders: Dean Tanella and CK Cho. CLASS III consisted of directors whose term was to expire at the 2008 annual meeting of stockholders: There are no directors under this class as of April 3, 2009.

### **Audit Committee**

Our board of directors has an Audit Committee that is currently comprised of Mr. Tanella and Mr. Biehl. The Audit Committee is responsible for reviewing the independence, qualifications, and activities of our independent certified accountants and our financial policies, control procedures, and accounting staff. The Audit Committee is also responsible for the review of transactions between us and any officer, director, or entity in which an officer or director of our company has a material interest. Our board of directors has determined that Mr. Tanella qualifies as “audit committee financial expert” as defined by the regulations of the Securities and Exchange Commission. In addition, our board of directors has determined that Mr. Tanella is an “independent” director within the meaning of Rule 10A-3(b)(i) under the Securities Exchange Act of 1934. The Audit Committee is governed by a written charter approved by the board of directors.

### **Compensation Committee**

The Compensation Committee is comprised of Mr. Cho and Mr. Biehl. All of the members of the Compensation Committee are “independent directors,” as defined by the rules applicable to members of the Compensation Committee. The Compensation Committee is responsible for establishing the compensation of our senior management, including salaries, bonuses, termination arrangements, and other executive officer benefits. The Compensation Committee also administers our equity incentive plans.

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### **Corporate Governance and Nominating Committee**

A Corporate Governance and Nominating Committee (“the Committee”) was formed on February 18, 2003, and is comprised of Mr. Tanella and Mr. Biehl. All members of the Committee are “independent directors,” as defined by the rules applicable to members of the Committee. The Committee is generally responsible for adopting policies, procedures, and practices designed to help ensure that our corporate governance policies, procedures, and practices continue to assist the board and our management in effectively and efficiently promoting the best interests of our stockholders. The Committee is also responsible for selecting and recommending for approval by the Board and the Company’s stockholders a slate of director nominees for election at each of the Company’s annual meetings of stockholders, and otherwise for determining the Board committee members and chairmen, subject to Board ratification, as well as recommending to the Board director nominees to fill vacancies or new positions on the Board or its committees that may occur or be created from time to time, all in accordance with the Company’s Bylaws and applicable law.

The Corporate Governance Committee’s principal functions include:

- developing and maintaining our corporate governance policy guidelines;
- developing and maintaining our codes of conduct and ethics;
- overseeing the interpretation and enforcement of our Code of Conduct and our Code of Ethics for Chief Executive Officer and Senior Financial and Accounting Officers;
- evaluating the performance of our board, its committees, and committee chairmen and our directors; and
- selecting and recommending a slate of director nominees for election at each of the Company’s annual meeting of the shareholders and recommending to the Board director nominees to fill vacancies or new positions on the Board or its committees that may occur from time to time.

### **Compensation Committee Interlocks and Insider Participation**

None of the members of our compensation committee serves, or has at any time served, as an officer or employee of us or any of our subsidiaries. None of our executive officers has served as a member of the compensation committee, or other committee serving an equivalent function, of any other entity, one of whose executive officers served as a member of our compensation committee.

### **Limitation of Liability and Indemnification of Officers and Directors**

Our by-laws provide that our directors, officers and employees shall be indemnified by us to the fullest extent authorized by Delaware law, as it now exists or may in the future be amended, against all expense, liability and loss reasonably incurred or suffered by them in connection with their service for or on behalf of us. In addition, we have entered into separate indemnification agreements with our directors and executive officers. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers. These indemnification agreements may require us to indemnify our directors and executive officers for related expenses, including attorneys’ fees, judgments, fines and amounts paid in settlement that were actually and reasonably incurred or suffered by a director or executive officer in an action or proceeding arising out of his or her service as one of our directors or executive officers. In order to cover the foregoing potential expenses and liability, we have obtained insurance that insures our directors and officers against specified losses.

### **Code of Ethics**

Our board of directors has adopted a Code of Ethics that is applicable to its principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions. The Code of Ethics is attached as Exhibit 14 to our Annual Report on Form 10-K filed on November 10, 2004. In addition, we intend to promptly disclose (1) the nature of any amendment to our Code that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (2) the nature of any waiver, including an implicit waiver, from a provision of our Code that is granted to one of these specified officers, the name of such person who is granted the waiver and the date of the waiver on our website in the future. You may also request a copy of the Code by sending the request to [information@liquidmetal.com](mailto:information@liquidmetal.com).

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## Item 11. Executive Compensation

### COMPENSATION DISCUSSION AND ANALYSIS

This compensation discussion describes the material elements of compensation awarded to, earned by, or paid to each of our executive officers who served as named executive officers during the last completed fiscal year. This compensation discussion focuses on the information contained in the following tables and related footnotes and narrative for primarily the last completed fiscal year, but we also describe compensation actions taken before or after the last completed fiscal year to the extent it enhances the understanding of our executive compensation disclosure.

The compensation committee currently oversees the design and administration of our executive compensation program.

The principal elements of our executive compensation program are base salary, annual cash incentives, long-term equity incentives in the form of stock options, other benefits and perquisites, post-termination severance and acceleration of stock option vesting for certain named executive officers upon termination and/or a change in control. Our other benefits and perquisites consist of reimbursement for certain automobile payments and health insurance benefits. Our philosophy is to position the aggregate of these elements at a level that is commensurate with our size and sustained performance.

#### Compensation Program Objectives and Philosophy

The objectives of our compensation programs are to:

- attract, motivate and retain talented and dedicated executive officers;
- provide our executive officers with both cash and equity incentives to further the interests of us and our stockholders; and
- provide employees with long-term incentives so we can retain them and provide stability during our growth stage.

Generally, the compensation of our executive officers is composed of a base salary, an annual incentive compensation award and equity awards in the form of stock options. In setting base salaries, the compensation committee reviewed the individual contributions of the particular executive. The management incentive program for 2008 is a discretionary award determined by the compensation committee based on company performance. In addition, stock options are granted to provide the opportunity for long-term compensation based upon the performance of our common stock over time.

For each of our named executive officers, the compensation committee reviews and approves all elements of compensation taking into consideration recommendations from our principal executive officer (for compensation other than his own), as well as competitive market guidance provided at the request of the compensation committee.

We have designed our management incentive program so that bonuses paid thereunder will qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code of 1986, as amended (the Code). Given the compensation cost to us of awarding stock options under recent accounting pronouncements, we will consider the size and frequency of any future stock option awards under our long-term equity incentive program.

#### Base Salaries

We provide the opportunity for our named executive officers and other executives to earn a competitive annual base salary. We provide this opportunity to attract and retain an appropriate caliber of talent for the position, and to provide a base wage that is not subject to our performance risk. We review base salaries for our named executive officers annually in January and increases are based on our performance and individual performance. The salary of our principal executive officer is set by our compensation committee.

#### Cash Incentives

We provide the opportunity for our named executive officers and other executives to earn cash incentive award. We provide this opportunity to attract and retain an appropriate caliber of talent for the position and to motivate executives to achieve our annual business goals. We plan to review cash incentive awards for our named executive officers and other executives annually in March to determine award payments for the last completed fiscal year, as well as to establish award opportunities for the current fiscal year.

Awards are subject to the compensation committee's discretion and may take into account corporate performance measures, including, but not limited to, revenues, EBITDA and net income. The compensation committee establishes award criteria, generally, as a percentage of annual growth.

For the year ended December 31, 2008, John Kang, our chairman of the board is eligible to receive cash awards under the 2008 management incentive program based on revenue and profit growth. The awards are subject to final approval by the compensation committee based on overall performance of the company. There were no such awards declared or paid to our named executive officers during 2008.

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In setting the target bonus amounts, our Board took into consideration that our named executive officers have significant equity interests in us through direct ownership of shares or prior option grants, which already provide them with performance incentives.

#### Equity-Based Compensation.

Our equity-based awards to our executive officers consist principally of stock options granted from time to time under our 2002 Equity Incentive Plan and our 1996 Stock Option Plan. Stock option grants are based on various factors, including the executive officer's position, responsibility and tenure, each executive officer's ability to contribute to our future success, and the other elements of such executive officer's compensation. Generally, we use equity-based compensation to better align the interests of our executive officers with those of our stockholders.





John Kang	2008	\$	300,000	—	—	—	—	—	\$	14,163(2)	\$	314,163	
	2007	\$	300,000	—	—	\$	161,171	—	—	\$	13,110(2)	\$	474,281
Ricardo Salas	2008	\$	20,000	—	—	—	—	—	—	\$	220,000(3)	\$	240,000
	2007	—	—	—	—	—	—	—	—	—	\$	180,000(4)	\$

(1) Amount represent the fair value of stock options granted in 2008 under SFAS 123(R) as discussed in Note 13, “Stock Compensation Plan” to our financial statement included elsewhere in this annual report on Form 10-K.

(2) Amount represents automobile lease payments and use of a company car.

(3) Amount represents compensation earned for consulting services provided to the company from January 2008 through November 2008.

(4) Amount represents compensation earned for consulting services provided to the company from January 2007 through December 2007.

For a description of the material terms of employment agreements with our named executive officers, see “—Employment Agreements.”

### Grants of Plan-based Awards

The following table sets forth information regarding all incentive plan awards that were made to the named executive officers during 2008, including incentive plan awards (equity-based and non-equity based) and other planned-based awards. Disclosure on a separate line item is provided for each grant of an award made to a named executive officer during the year. The information supplements the dollar value disclosure of stock, option and non-stock awards in the Summary Compensation Table by providing additional details about such awards. Equity incentive-based awards are subject to a performance condition or a market condition as those terms are defined by SFAS 123(R). Non-equity incentive plan awards are awards that are not subject to SFAS 123(R) and are intended to serve as an incentive for performance to occur over a specified period.

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Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units	All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards
		Threshold	Target	Maximum	Threshold	Target	Maximum			
Larry Buffington	—	—	—	—	—	—	—	—	—	—
Tony Chung	12/01/08	—	—	—	—	—	—	—	200,000	\$ 0.086
John Kang	—	—	—	—	—	—	—	—	—	—
Ricardo Salas	—	—	—	—	—	—	—	—	—	—

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### Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information on outstanding option and stock awards held by the named executive officers at December 31, 2008, including the number of shares underlying both exercisable and unexercisable portions of each stock option as well as the exercise price and expiration date of each outstanding option.

Name	Option Awards						Stock Awards				
	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Equity Incentive Plan Awards Number of Securities Underlying Unexercised Options	Option Exercise Price	Option Expiration Date	Vesting Commencement Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested	
Larry Buffington	100,000	400,000	—	\$ 0.772	09/19/2017	09/20/2008(1)	—	—	—	—	
Tony Chung	—	200,000	—	\$ 0.086	11/30/2018	12/01/2009(1)	—	—	—	—	
John Kang	21,505	—	—	\$ 4.650	12/30/2010	12/31/2000(2)	—	—	—	—	
	1,591,399	—	—	\$ 4.650	12/30/2010	12/31/2000(2)	—	—	—	—	
	30,000	20,000	—	\$ 2.326	12/31/2014	01/01/2006(1)	—	—	—	—	
	596	1,192	—	\$ 0.772	09/19/2017	09/20/2008(1)	—	—	—	—	
	99,404	398,808	—	\$ 0.772	09/19/2017	09/20/2008(1)	—	—	—	—	
Ricardo Salas	—	—	—	—	—	—	—	—	—	—	

(1) The shares underlying this option vest 20% per year starting with the vesting commencement date and thereafter.

(2) The shares underlying this option vest 100% immediately on grant date.

## Option Exercises and Stock Vested

There were no exercise of stock options and vesting of restricted stock during 2008.

## Employment Agreements

We have entered into the following employment agreements with the named executive officers identified above.

**Larry Buffington.** On October 8, 2006 we elected Larry Buffington as our President and Chief Executive Officer who received an initial base salary of \$200,000 for serving as President and Chief Executive Officer of our company. Effective January 1, 2007, the Compensation Committee approved an increase in the base salary to \$250,000. On July 24, 2007, we transferred substantially all of

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the assets of its Liquidmetal alloy industrial coatings business to a newly formed, newly capitalized subsidiary named Liquidmetal Coatings, LLC, a Delaware limited liability company (“LMC”), and LMC assumed substantially all of the liabilities of the coatings business, in which we hold a 69.25% ownership interest. In conjunction to the transfer, LMC entered into an employment agreement with Mr. Buffington as its President and Chief Executive Officer. The employment agreement has an initial 5-year term (“Initial Term”), provides for an annual base salary of \$250,000 per year with an opportunity for an annual performance bonus of up to 50% of his salary based on meeting certain target goals. In addition, Mr. Buffington has a 10% ownership in LMC which vests evenly over five years. Mr. Buffington’s employment will terminate upon the earlier of his death, resignation, disability, or termination by the board of directors for any reason, provided that if his employment is terminated without cause, he will continue to receive the Employee’s base salary (as then in effect) through the later of one year after the date of the termination or the end of the Initial Term. He will also forfeit the unvested portion of his interest in LMC if he terminates prior to the completion of his five years of employment with LMC.

**John Kang.** On December 31, 2000, we entered into an employment agreement with John Kang that, as amended, provides for his employment as our Chief Executive Officer and President, and on August 22, 2003, Mr. Kang was named Chairman of our Board of Directors. On December 30, 2005, Mr. Kang ceased to serve as our President and Chief Executive Officer, and Mr. Kang’s employment agreement has an expiration date of December 31, 2005, although the agreement automatically renews on a year-to-year basis until Mr. Kang resigns or his employment is terminated by us with or without cause. Mr. Kang receives an annual base salary equal to \$300,000 per year, and his employment will terminate upon the earlier of his death, resignation, disability, or termination by the board of directors for any reason. If we terminate Mr. Kang’s employment without cause, or if Mr. Kang terminates his own employment upon a change of control of our company or for other good reason, as defined in the agreement, we are responsible for paying Mr. Kang a lump-sum cash payment equal to 200% of Mr. Kang’s annual base salary plus the average cash bonus during the two full fiscal years immediately preceding the termination. Pursuant to the agreement, Mr. Kang was issued options to purchase 1,612,904 shares of our common stock at an exercise price of \$4.65 per share. The options expire on December 31, 2010 and vested immediately upon grant. In addition, Mr. Kang is prohibited, during his employment with us and for one year after he is no longer employed by us, from soliciting any of our employees or competing with us in any manner.

**Tony Chung,** who was elected as our Chief Financial Officer on December 1, 2008, receives an initial base salary of \$150,000. In connection with the commencement of his employment, Mr. Chung was granted an option to purchase up to 200,000 shares of Company common stock under the Company’s 2002 Equity Incentive plan. The option was granted at an exercise price equal to \$0.09 per share, which was the fair market value of the Company’s common stock on the option grant date, and the option vests to the extent of 40,000 shares on each anniversary of the option grant date beginning in 2009. We and Mr. Chung have not entered into an employment agreement relating to Mr. Chung’s employment with us, but we may determine to do so in the future.

**Ricardo Salas,** who previously served as our Chief Executive Officer and President from December 30, 2005 through October 8, 2006, began serving as our Executive Vice President on December 1, 2008. Mr. Salas will receive an initial base salary of \$240,000. We and Mr. Salas have not entered into an employment agreement relating to Mr. Salas’ employment with us, but we may determine to do so in the future.

## 401(k) Savings Plan

We have adopted a tax-qualified employee savings and retirement plan, or 401(k) plan, that covers all of our employees. Pursuant to our 401(k) plan, participants may elect to reduce their current compensation, on a pre-tax basis, by up to 15% of their taxable compensation or of the statutorily prescribed annual limit, whichever is lower, and have the amount of the reduction contributed to the 401(k) plan. The 401(k) plan permits us, in our sole discretion, to make additional employer contributions to the 401(k) plan. However, we do not currently make employer contributions to the 401(k) plan and may not do so in the future. As such, contributions by employees or by us to the 401(k) plan, and the income earned on plan contributions, are not taxable to employees until withdrawn from the 401(k) plan, and we can deduct our contributions, if any, at the time they are made.

## Pension Benefits

We do not sponsor any qualified or non-qualified defined benefit plans.

## Nonqualified Deferred Compensation

We do not maintain any non-qualified defined contribution or deferred compensation plans. The compensation committee, which is comprised solely of “outside directors” as defined for purposes of Section 162(m) of the Code, may elect to provide our officers and other employees with non-qualified defined contribution or deferred compensation benefits if the compensation committee determines that doing so is in our best interests. We sponsor a tax qualified defined contribution 401(k) savings plan.

## Potential Payments upon Termination or Change in Control

Potential payments payable to our executive officers upon termination of employment following a change in control of us is discussed under “—Employment Agreements”. The compensation committee of our board of directors may, at their discretion, amend or add benefits to these arrangements as they deem advisable.

The table below presents estimates of the amounts of compensation payable to each named executive officer upon a change in control and termination of the executive. The amounts shown assume that such a change in control and termination were both effective as of December 31, 2008. The actual amounts to be paid can only be determined at the time of a change in control or executive’s termination.

Benefit	Larry Buffington		John Kang		Tony Chung		Ricardo Salas	
	Change in Control	Termination	Change in Control	Termination	Change in Control	Termination	Change in Control	Termination
<b>UNEARNED COMPENSATION</b> (payment contingent on termination)								
Cash Severance (a)	—	\$ 896,000	\$ 600,000	\$ 600,000	—	—	—	—
Equity								
Unexercisable Options	—	—	—	—	—	—	—	—
Benefits								
Health	—	\$ 11,593	—	—	—	—	—	—
<b>Total</b>	<b>—</b>	<b>\$ 907,593</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

(a) For Mr. Buffington, reflects approximately 3.6 times his annual base pay for a termination. Mr. Buffington will receive annual base salary through the later of one year or his initial 5 year term. For Mr. Kang, reflects two times his annual base pay for a change of control or termination.

## Director Compensation

The following table sets forth information regarding the compensation received by each of our directors during the year ended December 31, 2008;

Name	Fees Earned or Paid in Cash	Stock Awards	Option Awards (1)	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
John Kang	—	—	—(2)	—	—	—	—
William Johnson (9)	—	—	\$ 2,904(3)	—	—	\$ 60,000(8)	\$ 62,904
Dean Tanella	\$ 75,000	—	\$ 8,712(4)	—	—	—	\$ 83,712
Robert Biehl	\$ 47,500	—	\$ 62,638(5)	—	—	—	\$ 110,138
CK Cho	\$ 40,000	—	\$ 2,904(6)	—	—	\$ 8,995	\$ 51,899
Patrick Caruana (9)	\$ 10,000	—	\$ 2,904(7)	—	—	—	\$ 12,904

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- (1) Amounts represent the fair value of stock options granted in 2008 under SFAS 123(R) as discussed in Note 13, “Stock Compensation Plan”, to our consolidated financial statements included elsewhere in this report on Form 10K.
- (2) 2,162,904 shares of options were outstanding as of December 31, 2008.
- (3) 90,000 shares of options were outstanding as of December 31, 2008.
- (4) 150,000 shares of options were outstanding as of December 31, 2008.
- (5) 308,031 shares of options were outstanding as of December 31, 2008. Amount includes fair value of stock options issued for consulting services provided during 2008 totaling \$59,734 .
- (6) 80,000 shares of options were outstanding as of December 31, 2008.
- (7) 70,000 shares of options were outstanding as of December 31, 2008.
- (8) Amount represents amount incurred for consulting services provided during 2008.
- (9) Messrs. Johnson and Caruana resigned as directors of our company effective March 31, 2009.

Our non-employee directors receive an annual fee of \$10,000 for their service to our board and are reimbursed for expenses incurred in attending board and committee meetings. Non-employee directors are also entitled to receive a \$10,000 annual cash stipend for each standing board committee (excluding the Audit Committee) on which the director serves. For Audit Committee service, the Audit Committee chairman is entitled to a \$35,000 annual stipend, and the other members of the Audit Committee are entitled to a \$27,500 annual stipend. In addition to the annual stipends, each non-employee director is entitled to receive a per-meeting fee of \$1,000 for each meeting of the board of directors or any board committee attended in person. Effective December 30, 2005, Dean Tanella was elected as the lead independent director of our company. The lead independent director is entitled to a \$30,000 annual stipend.

We also have a 2002 Non-employee Director Stock Option Plan pursuant to which our non-employee directors are entitled to receive stock options. Under this plan, when a director is first elected or appointed to our board of directors, the non-employee director is entitled to receive an initial stock option grant to purchase 50,000 shares of our common stock. Thereafter, on the first business day of January of each year in which the director continues to serve as a member of our board, the director is entitled to an annual stock option grant to purchase 10,000 shares of our common stock. All options granted under the plan have an exercise price equal to the fair market value of our common stock on the date of the grant. These stock options have a 10-year term, vest, and are exercisable pursuant to an equal 5-year vesting schedule, and remain exercisable for certain periods of time after a person is no longer a director.

No director who is an employee will receive separate compensation for services rendered as a director. However, our employee directors are eligible to participate in our 2002 Equity Incentive Plan.

### Compensation Committee Report

The compensation committee of the board of directors has reviewed and discussed the above Compensation Discussion & Analysis with management and, based on such review and discussion, has recommended to the board of directors that the Compensation Discussion & Analysis be included in the company's Annual Report on Form 10-K statement.

CK Cho  
Robert Biehl

December 31, 2008

Compensation Committee of the Board of Directors

The report of the Compensation Committee shall not be deemed incorporated by reference by any general statement incorporating by reference this Annual Report on Form 10-K into any filing under the Securities Act of 1993 or under the Securities Exchange Act of 1934, except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

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#### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table sets forth certain information regarding the beneficial ownership of our common stock as of April 3, 2009 by:

- each person known by us to be a beneficial owner of more than 5.0% of our outstanding common stock;
- each of our directors;
- each of our named executive officers; and
- all directors and executive officers as a group.

The number and percentage of shares beneficially owned is determined under rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares as to which the individual has sole or shared voting power or investment power and also any shares which the individual has the right to acquire beneficial ownership of within 60 days of April 3, 2009 through the exercise of any stock option or other right. Unless otherwise indicated in the footnotes, each person has sole voting and investment power with respect to the shares shown as beneficially owned. A total of 44,825,402 shares of our common stock were issued and outstanding as of April 3, 2009. Unless otherwise indicated, the address of all directors and named executive officers is 30452 Esperanza, Rancho Santa Margarita, CA 92688.

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Name of Beneficial Owner (PENDING)	Shares	Percent of Class
<b>5% Stockholders</b>		
Tjoa Thian Song(1) 16 Raffles Quay #B1-14A Hong Leong Building Singapore 0101	4,008,523	9%
Jack Chitayat(2) 1133 Park Avenue, Suite 1W New York, NY 10128	6,591,685	15%

James Kang(3) Hyundai Hyperion Apt. 101-403 Youngsan-Gu, Hannam-Dong Seoul, Korea	6,121,304	14%
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### **Directors and Named Executive Officers**

John Kang(4)	5,134,973	12%
Dean Tanella(5)	121,620	*
Robert Biehl(6)	483,544	1%
CK Cho(7)	1,056,539	2%
Larry Buffington(8)	100,000	—
Tony Chung(9)	—	—
All directors and executive officers as a group (8 persons)	6,896,676	15%

\* Less than one percent.

(1) Includes 3,874,585 shares are held of record by a revocable grantor trust established by Mr. Tjoa for himself and his family members. Mr. Tjoa continues to beneficially own all such shares.

(2) Includes 1,588,637 shares issuable pursuant to currently exercisable warrants and 2,458,749 shares issuable pursuant to currently convertible notes held by Atlantic Realty Group, Inc., Carlyle Liquid, LLC, and Carlyle Holdings, LLC, of which all are controlled by Mr. Chitayat, and 91,792 shares held of record by a trust established by Mr. Chitayat for his family members. Mr. Chitayat continues to beneficially own all such shares.

(3) Includes 84,542 shares issuable pursuant to currently exercisable warrants and 2,877,420 shares issuable pursuant to outstanding stock options that are exercisable currently or within 60 days of April 3, 2009 and includes 969 shares held by James Kang's minor children. Does not include the 1,700,000 shares that Mr. Kang has agreed to personally purchase on October 31, 2006 from Innometal Co., Ltd. as an inducement for Innometal to enter into a Settlement Agreement with us. Innometal agreed to accept these shares in full satisfaction of all of our obligations to them under January 2004 settlement agreement.

(4) Includes 182,400 shares held by Mr. Kang's minor children and 1,752,905 shares issuable pursuant to outstanding stock options that are exercisable currently or within 60 days of April 3, 2009. Does not include 410,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of April 3, 2009.

(5) Includes 16,130 shares held by Mr. Tanella's investment firm, HarborLight Diversified Fund, LP; 2,890 shares held by Mr. Tanella's family; and 94,000 shares issuable pursuant to outstanding stock options that are exercisable currently or within 60

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days of April 3, 2009. Does not include 86,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of April 3, 2009.

(6) Includes 280,031 shares issuable pursuant to outstanding stock options that are exercisable currently or within 60 days of April 3, 2009. Does not include 38,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of April 3, 2009.

(7) Includes 305,918 shares issuable pursuant to currently exercisable warrants and 457,023 shares issuable pursuant to currently convertible notes; and 52,000 shares issuable pursuant to outstanding stock options that are exercisable currently or within 60 days of April 3, 2009. Does not include 38,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of April 3, 2009.

(8) Includes 100,000 shares issuable pursuant to outstanding stock options that are exercisable currently or within 60 days of April 3, 2009. Does not include 400,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of April 3, 2009.

(9) Does not include 200,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of April 3, 2009.

### **Equity Incentive / Equity Compensation Plans**

Our executive officers, directors, and all of our employees are allowed to participate in our equity incentive plans. We believe that providing them with the ability to participate in such plans provides them with a further incentive towards ensuring our success and accomplishing our corporate goals.

Securities authorized for issuance under equity compensation plans as of December 31, 2008 were as follows:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants, and rights [a]	Weighted-average exercise price of outstanding options, warrants, and rights [b]	Number of securities remaining available for future issuance under equity compensation plans (excluding securities
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				reflected in column (a) [c]
Equity compensation plans approved by stockholders	7,975,782	\$	3.81	7,908,579
Equity compensation plans not approved by stockholders	14,443,183	\$	1.64	—
<b>Total</b>	<b>22,418,965</b>			<b>7,908,579</b>

Equity compensation plans not approved by stockholders consist of:

- Warrants to purchase up to 1,039,255 shares issued on June 13, 2005 with an exercise price of \$1.72 per share and an expiration date of June 13, 2010;
- Warrants to purchase up to 3,353,486 shares issued on August 2, 2005 with an exercise price of \$1.72 per share and an expiration date of August 2, 2010;
- Warrants to purchase up to 125,000 shares issued on March 17, 2006 with an exercise price of \$1.55 per share and an expiration date of March 17, 2009;
- Warrants to purchase up to 452,859 shares issued between May 17, 2006 and December 1, 2006 with an exercise price of \$1.72 per share and an expiration date of May 17, 2011;
- Warrants to purchase up to 860,521 shares issued between May 17, 2006 and December 1, 2006 with an exercise price of \$2.07 per share and an expiration date of May 17, 2011;
- Warrants to purchase up to 7,477,971 shares issued on January 3, 2007 with an exercise price of \$1.55 per share and an expiration date of January 3, 2012;
- Warrants to purchase up to 1,109,091 shares issued on December 28, 2007 with an exercise price of \$1.55 per share and an expiration date of December 28, 2012;

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- Warrants to purchase up to 25,000 shares issued on May 6, 2008 with an exercise price of \$1.75 per share and an expiration date of May 17, 2011.

The number of securities and type of plans available for future issuance of stock options as of December 31, 2008 were as follows:

Plan Name	Options and Warrants for Common Shares			
	Authorized	Exercised	Outstanding	Available
1996 Stock Option Plan	12,903,226	1,974,365	3,039,198	—
2002 Equity Incentive Plan	10,000,000	—	2,621,421	7,378,579
2002 Non-employee Director Stock Option Plan	1,000,000	—	470,000	530,000
<b>Total Stock Options</b>	<b>23,903,226</b>	<b>1,974,365</b>	<b>6,130,619</b>	<b>7,908,579</b>

#### 1996 Stock Option Plan

Our 1996 Stock Option Plan provides for the grant of stock options to employees, directors, and consultants of our company and its affiliates. The purpose of the plan is to retain the services of existing employees, directors, and consultants; to secure and retain the services of new employees, directors, and consultants; and to provide incentives for such persons to exert maximum efforts for our success. The plan provides for the granting to employees of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and for the granting to employees and consultants of nonstatutory stock options. Our board of directors terminated the 1996 Stock Option Plan on April 4, 2002. The termination will not affect any outstanding options under the plan, and all such options will continue to remain outstanding and be governed by the plan.

Options granted under the 1996 Stock Option Plan are generally not transferable by the optionee except by will or the laws of descent and distribution, and each option is exercisable, during the lifetime of the optionee, only by the optionee. Options generally must be exercised within 90 days after the optionee's termination for cause, three months following the end of the optionee's status as an employee or consultant, other than for cause or for death or disability, or within six months after the optionee's termination by disability or twelve months following the optionee's termination by death. However, in no event may an option be exercised later than the earlier of the expiration of the term of the option or ten years from the date of the grant of the option or, where an optionee owns stock representing more than 10% of the voting power, five years from the date of the grant of the option in the case of incentive stock options.

As of December 31, 2008, options to purchase 3,039,198 shares of common stock were outstanding at a weighted average price of \$5.76 per share under the 1996 Stock Option Plan. As of December 31, 2008, options to purchase 1,974,365 shares had been issued upon exercise of options under the plan. There were 3,224,683 options exercisable under the 1996 Stock Option Plan as of December 31, 2007.

#### 2002 Equity Incentive Plan

Our 2002 Equity Incentive Plan, which was adopted by our board of directors and approved by our stockholders in April 2002, provides for the grant of stock options to officers, employees, consultants, and directors of our company and its subsidiaries. The purpose of the plan is to advance the interests of our stockholders by enhancing our ability to attract, retain, and motivate persons who make or are expected to make important contributions to our company and its subsidiaries by providing such persons with equity ownership opportunities and performance-based incentives, thereby better aligning their interests with those of our stockholders. The plan provides for the granting to employees of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, and for the granting to employees and consultants of nonstatutory stock options. In addition, the plan permits the granting of stock appreciation rights, or SARs, with or independently of options, as well as stock bonuses and rights to purchase restricted stock. A total of ten million shares of our common stock may be granted under the plan.

The plan is administered by our board of directors or a committee appointed by our board of directors. All members of such a committee must be a non-employee director and an outside director, as defined in the plan. Subject to the limitations set forth in the plan, the administrator has the authority to select the persons to whom grants are to be made, to designate the number of shares to be covered by each stock award, to determine whether an option is to be an incentive stock option or a nonstatutory stock option, to

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establish vesting schedules, to specify the option exercise price and the type of consideration to be paid upon exercise, and, subject to some restrictions, to specify other terms of stock awards.

The administrator establishes the option exercise price, which in the case of incentive stock options, must be at least the fair market value of the common stock on the date of the grant or, with respect to optionees who own at least 10% of our outstanding common stock, 110% of fair market value. If our common stock is listed and traded on a registered national or regional securities exchange, or quoted on the National Association of Securities Dealers' Automated Quotation System, fair market value is the average closing price of a share of our common stock on such exchange or quotation system for the five trading days prior to the date of grant. If our common stock is not traded on a registered securities exchange or quoted in such a quotation system, fair market value is determined in good faith by the administrator.

Options granted under the plan are generally not transferable by the optionee except by will or the laws of descent and distribution, and to certain related individuals with the consent of the administrator. Options generally must be exercised within three months after the optionee's termination of employment for any reason other than disability or death, or within 12 months after the optionee's termination by disability. Options granted under the plan vest at the rate specified in the option agreement. However, in no event may an option be exercised later than the earlier of the expiration of the term of the option or 10 years from the date of the grant of the option, or when an optionee owns stock representing more than 10% of the voting power, five years from the date of the grant of the option in the case of incentive stock options.

Any incentive stock options granted to an optionee which, when combined with all other incentive stock options becoming exercisable for the first time in any calendar year that are held by that person, would have an aggregate fair market value in excess of \$0.1 million, shall automatically be treated as nonstatutory stock options.

The plan may be amended, altered, suspended or terminated by our board of directors at any time, but no such amendment, alteration, suspension or termination may adversely affect the terms of any option previously granted without the consent of the affected optionee. Unless terminated sooner, the plan will terminate automatically in September 2012. As of December 31, 2008, there were 2,621,421 outstanding options or stock awards at a weighted average price of \$1.55 under the plan. There were 1,218,021 options exercisable under the 2002 Equity Incentive Plan as of December 31, 2008.

### **2002 Non-employee Director Stock Option Plan**

Our 2002 Non-employee Director Stock Option Plan was adopted by our board of directors and by our stockholders in April 2002. We have reserved a total of one million shares of our common stock for issuance under the plan. The option grants under the plan are automatic and nondiscretionary, and the exercise price of the options is equal to 100% of the fair market value of our common stock on the grant date.

Only non-employee directors are eligible for grants under the plan. The plan will provide for an initial grant to a new non-employee director of an option to purchase 50,000 shares of our common stock. Subsequent to the initial grants, each non-employee director will be automatically granted on the first business day of January commencing January 1, 2003, an option to purchase 10,000 shares of our common stock.

The term of the options granted under the plan is 10 years, but the options expire 12 months after the termination of the optionee's status as a director or three months if the termination is due to the voluntary resignation of the optionee. The option grants will vest and become exercisable as to one-fifth of the shares on the date that is one year after the date of grant and an additional one-fifth of the shares subject to the option on a cumulative basis will vest and become exercisable annually thereafter.

As of December 31, 2008, options to purchase 470,000 shares of common stock were outstanding at a weighted average price of \$1.85 per share under the 2002 Non-employee Director Stock Option Plan. There were 200,000 options exercisable under the 2002 Non-employee Director Stock Option Plan as of December 31, 2008.

The plan will terminate in October 2012, unless our board of directors terminates it sooner.

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### **Item 13. Certain Relationships and Related Transactions**

We are a party to a consulting agreement with William Johnson, a former director of our company, on a month-to-month basis starting from 2005. During each of the years ended December 31, 2008, 2007 and 2006, the Company incurred approximately \$0.1 million consulting fees from Mr. Johnson.

Soo Buchanan, the sister of John Kang, the our Chairman of the Board, provides services us a consultant. During the years ended December 31, 2008, 2007 and 2006, we incurred approximately \$0.1 million, \$0 and \$0, respectively, for her services as a consultant. Additionally, Otis Buchanan, the husband of Ms. Buchanan, was employed by us and was paid aggregate compensation of approximately \$0.1 million during each of the years ended December 31, 2008, 2007 and 2006.

On December 23, 2008, John Kang advanced us \$0.2 million to be used to repay our company's outstanding borrowings made under the Factoring, Loan and Security Agreement (the "Factoring Agreement"), dated April 21, 2005, with a financing company. Further, Mr. Kang entered into a Continuing Guarantee Agreement, dated January 5, 2009, with the financing company to personally guarantee repayment of the outstanding borrowings made under the Factoring

Agreement. Subsequently in January 2009, the \$0.2 million advance was offset with \$0.2 million outstanding receivable from Mr. Kang arising from liabilities incurred from certain stock transactions in August 2002.

As of December 31, 2008 and 2007, CK Cho, a member of our Board of Directors, held approximately \$0.5 million of the convertible subordinated notes and held 305,918 exercisable warrants for both periods.

As of December 31, 2008 and 2007, Ricardo Salas, the our former Chief Executive Officer, held approximately \$0.4 million of the convertible unsecured subordinated notes and approximately \$0.3 million of the unsecured subordinated notes. He also held a total of 377,691 of exercisable warrants as of December 31, 2008 and 2007.

On June 1, 2007, we entered into a transaction with Grace Metal (currently Liquidmetal Korea Co., Ltd. "LMK"), under which (i) LMK agreed to purchase various equipments (including die casting machines and vacuum induction melters) used in our bulk amorphous alloy business segment and (ii) we granted LMK a 10-year exclusive license to manufacture products made from bulk Liquidmetal alloys for customers whose principal headquarters or whose major operations are located in South Korea. LMK was formed by an investor group that includes the former director and officer of our company, James Kang, who is also the brother of John Kang, our Chairman of the Board. Under an equipment purchase agreement between us and LMK, LMK agreed to buy the purchased equipment for a total purchase price of \$2.0 million, of which \$0.8 million were received as of December 31, 2008. The equipment purchase agreement provides that delivery of the equipment can be delayed to accommodate our continuing manufacturing needs, and it also provides that we will retain a security interest in the purchased equipment until full payment of the purchase price.

In consideration of the license agreement with LMK, we will be entitled to royalty of 10% of LMK's net sales of licensed products (unless LMK's margin on the products falls below specified levels, in which case a new royalty will be negotiated in good faith). Effective June 1, 2008, the royalty rate was adjusted to 5%. The agreement provides that we may convert the license to a non-exclusive in the event that the net sales in the second year of the contract or thereafter are not sufficient to result in royalties of \$0.5 million or more per year. The agreement also provides that LMK will be required to purchase all alloy feedstock from us, and we will have the right to continue to manufacture Liquidmetal alloy products for South Korean customers until all purchased equipment has been commissioned.

Additionally, effective June 1, 2007, we discontinued our post-processing operation in Weihai, China and transferred the manufacturing staff and equipment in Weihai to LMK under an amendment to the equipment purchase agreement with LMK. Further, we transferred certain of our manufacturing staff from its South Korean plant to LMK. As a result, LMK assumed \$0.4 million of accrued severance liability for the transferred employees. The equipment purchase agreement and the transfer agreement regarding our Weihai operations resulted in a total net gain of \$0.2 million, which is recorded as other income during the year ended December 31, 2007.

We purchased production supplies and outsourced production of certain bulk alloy production with LMK, Lead Metal, and SDM, which are controlled by James Kang, a former director and officer of our company and the brother of our current Chairman of the Board. In June 2008, we began sharing the use of our manufacturing facility and production equipment in Pyongtaek, South Korea, with LMK as we began significant outsourcing of our bulk alloy parts production. We incurred expenses for purchase of production supplies and outsourcing fees of \$2.1 million, \$0.7 million and \$0.5 million during the years ended December 31, 2008, 2007 and 2006, respectively. We recognized revenue from sales of raw materials and royalties for a total of \$2.0 million and \$3.4 million during the years ended December 31, 2008 and 2007, respectively. Approximately, \$0.2 million and \$0.4 million is included in accounts receivables as of December 31, 2008 and 2007, respectively for outstanding trade receivables due.

Effective October 20, 2006, James Kang began providing services us as a consultant, which would have continued through December 31, 2009. On December 31, 2007, the terms of the consulting agreement were accelerated whereby the remaining two years of Mr. Kang's consulting fees were settled for \$435.

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In December 2007, we entered into agreements with two holders of our convertible subordinated notes (the "January 2010 Notes") and LMK, a South Korean company formed by investor groups including our former director and officer of our company, James Kang, and the two former noteholders, whereby LMK would assume the liabilities due under the January 2010 Notes, including principal, interest, and fees due by our company to the two noteholders totaling \$0.4 million and we released obligations due from LMK for outstanding trade accounts receivables. In connection with the assumption of the liabilities by LMK, warrants to purchase 179,620 shares of our common stock held by the holders were cancelled.

We believe that each of the foregoing transactions was consummated on terms at least as favorable to us as we would expect to negotiate with unrelated third parties.

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### **Item 14. Principal Accounting Fees and Services**

Choi, Kim & Park, LLP

The following table summarizes the aggregate fees billed to the Company by Choi, Kim & Park, LLP for professional services:

<u>Fees</u>	<u>2007</u>	<u>2008</u>
Audit Fees (1)	\$ 406,000	\$ 297,000

(1) *Audit Fees.*

Fees for audit services billed in 2008 consisted of:

- Audit of the Company's financial statements for 2007;
- Review of the Company's quarterly financial statements for 2008;
- Review of the Company's internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 for 2007;

Fees for audit services billed in 2007 consisted of:

- Audit of the Company's financial statements for 2006;
- Review of the Company's quarterly financial statements for 2007;
- Review of the Company's internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 for 2007;
- Review of the Company's S-1 filing for 2007.

## PART IV

### Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as a part of this report:

1. *Financial Statements*.
2. *Financial Statement Schedules*. See the last page of Consolidated Financial Statements.
3. *Exhibits*. See Item 15(c) below.

(b) *Exhibits*. The exhibits listed on the Exhibit Index, which appears at the end of this Item 15, are filed as part of, or incorporated by reference into, this report.

(c) *Financial Statement Schedules*. See Item 15(a)(2) above.

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## EXHIBIT INDEX

Exhibit Number	Document Description
3.1	Certificate of Incorporation ( <i>incorporated by reference to Exhibit 3.1 to the Form 10-Q filed on August 14, 2003</i> ).
3.2	Bylaws ( <i>incorporated by reference to Exhibit 3.2 to the Form 10-Q filed on August 14, 2003</i> ).
4.1	Reference is made to Exhibits 3.1 and 3.2.
4.2	Form of Common Stock Certificate ( <i>incorporated by reference to Exhibit 4.2 to the Form 10-Q filed on August 14, 2003</i> ).
10.1	Amended and Restated License Agreement, dated September 1, 2001, between Liquidmetal Technologies, Inc. and California Institute of Technology ( <i>incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed on November 20, 2001 (Registration No. 333-73716)</i> ).
10.2*	1996 Stock Option Plan, as amended, together with form of Stock Option Agreement ( <i>incorporated by reference to Exhibit 10.7 to the Registration Statement on Form S-1 filed on November 20, 2001 (Registration No. 333-73716)</i> ).
10.3*	2002 Equity Incentive Plan ( <i>incorporated by reference to Exhibit 10.23 to the Registration Statement on Form S-1 (Amendment No. 2) filed on April 5, 2002 (Registration No. 333-73716)</i> ).
10.4*	2002 Non-Employee Director Stock Option Plan ( <i>incorporated by reference to Exhibit 10.24 to the Registration Statement on Form S-1 (Amendment No. 2) filed on April 5, 2002 (Registration No. 333-73716)</i> ).
10.5*	Employment Agreement, dated December 31, 2000, between Liquidmetal Technologies, Inc. and John Kang, as amended by Amendment No. 1 to Employment Agreement, dated June 28, 2001 ( <i>incorporated by reference to Exhibit 10.8 to the Registration Statement on Form S-1 filed on November 20, 2001 (Registration No. 333-73716)</i> ).
10.6	Non-Qualified Stock Option Agreement, dated January 1, 2001, between Liquidmetal Technologies, Inc. and Paul Azinger ( <i>incorporated by reference to Exhibit 10.19 to the Registration Statement on Form S-1 filed on November 20, 2001 (Registration No. 333-73716)</i> ).
10.7	Foreign Corporation Lease Zone Occupancy (Lease) Agreement, dated March 5, 2002, between Kyonggi Local Corporation and Liquidmetal Korea Co., Ltd. ( <i>incorporated by reference to Exhibit 10.22 to the Registration Statement on Form S-1 (Amendment No. 2) filed by Liquidmetal Technologies on April 5, 2002 (Registration No. 333-73716)</i> ).
10.8	Credit Service Agreement, dated February 2003, between Liquidmetal Korea Co., Ltd. and Kookmin Bank ( <i>incorporated by reference to Exhibit 10.20 to the Form 10-K filed on March 31, 2003</i> ).
10.9	Form of Common Stock Purchase Warrant, dated August 2, 2005 ( <i>incorporated by reference from Exhibit 10.3 of the Registrant's 10-Q/A filed on 08/30/05</i> ).
10.10	Form of Common Stock Purchase Warrant, dated June 13, 2005 ( <i>incorporated by reference from Exhibit 99.3 of the Registrant's 8-K filed on</i>

- 10.11 Agreement, dated November 3, 2004, between Liquidmetal Technologies, Inc. and John Kang relating to liability under Section 16(b) (*incorporated by reference from Exhibit 10.58 to the Form 10-K filed on March 16, 2006*).
- 10.12 Form of Indemnity Agreement between Liquidmetal Technologies, Inc. and directors and executive officers (*incorporated by reference from Exhibit 10.59 to the Form 10-K filed on March 16, 2006*).
- 10.13 Factoring, Loan, and Security Agreement, dated April 21, 2005, between Liquidmetal Technologies, Inc. and Hana Financial, Inc. and Amendment No. 1 to Factoring, Loan, and Security Agreement, dated January 27, 2006, between Liquidmetal Technologies, Inc. and Hana Financial, Inc. (*incorporated by reference to Exhibit 10.60 to the Registration Statement on Form S-1 (Amendment No. 1) filed on April 20, 2006 (Registration No. 333-130251)*).
- 10.14 Warrant for Purchase of Shares of Common Stock, dated March 17, 2006, granted by Liquidmetal Technologies, Inc. to Atlantic Realty Group, Inc. (*incorporated by reference to Exhibit 10.62 to the Registration Statement on Form S-1 (Amendment No. 1) filed on April 20, 2006 (Registration No. 333-130251)*).
- 10.15 Consulting Agreement, dated April 12, 2006, between Liquidmetal Technologies, Inc. and William Johnson (*incorporated by reference to Exhibit 10.65 to the Registration Statement on Form S-1 (Amendment No. 1) filed on April 20, 2006 (Registration No. 333-130251)*).
- 10.16 Securities Purchase Agreement, dated May 17, 2006, among Liquidmetal Technologies, Inc. and the parties identified as “Purchasers” therein (*incorporated by reference to Exhibit 10.66 to the Registration Statement on Form S-1 (Amendment No. 2) filed on July 20, 2006 (Registration No. 333-130251)*).

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Exhibit Number	Document Description
10.17	Form of 8% Unsecured Subordinated Note due August 2007 ( <i>incorporated by reference to Exhibit 10.67 to the Registration Statement on Form S-1 (Amendment No. 2) filed on July 20, 2006 (Registration No. 333-130251)</i> ).
10.18	Form of Common Stock Purchase Warrant, dated May 17, 2006 ( <i>incorporated by reference to Exhibit 10.68 to the Registration Statement on Form S-1 (Amendment No. 2) filed on July 20, 2006 (Registration No. 333-130251)</i> ).
10.19	Registration Rights Agreement, dated May 17, 2006, among Liquidmetal Technologies, Inc. and the parties identified as “Purchasers” therein ( <i>incorporated by reference to Exhibit 10.69 to the Registration Statement on Form S-1 (Amendment No. 2) filed on July 20, 2006 (Registration No. 333-130251)</i> ).
10.20	Securities Purchase Agreement, dated January 3, 2007 (the “Securities Purchase Agreement”), among Liquidmetal Technologies, Inc. (the “Company”) and the investors listed on the Schedule of Buyers attached thereto (the “Buyers”) ( <i>incorporated by reference from Exhibit 10.1 to the Form 8-K filed on January 4, 2007</i> ).
10.21	Form of Convertible Subordinated Note issued pursuant to Securities Purchase Agreement ( <i>incorporated by reference from Exhibit 10.2 to the Form 8-K filed on January 4, 2007</i> ).
10.22	Form of Common Stock Purchase Warrant issued pursuant to Securities Purchase Agreement ( <i>incorporated by reference from Exhibit 10.3 to the Form 8-K filed on January 4, 2007</i> ).
10.23	Registration Rights Agreement, dated January 3, 2007, among the Company and the Buyers ( <i>incorporated by reference from Exhibit 10.4 to the Form 8-K filed on January 4, 2007</i> ).
10.24	Amendment No. 2 to Factoring, Loan & Security Agreement, dated January 23, 2007, between Liquidmetal Technologies Inc. and Hana Financial, Inc. ( <i>incorporated by reference from Exhibit 10.76 to the Form 10-K filed on March 16, 2007</i> ).
10.25	Amendment No. 1 to the Securities Purchase Agreement and Convertible Subordinated Notes, dated April 23, 2007, by and between Liquidmetal Technologies, Inc. and the investors listed on the Schedule of Buyers attached thereto ( <i>incorporated by reference from Exhibit 10.1 to the Form 8-K filed on April 27, 2007</i> ).
10.26	Standard Industrial / Commercial Single-Tenant Lease, dated February 13, 2007, between Liquidmetal Technologies, Inc. and 30452 Esperanza LLC ( <i>incorporated by reference from Exhibit 10.1 to the Form 10-Q filed on May 15, 2007</i> ).
10.27	Lease, dated March 19, 2007, between Liquidmetal Technologies, Inc. and Larry Ruffino and Roland Ruffino ( <i>incorporated by reference from Exhibit 10.1 to the Form 10-Q filed on May 15, 2007</i> ).
10.28	Principles of Agreement and Security Agreement, dated June 1, 2007, between Liquidmetal Technologies, Inc. and Foster Wheeler Energy Services, Inc. ( <i>incorporated by reference from Exhibit 10.64 to the Registration Statement on Form S-1 (Amendment No. 1) filed on July 2, 2007 (Registration No. 333-142442)</i> ).
10.29	Equipment Purchase Agreement and Licensing Agreement, dated June 1, 2007, between Liquidmetal Technologies, Inc. and Gracemetal, as amended ( <i>incorporated by reference from Exhibit 10.65 to the Registration Statement on Form S-1 (Amendment No. 1) filed on July 2, 2007 (Registration No. 333-142442)</i> ).



10.30	Asset Purchase and Contribution Agreement, dated July 24, 2007 between Company and Liquidmetal Coatings, LLC. (includes Liquidmetal Coatings, LLC Operating Agreement) <i>(incorporated by reference from Exhibit 2.1 to the Form 8-K filed on July 27, 2007)</i> .
10.31	Loan Agreement, dated July 24, 2007 by and among Liquidmetal Coatings, LLC, Liquidmetal Coatings Solutions, LLC and Bank Midwest, N.A. <i>(incorporated by reference from Exhibit 2.2 to the Form 8-K filed on July 27, 2007)</i> .
10.32	Securities Purchase Agreement, dated July 24, 2007, by and among Liquidmetal Coatings, LLC, C3 Capital Partners, L.P., C3 Capital Partners II, L.P. and Liquidmetal Coatings Solutions, LLC. <i>(incorporated by reference from Exhibit 2.3 to the Form 8-K filed on July 27, 2007)</i> .
10.33	First Amended and Restated Operating Agreement of Liquidmetal Coatings, LLC, dated February 22, 2008 <i>(incorporated by reference from Exhibit 2.1 to the Form 8-K filed on February 28, 2008)</i> .
10.34	Form of Convertible Subordinated Note, dated October 1, 2007 <i>(incorporated by reference from Exhibit 10.34 to the Form 10-K filed on April 3, 2008)</i> .
10.35	Form of Convertible Subordinated Note, dated December 28, 2007 <i>(incorporated by reference from Exhibit 10.35 to the Form 10-K filed on April 3, 2008)</i> .
10.36	Form of Common Stock Purchase Warrant, dated December 28, 2007 <i>(incorporated by reference from Exhibit 10.36 to the Form 10-K filed on April 3, 2008)</i> .
10.37	Form of Letter dated, October 31, 2007, to extend 8% Unsecured Subordinated Note due date <i>(incorporated by reference</i>

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Exhibit Number	Document Description
	<i>from Exhibit 10.37 to the Form 10-K filed on April 3, 2008)</i> .
10.38	First Amended and Restated Operating Agreement of Liquidmetal Coatings, LLC, dated February 22, 2008 <i>(incorporated by reference from Exhibit 2.1 to the Form 8-K filed on February 22, 2008)</i> .
10.39	Form of Convertible Subordinated Note, dated April 1, 2008 <i>(incorporated by reference from Exhibit 10.1 to the Form 10-Q filed on August 19, 2008)</i> .
10.40	Form of Convertible Subordinated Note, dated July 1, 2008 <i>(incorporated by reference from Exhibit 10.2 to the Form 10-Q filed on August 19, 2008)</i> .
10.41	Form of letter dated, July 31, 2008, to extend to change the first redemption date and amount of the Convertible Subordinated Notes due January 2010 <i>(incorporated by reference from Exhibit 10.3 to the Form 10-Q filed on August 19, 2008)</i> .
10.42	Promissory Note, dated October 21, 2008, between Liquidmetal Coatings, LLC and Bank Midwest N.A.
10.43	Form of Convertible Subordinated Note, dated October 1, 2008.
10.44	Form of Convertible Subordinated Note, dated January 1, 2009.
10.45	Continuing Guarantee Agreement, dated January 5, 2009, between John Kang and Hana Financial, Inc.
14	Code of Ethics for Chief Executive Officer and Senior Financial and Accounting Officers <i>(incorporated by reference to Exhibit 14 to the Form 10-K filed on November 10, 2004)</i> .
21	Subsidiaries of the Registrant. <i>(incorporated by reference from Exhibit 21 to the Form 10-K filed on November 10, 2004)</i> .
23.1	Consent of Registered Independent Public Accounting Firm, Choi, Kim & Park, LLP.
24.1	Power of Attorney relating to subsequent amendments (included on the signature page(s) of this report)
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-15(e) or 15d-15(e) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-15(e) or 15d-15(e) of the Securities Exchange Act of 1934, as amended.
32.1	Certification pursuant to 18 U.S.C. 1350.

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\* Denotes a management contract or compensatory plan or arrangement required to be filed as an exhibit this Form 10-K.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Liquidmetal Technologies, Inc.

By: /s/ Larry E. Buffington  
Larry E. Buffington  
President and Chief Executive Officer

Date: April 15, 2009

By: /s/ Tony Chung  
Tony Chung  
Chief Financial Officer

Date: April 15, 2009

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## POWER OF ATTORNEY

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Larry Buffington and Tony Chung and each of them, jointly and severally, his attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each said attorneys-in-fact or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ John Kang</u> John Kang	Chairman of the Board and Director	April 15, 2009
<u>/s/ Robert Biehl</u> Robert Biehl	Director	April 15, 2009
<u>/s/ Dean Tanella</u> Dean Tanella	Director	April 15, 2009
<u>/s/ CK Cho</u> CK Cho	Director	April 15, 2009

Certifications provided as Exhibits.

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## INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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To the Board of Directors and Shareholders of Liquidmetal Technologies, Inc.

We have audited the accompanying consolidated balance sheets of Liquidmetal Technologies, Inc. and subsidiaries (the "Company") as of December 31, 2008 and 2007, and the related consolidated statements of operations and comprehensive loss, shareholders' equity (deficiency), and cash flows for the years ended December 31, 2008, 2007, and 2006. Our audits also included the financial statement schedules listed at index in Item 15(a) as of and for the years ended December 31, 2008, 2007, and 2006. Our responsibility is to express an opinion on the financial statements and financial statement schedules based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Liquidmetal Technologies, Inc. and subsidiaries as of December 31, 2008 and 2007, and the results of their operations and cash flows for the years ended December 31, 2008, 2007, and 2006, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedules, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company's significant operating losses and working capital deficit raise substantial doubt about its ability to continue as a going concern. Management's plans regarding those matters also are described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Choi, Kim & Park LLP

Los Angeles, California  
 Certified Public Accountants

April 13, 2009

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**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
 (in thousands, except share data)

	<u>December 31,</u> <u>2008</u>	<u>December 31,</u> <u>2007</u>
<b><u>ASSETS</u></b>		
Current assets:		
Cash and cash equivalents	\$ 157	\$ 1,180
Trade accounts receivables, net of allowance for doubtful accounts of \$121 and \$89	2,237	5,165
Inventories	820	2,298
Prepaid expenses and other current assets	967	708
Total current assets	<u>4,181</u>	<u>9,351</u>
Property, plant and equipment, net	7,021	9,730
Idle equipment	—	178
Other intangibles, net	1,069	1,142
Investment in joint venture	306	306
Other assets	663	1,806
Total assets	<u><u>13,240</u></u>	<u><u>22,513</u></u>
<b><u>LIABILITIES AND SHAREHOLDERS' DEFICIENCY</u></b>		
Current liabilities:		
Accounts payable and accrued expenses	8,563	8,056
Deferred revenue	40	316
Short-term debt	1,176	2,138
Long-term debt, current portion, net of debt discounts of \$7,128 and \$838	14,172	6,101
Warrant liabilities	692	2,583
Conversion feature liabilities	147	2,083
Other liabilities, current portion	146	398
Total current liabilities	<u>24,936</u>	<u>21,675</u>
Long-term debt, net of current portion and debt discounts of \$0 and \$9,634	8,521	14,623
Other long-term liabilities, net of current portion	163	411
Total liabilities	<u>33,620</u>	<u>36,709</u>

Minority interests	651	384
Shareholders' deficiency:		
Common stock, \$0.001 par value; 100,000,000 shares authorized and 44,825,402 and 44,726,295 issued and outstanding at December 31, 2008 and 2007, respectively	45	45
Additional paid-in capital	140,204	137,293
Accumulated deficit	(162,307)	(154,710)
Accumulated other comprehensive income	1,027	2,792
Total shareholders' deficiency	(21,031)	(14,580)
Total liabilities and shareholders' deficiency	<u>\$ 13,240</u>	<u>\$ 22,513</u>

The accompanying notes are an integral part of the consolidated financial statements.

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**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)**  
(in thousands, except per share data)

	Years Ended December 31,		
	2008	2007	2006
Revenue	\$ 22,083	\$ 29,022	\$ 27,669
Cost of sales	17,131	26,459	22,418
Gross profit	4,952	2,563	5,251
Operating expenses			
Selling, general, and administrative	6,529	8,921	9,962
Research and development	1,022	1,123	950
Impairment of long-lived assets	132	—	—
Total operating expenses	7,683	10,044	10,912
Loss before interest, other income, income taxes, and minority interest	(2,731)	(7,481)	(5,661)
Loss from extinguishments of debt	—	(648)	—
Change in value of warrants, gain	1,890	4,923	279
Change in value of conversion feature, gain (loss)	1,987	6,965	(226)
Other expense	(17)	—	—
Other income	429	226	572
Interest expense	(7,712)	(9,364)	(9,509)
Interest income	3	123	23
Loss before income taxes and minority interest	(6,151)	(5,256)	(14,522)
Income taxes	—	—	—
Loss before minority interest	(6,151)	(5,256)	(14,522)
Minority interests	(421)	(384)	—
Loss from continuing operations	(6,572)	(5,640)	(14,522)
Net loss	(6,572)	(5,640)	(14,522)
Other comprehensive income (loss):			
Foreign exchange translation (loss) gain during the period	(1,765)	183	339
Comprehensive income (loss)	<u>\$ (8,337)</u>	<u>\$ (5,457)</u>	<u>\$ (14,183)</u>
Per common share basic and diluted:			
Loss per share basic and diluted	<u>\$ (0.15)</u>	<u>\$ (0.13)</u>	<u>\$ (0.33)</u>
Number of weighted average shares - basic and diluted	<u>44,735</u>	<u>44,730</u>	<u>43,809</u>

The accompanying notes are an integral part of the consolidated financial statements.

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**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIENCY)**  
(in thousands, except share data)

	Common Shares	Common Stock	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
<b>Balance, December 31, 2005 (As Restated)</b>	42,187,621	\$ 42	\$ 130,893	\$ (134,525)	\$ 2,270	\$ (1,320)
Conversion of notes payable	285,750	—	471	—	—	471
Common stock issued as director's fees	109,437	—	102	—	—	102
Common stock issued to Innometal	1,700,000	2	3,448	—	—	3,450
Stock awards	28,960	—	42	—	—	42
Stock-based compensation	—	—	1,075	—	—	1,075
Foreign exchange translation gain	—	—	—	—	339	339
Net loss	—	—	—	(14,522)	—	(14,522)
<b>Balance, December 31, 2006</b>	44,311,768	\$ 44	\$ 136,032	\$ (149,047)	\$ 2,609	\$ (10,363)
Conversion of notes payable	365,455	1	578	—	—	579
Common stocks issued as director's fees	49,072	—	42	—	—	42
Stock-based compensation	—	—	642	—	—	642
Foreign exchange translation gain	—	—	—	—	183	183
Cash distribution to minority interests	—	—	—	(23)	—	(23)
Net loss	—	—	—	(5,640)	—	(5,640)
<b>Balance, December 31, 2007</b>	44,726,295	\$ 45	\$ 137,293	\$ (154,710)	\$ 2,792	\$ (14,580)
Common stock issued in lieu of cash	99,107	—	69	—	—	69
Stock-based compensation	—	—	578	—	—	578
Foreign exchange translation loss	—	—	—	—	(1,765)	(1,765)
Cash distribution to minority interests	—	—	—	(1,025)	—	(1,025)
Preferred units capital account of subsidiary	—	—	2,264	—	—	2,264
Net loss	—	—	—	(6,572)	—	(6,572)
<b>Balance, December 31, 2008</b>	44,825,402	\$ 45	\$ 140,204	\$ (162,307)	\$ 1,027	\$ (21,031)

The accompanying notes are an integral part of the consolidated financial statements.

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**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands, except share data)

	Years Ended December 31,		
	2008	2007	2006
<b>Operating activities:</b>			
Net loss	\$ (6,572)	\$ (5,640)	\$ (14,522)
Adjustments to reconcile loss from operations to net cash used for operating activities:			
Impairment of long-lived assets	132	—	—
Gain on disposal of asset	(15)	(226)	—
Minority interests in income of consolidated subsidiary	421	384	—
Depreciation and amortization	1,275	3,102	3,574
Loss on extinguishment of debt	—	648	—
Amortization of debt discount	3,883	5,350	6,158
Stock-based compensation	578	642	1,075
Bad debt expense (recovery)	(83)	7	47
Warranty expense	184	169	46
Gain from change in value of warrants	(1,890)	(4,923)	(279)
(Gain) loss from change in value of conversion feature	(1,987)	(6,965)	225
Changes in operating assets and liabilities:			
Trade accounts receivable	3,012	(1,061)	(1,621)
Inventories	1,479	1,467	(2,017)
Prepaid expenses and other current assets	(259)	(1)	(221)
Other assets	654	(2,211)	142
Accounts payable and accrued expenses	393	(1,545)	3,371
Deferred revenue	(276)	114	(1,073)
Other liabilities	(501)	450	(171)
Net cash provided by (used for) operating activities	428	(10,239)	(5,266)
<b>Investing Activities:</b>			



Purchases of property and equipment	(1,087)	(1,171)	(932)
Proceeds from the sale of property and equipment	(17)	400	104
Investment in patents and trademarks	(51)	(103)	(104)
Investment in joint venture	—	(303)	(3)
Net cash used for investing activities	(1,155)	(1,177)	(935)
<b>Financing Activities:</b>			
Proceeds from borrowings	16,438	45,863	23,620
Repayment of borrowings	(18,707)	(33,166)	(18,117)
Proceeds from issuance of preferred units of subsidiary	2,500	—	—
Redemption of preferred units of subsidiary	(237)	—	—
Repayment of other liabilities	—	—	69
Cash distributions	(1,178)	(23)	—
Net cash provided by (used for) financing activities	(1,184)	12,674	5,572
Effect of foreign exchange translation	888	(222)	(619)
Net (decrease) increase in cash and cash equivalents	(1,023)	1,036	(1,248)
Cash and cash equivalents at beginning of period	1,180	144	1,392
Cash and cash equivalents at end of period	<u>\$ 157</u>	<u>\$ 1,180</u>	<u>\$ 144</u>
<b>Supplemental cash flow information</b>			
Interest paid	<u>\$ 2,007</u>	<u>\$ 2,874</u>	<u>\$ 1,970</u>
Taxes paid	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The accompanying notes are an integral part of the consolidated financial statements.

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**LIQUIDMETAL TECHNOLOGIES, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)**  
(in thousands, except share data)

In 2007, \$400 of the Company's 7% senior convertible notes due July 2007 was converted into 320,000 shares of the Company's common stock at a conversion price of \$1.25 per share.

In 2007, \$50 of the Company's 8% convertible subordinate notes due January 2010 was converted into 45,455 shares of the Company's common stock at a conversion price of \$1.10 per share.

In 2006, \$286 of the Company's 6% senior convertible notes due July 2007 was converted into 285,750 shares of the Company's common stock at a conversion price of \$1.00 per share.

In 2006, the Company fulfilled its settlement payable to Innometal (formerly known as Growell Metal) of \$3,450, net of foreign exchange translation loss, through stock issuance of 1,700,000 shares of the company's common stock.

The accompanying notes are an integral part of the consolidated financial statements.

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**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2008, 2007, and 2006**  
(in thousands, except share data)

**1. Description of Business**

Liquidmetal Technologies, Inc. ("Liquidmetal Technologies") and its subsidiaries (collectively "the Company") are in the business of developing, manufacturing, and marketing products made from amorphous alloys. Liquidmetal Technologies markets and sells Liquidmetal® alloy industrial coatings and also manufactures, markets and sells products and components from bulk Liquidmetal alloys that can be incorporated into the finished goods of its customers across a variety of industries. The Company also partners with third-party licensees and distributors to develop and commercialize Liquidmetal alloy products.

The Company classifies operations into two reportable segments: Liquidmetal alloy industrial coatings and bulk Liquidmetal alloys. Liquidmetal alloy industrial coatings are used primarily as a protective coating for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used by coal-burning power plants. Bulk Liquidmetal alloys include potential market opportunities to manufacture and sell products and components for electronic devices, medical devices, defense applications, and sporting goods. In addition, such alloys are used to generate research and development services revenue for developing uses related primarily to defense and medical applications as well as potential license fees, royalties, and other compensation from strategic partnering transactions.

On July 24, 2007, the Company transferred substantially all of the assets of its Liquidmetal alloy industrial coatings business to a newly formed, newly capitalized subsidiary named Liquidmetal Coatings, LLC, a Delaware limited liability company ("LMC"), and LMC assumed substantially all of the liabilities of the coatings business. The transfer included the thermal spray coatings assets and liabilities acquired under a purchase agreement with Foster Wheeler Energy Services in June 2007. The Company holds a 69.25% ownership interest in LMC. The results of operation of LMC are consolidated and comprise our Liquidmetal alloy industrial coatings segment for financial reporting purposes.

## 2. Liquidity

The Company has experienced losses from continuing operations during the last three fiscal years and has an accumulated deficit of \$162,307 as of December 31, 2008. Net cash provided by continuing operations for the year ended December 31, 2008 was \$426. At December 31, 2008, working capital deficit was \$20,755. As of December 31, 2008, the Company's principal source of liquidity is \$157 of cash and \$2,237 of trade accounts receivable. Such conditions raise substantial doubt that the Company will be able to continue as a going concern. These operating results occurred while the Company was developing and continues to develop, commercialize, and manufacture products from an entirely new and unique technology. These factors have placed a significant strain on the financial resources of the Company. The ability of the Company to overcome these challenges depends on its ability to correct its production inefficiencies, reduce its operating costs, generate higher revenue, achieve positive cash flow from continuing operations and continued sources of debt and equity financing. The consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties.

We anticipate that we will not have sufficient funds to pursue our current operating plan beyond the first quarter of 2009 and we will therefore require additional funding. We are actively seeking additional sources of capital and seeking to restructure and/or modify existing indebtedness. The amount of funding that we seek and the timing of such fundraising efforts will depend on the extent to which we are able to increase revenues through obtaining additional purchase orders for our products and/or the extent to which we can restructure or modify our debt. Because we cannot be certain that we will be able to obtain adequate funding from debt, equity, or other traditional financing sources, we are also actively exploring several strategic financing options, including the possible sale of our manufacturing plant in South Korea (which would then be replaced with a smaller facility) and additional licensing and outsourcing of our manufacturing operations.

We cannot guarantee that adequate funds will be available when needed, and if we do not receive sufficient capital, we may be required to alter or reduce the scope of our operations.

Additionally, we have approximately \$1,210 of principal and accrued interest outstanding as of December 31, 2008, under the 8% unsecured subordinated notes (the "Bridge Notes"), which were due August 17, 2007. We intend to fully repay the amounts due under the Bridge Notes. However, as of the filing of this report we do not have sufficient funds to repay the Bridge Notes. As a result, we are currently in default under the Bridge Notes. Such a default may have material adverse effect on our operations, financial condition, and results of operations. We have not received a formal notice of default and we are currently working to resolve this matter with investors holding our Bridge Notes.

We were required under our amended Security Purchase Agreement, dated April 23, 2007, between our company and holders of our 8% convertible subordinated notes due January 2010 (the "January 2010 Notes"), to repay outstanding debt under previously

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### **LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS For the Years Ended December 31, 2008, 2007, and 2006 (in thousands, except share data)**

issued promissory notes, including the Bridge Notes ("Debt Satisfaction Covenant") by October 1, 2007. As we have not yet fully repaid our Bridge Notes, we are in default under the January 2010 Notes under the Debt Satisfaction Covenant. Further, we were required, beginning September 30, 2008 and at the end of each month thereafter, to redeem 1/32nd of the principal amount of the January 2010 Notes. An aggregate payment equal to \$0.6 million was due September 30, 2008. However, we did not have sufficient funds to make this payment, and, accordingly, we are in default under the January 2010 Notes.

The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. As of the filing of this report, we have received a formal notice of default and we are currently working to resolve this matter. As a result, the outstanding principal due under the January 2010 Notes of \$19,113 is included in current portion of long-term debt and accrued interest and fees of \$1,037 is included in accounts payable and accrued expenses as of December 31, 2008. Such defaults may have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with investors holding our January 2010 Notes.

Approximately \$188 of principal and accrued interest became due from our Korean subsidiary under a loan from Kookmin Bank of South Korea in August 2008. However, as of the filing of this report we did not have sufficient funds to repay the loan and we have received a formal notice of default. Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of our manufacturing plant facility and certain equipment in South Korea. The foreclosure of our manufacturing plant facility and equipment in South Korea would have material adverse effect on our operations, financial condition, and results of operations. We are currently working to resolve this matter with Kookmin Bank by seeking a forbearance until we are able to obtain funding to repay this loan, although there is no assurance that we will be able to obtain any such funding.

We have outstanding liens and judgments on our assets by various creditors for past-due trade payables totaling \$1,404, of which \$1,173 is held by creditors in South Korea, as of December 31, 2008. We are currently working to resolve the matter with each creditor by seeking forbearance until we are able to obtain funding to repay the amounts due, although there is no assurance that we will be able to obtain any such funding. If we cannot repay the amounts due or obtain forbearance, the creditors may seek to foreclose on the Company's assets. Such a foreclosure would have material adverse effect on our operations, financial condition, and results of operations.

## 3. Summary of Significant Accounting Policies

*Principles of Consolidation.* The consolidated financial statements include the accounts of Liquidmetal Technologies, Inc. and its wholly-owned subsidiaries, Liquidmetal Technologies Co., Ltd., formerly Liquidmetal Korea Co., Ltd., ("LMT Korea"), located in South Korea, Liquidmetal Golf and its subsidiaries, which included the retail golf segment, now accounted for as a discontinued operations, and its majority-owned subsidiary, Liquidmetal Coatings, LLC,

located in Texas. All intercompany balances and transactions have been eliminated. A minority interest in Liquidmetal Golf is included in the consolidated financial statements as a component of the loss from operations of the discontinued retail golf segment (see Note 14).

*Revenue Recognition.* Revenue is recognized pursuant to applicable accounting standards including Securities and Exchange Commission (“SEC”) Staff Accounting Bulletin (“SAB”) No. 101 (SAB 101), “*Revenue Recognition in Financial Statements*”, and SAB 104, *Revenue Recognition*. SAB 101 as amended and SAB 104 summarize certain points of the SEC staff’s views in applying generally accepted accounting principles to revenue recognition in financial statements and provide guidance on revenue recognition issues in the absence of authoritative literature addressing a specific arrangement or a specific industry. The Company’s revenue recognition policy complies with the requirements of SAB 101 and SAB 104. Revenue is recognized at the time the Company ships its products, as this is when title passes to the customer and all other incidences of a sale have occurred. Revenue is deferred and included in liabilities when the Company receives cash in advance for services not yet performed or goods not yet delivered.

The Company applies the percentage of completion method to recognize revenue earned from government contracts that have cost-plus-fixed-fee arrangements. These arrangements provide the Company with full reimbursement on the actual cost incurred, plus a fixed fee that the Company is entitled to. These arrangements are covered by the American Institute of Certified Public Accountants Statement of Position 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts* (SOP 81-1) and Accounting Research Bulletin No. 45, *Long-term Construction-Type Contracts* (ARB 45). In addition, cost-reimbursable contracts are also specifically covered by Accounting Research Bulletin No. 43, Chapter 11, Section A, *Government Contracts, Cost-Plus-Fixed Fee Contracts* (ARB 43). Substantially all of our cost-reimbursable and time and material contracts are with the U.S. Government, primarily with the Department of Defense. Revenues recognized under cost-plus-fixed fee are consistent with percentage of completion method and are consistent with ARB 43.

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**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**  
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Sales on cost-reimbursable plus fixed fee type contracts are recognized as allowable costs are incurred on the contract and become billable to the customer, at an amount equal to the allowable costs plus the estimated profit on those costs. The estimated profit on a cost-reimbursable contract is generally fixed or variable based on the contract fee arrangement.

*Cash and Cash Equivalents.* The Company considers all highly liquid investments with maturity dates of three months or less when purchased to be cash equivalents. The Company limits the amount of credit exposure to each individual financial institution and places its temporary cash into investments of high credit quality. There are no significant concentrations of credit risk to the Company associated with cash and cash equivalents.

*Restricted Cash.* The Company considers all cash and cash equivalents held under restrictive accounts as restricted cash.

*Marketable Securities.* The Company follows Statement of Financial Accounting Standards (“SFAS”) No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and classifies all of its investment securities as available -for-sale. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported in Shareholders’ Equity (Deficiency) under the caption “Accumulated Other Comprehensive Income.”

*Trade Accounts Receivables.* The Company grants credit to its customers generally in the form of short-term trade accounts receivable. The creditworthiness of customers is evaluated prior to the sale of inventory. As of December 31, 2008, one customer represented 18%, or \$411, of the total outstanding trade accounts receivable. As of December 31, 2007, two customers represented 22%, or \$1,148, of the total outstanding trade accounts receivable.

The allowance for doubtful accounts reflects management’s best estimate of probable losses inherent in the trade accounts receivable. Management primarily determines the allowance based on the aging of accounts receivable balances, historical write-off experience, customer concentrations, customer creditworthiness and current industry and economic trends. The Company’s provisions for uncollectible receivables are included in selling, general and administrative expense in the accompanying consolidated statements of operations and comprehensive loss.

*Inventories.* Inventories are accounted for using the moving average basis and reported at the lower of cost or market. Inventories consist of raw materials, work in process, and finished goods. The Company records write-offs for inventory obsolescence when it is deemed that there is impairment of the value of the inventories on hand.

*Property, Plant and Equipment.* Property, plant and equipment are stated at cost less accumulated depreciation and amortization. Additions and major renewals are capitalized. Repairs and maintenance are charged to expense as incurred. Upon disposal, the related cost and accumulated depreciation are removed from the accounts, with the resulting gain or loss included in operating income. Depreciation is provided principally on the straight-line method over the estimated useful lives of the assets, which range from two to twenty years.

Leased property meeting certain criteria is capitalized and the present value of the related lease payments is recorded as a liability. Amortization of capitalized leased assets is provided on the straight-line method over the estimated useful lives of the assets, which is five years.

*Intangible Assets.* Intangible assets consist of the costs incurred to purchase patent rights and costs incurred to internally develop patents and trademarks. Intangible assets are reported net of accumulated amortization. Patents and trademarks are amortized using the straight-line method over a period based on their contractual lives ranging from ten to seventeen years.

*Goodwill.* Beginning January 1, 2002, the Company adopted Statement of Financial Accounting Standards (“SFAS”) No. 142, *Goodwill and Other Intangible Assets* (See “New Accounting Pronouncements”). According to this statement, goodwill and other intangible assets are no longer subject to amortization, but instead must be reviewed annually for impairment by applying a fair value-based test.

*Impairment of Long-lived Assets.* The Company reviews long-lived assets to be held and used in operations for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may be impaired. An impairment loss is recognized when the estimated fair value of the assets is

less than the carrying value of the assets. The Company recognized \$132, \$0, and \$0 during the years ended December 31, 2008, 2007 and 2006, respectively, for impairment of long-lived assets.

*Fair Value of Financial Instruments.* The estimated fair value of amounts reported in the consolidated financial statements have been determined using available market information and valuation methodologies, as applicable. The carrying amount of cash and cash equivalents, accounts receivable, accounts payable, and all other current assets and liabilities approximate their fair value because of their short term maturities at December 31, 2008 and 2007, unless otherwise stated. The fair value of non-current

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assets and liabilities approximate their carrying value unless otherwise stated. The fair value of the Company's long-term debt is based on interest rates that would be available to the Company for the issuance of debt with similar terms.

*Research and Development Expenses.* Research and development expenses represent salaries, related benefits expense, expenses incurred for the design and testing of new processing methods and other expenses related to the research and development of Liquidmetal alloys. Development costs incurred in research and development activities are expensed as incurred.

*Advertising and Promotion Expenses.* Advertising and promotion expenses are expensed when incurred. Advertising and promotion expenses were \$22, \$1, and \$10, for the years ended December 31, 2008, 2007 and 2006, respectively.

*Debt Discount Amortization.* Debt discounts for notes payable are amortized to interest expense, using a method that approximates the interest method over the term of the related debt instruments.

*Stock-Based Compensation.* The Company accounts for share-based compensation in accordance with the fair value recognition provisions of SFAS No. 123(R), *Share-based Payment*, which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the consolidated financial statements based on their fair values. The fair value of stock options is calculated by using the Black-Scholes option pricing formula that requires estimates for expected volatility, expected dividends, the risk-free interest rate and the term of the option. If any of the assumptions used in the Black-Scholes model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period. See additional information related to share-based compensation in Note 13.

*Income Taxes.* Income taxes are provided under the asset and liability method as required by SFAS No. 109, *Accounting for Income Taxes*. Under this method, deferred income taxes are recognized for the tax consequences of "temporary differences" by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. The effect of a tax rate change on deferred taxes is recognized in operations in the period that the change in the rate is enacted. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized.

The Company adopted the provisions of Interpretation No. 48, *Accounting for Uncertainty in Income Taxes*, an interpretation of FASB Statement No. 109 ("FIN 48") on January 1, 2007. At the adoption date and as of December 31, 2007, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. There was no expense related to interest and penalties for the year ended December 31, 2008.

*Translation of Foreign Currency.* The Company applies FASB No. 52, *Foreign Currency Translation*, for translating foreign currency into US dollars in our consolidation of the financial statements. Upon consolidation of the Company's foreign subsidiaries into the Company's consolidated financial statements, any balances with the subsidiaries denominated in the foreign currency are translated at the exchange rate at year end. The financial statements of LMT Korea have been translated based upon Korean Won as the functional currency. LMT Korea's assets and liabilities were translated using the exchange rate at period end and income and expense items were translated at the average exchange rate for the periods reported. The resulting translation adjustment was included in other comprehensive income (loss).

*Earnings Per Share.* Basic earnings per share ("EPS") is computed by dividing earnings (losses) attributable to common shareholders by the weighted average number of common shares outstanding for the periods. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock.

*Use of Estimates.* The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported periods. Actual results could differ from those estimates. These management estimates are primarily related to impairment of long-lived assets, inventory valuation, product warranty, and the allowance for bad debt account balances.

*Reclassifications.* Certain amounts from prior years have been reclassified to conform to the current year's presentation.

*New Accounting Pronouncements.*

In December 2007, the FASB issued SFAS No. 141R, "Business Combinations" ("SFAS 141R"). SFAS 141R amends the requirements for accounting for business combinations. SFAS 141R will be effective after the beginning of the first annual

**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**  
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reporting period beginning on or after December 15, 2008. The Company is currently evaluating the potential impact of the adoption of SFAS 141R on the Company's consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51 ("SFAS 160"). This statement establishes accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. Minority interests will be recharacterized as noncontrolling interests and classified as a component of shareholders' equity separate from the parent's equity. In addition, SFAS 160 establishes reporting requirements that provide sufficient disclosures that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. This statement is effective prospectively, except for certain retrospective disclosure requirements, for fiscal years beginning after December 15, 2008. Accordingly, the Company will adopt SFAS 160 in 2009. The presentation and disclosure requirements of this standard must be applied retrospectively for all periods presented and will impact how the Company presents and discloses noncontrolling interests and income from noncontrolling interests in our consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities — An Amendment of SFAS No. 133" ("SFAS 161"). SFAS 161 seeks to improve financial reporting for derivative instruments and hedging activities by requiring enhanced disclosures regarding the impact on financial position, financial performance, and cash flows. SFAS 161 will be effective for financial statements issued for fiscal years beginning after November 15, 2008. The Company is currently evaluating the potential impact of the adoption of SFAS 161 on the Company's consolidated financial statements.

In April 2008, the FASB issued FASB Staff Position No. 142-3, "Determination of the Useful Life of Intangible Assets" ("FSP 142-3"). FSP 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, "Goodwill and Other Intangible Assets." The intent of FSP 142-3 is to improve the consistency between the useful life of a recognized intangible asset under SFAS 142 and the period of expected cash flows used to measure the fair value of an asset under SFAS 141(R) and other U.S. generally accepted accounting principles. FSP 142-3 applies to intangible assets that are acquired individually or with a group of other assets acquired in business combinations and asset acquisitions. FSP 142-3 also requires expanded disclosure related to the determination of intangible asset useful lives. FSP 142-3 is effective for fiscal years beginning after December 15, 2008. The Company is currently evaluating the potential impact of FSP 142-3 on its consolidated financial statements.

In May 2008, the FASB issued FASB Staff Position No. APB 14-1, "Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)" ("FSP APB 14-1") which clarifies that convertible debt instruments that may be settled in cash or other assets upon conversion are not addressed by APB No. 14, "Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants." Additionally, FSP APB 14-1 requires an entity to separately account for the liability and equity components of a convertible instrument to reflect an entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB 14-1 also expands the disclosure requirements regarding convertible debt instrument terms and how the instrument is reflected in an entity's financial statements. FSP APB 14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. The Company is currently evaluating the potential impact of FSP APB 14-1 on its consolidated financial statements.

In May 2008, the FASB issued SFAS No. 162, "The Hierarchy of Generally Accepted Accounting Principles" ("SFAS 162"). SFAS 162 is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles for nongovernmental entities. SFAS 162 will become effective 60 days following the SEC's approval of the Public Company Accounting Oversight Board Auditing amendments to AU Section 411, "The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles." The Company is currently evaluating the impact of SFAS 162.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the AICPA and the SEC did not or are not believed by management to have a material impact on our company's present or future consolidated financial statements.

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#### 4. Trade accounts receivable

Trade accounts receivables from continuing operations were comprised of the following:

	December 31,	
	2008	2007
Trade accounts receivable	\$ 2,358	\$ 5,254
Less: Allowance for doubtful accounts	(121)	(89)
Trade accounts receivable, net	\$ 2,237	\$ 5,165

#### 5. Inventories

Inventories were comprised of the following:

December 31,



	2008	2007
Raw materials	\$ 426	\$ 1,216
Work in process	184	536
Finished goods	210	546
Total inventories	<u>\$ 820</u>	<u>\$ 2,298</u>

The Company analyzes inventory held for any excess or obsolescence issues. Any amounts considered excess or obsolete are written off. Further, as significant amount of sales of Liquidmetal bulk alloy parts are used primarily in consumer electronics components, our inventory is subject to fluctuations in demand for those consumer electronics goods. Accordingly, the Company reduces the carrying value of raw materials held by its subsidiaries, by the amounts considered to be excess or obsolete. During the year ended December 31, 2008, total write downs of excess or obsolete inventory included in "Cost of sales" in the accompanying Statement of Operations and Comprehensive Loss was \$199 primarily from discontinued Liquidmetal bulk alloy parts used in our customer's certain cell phone models. There were no such write downs as of December 31, 2007 and 2006.

## 6. Property, Plant and Equipment

Property, plant and equipment consists of the following:

	December 31,	
	2008	2007
Machinery and equipment	\$ 11,719	\$ 13,951
Computer equipment	750	1,234
Office equipment, furnishings, and improvements	1,002	1,422
Buildings	8,042	10,870
Construction in progress	—	369
Total	<u>21,513</u>	<u>27,846</u>
Accumulated depreciation	<u>(14,492)</u>	<u>(18,116)</u>
Total property, plant and equipment, net	<u>\$ 7,021</u>	<u>\$ 9,730</u>

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Depreciation expense is classified as follows:

	Years ended December 31,		
	2008	2007	2006
Cost of sales	\$ 1,065	\$ 2,831	\$ 3,229
Selling, general and administrative	86	153	225
Research and development	1	—	—
Total depreciation expense	<u>\$ 1,152</u>	<u>\$ 2,984</u>	<u>\$ 3,454</u>

## 7. Idle Equipment

Idle equipment consists of certain equipment held by the Company for use in expansion of bulk alloy parts manufacturing. While the equipment may be used internally to meet future capacity requirements, considering our current revenue and foreseeable production requirements, the Company does not anticipate utilizing this equipment internally in the near future. Additionally, the Company demined to write down the carrying value of the idle equipment during the fourth quarter of 2008 as the carrying value exceeded its fair value. The write-down amounted to \$132 and is included as "Impairment of long-lived assets" in the accompanying Consolidated Statement of Operations and Comprehensive Loss for the year ended December 31, 2008. Total amount of idle equipment remaining was \$0 and \$178 as of December 31, 2008 and 2007, respectively.

During the year ended December 31, 2007, the Company disposed of \$7 of idle equipment as part of the equipment purchase agreement and transfer agreement regarding Weihai operations with Grace Metal (see Note 21).

## 8. Other Intangible Assets

Intangible assets consist of the following:

	December 31,	
	2008	2007
Purchased and licensed patent rights	\$ 566	\$ 566
Internally developed patents	1,357	1,404
Trademarks	91	85
Total	<u>2,014</u>	<u>2,055</u>
Accumulated amortization	<u>\$ (945)</u>	<u>\$ (913)</u>
Total intangible assets, net	<u>\$ 1,069</u>	<u>\$ 1,142</u>

Amortization expense was \$123, \$123, and \$119 for the years ended December 31, 2008, 2007 and 2006, respectively. The estimated aggregate amortization expense for each of the five succeeding years is as follows:

December 31,	Aggregate Amortization Expense
2009	122
2010	120
2011	118
2012	108
2013	94

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Accumulated Amortization for the years ended December 31, 2008 and 2007 is as follows:

	December 31,	
	2008	2007
Purchased and licensed patent rights	\$ (324)	\$ (289)
Internally developed patents	(567)	(579)
Trademarks	(54)	(45)
Total	<u>\$ (945)</u>	<u>\$ (913)</u>

The weighted average amortization periods for each of the years ended December 31, 2008, 2007, and 2006, is as follows:

	December 31,		
	2008	2007	2006
Purchased and licensed patent right	17	17	17
Internally developed patents	17	17	17
Trademarks	10	10	10

Purchased patent rights represent the exclusive right to commercialize the bulk amorphous alloy and other amorphous alloy technology acquired from California Institute of Technology ("Caltech"), a shareholder, through a license agreement with Caltech and other institutions. All fees and other amounts payable by the Company for these rights and licenses have been paid or accrued in full, and no further royalties, license fees or other amounts will be payable in the future under the License Agreements.

In addition to the purchased and licensed patents, the Company has internally developed patents. Internally developed patents include legal and registration costs incurred to obtain the respective patents. The Company currently holds various patents and numerous pending patent applications in the United States, as well as numerous foreign counterparts to these patents outside of the United States.

### 9. Other Liabilities

The other liabilities balance consists of accrued severance and operating lease costs associated with the Company's cost reduction measures for the Tampa, Florida executive offices.

	December 31,	
	2008	2007
Accrued severance	\$ 255	\$ 745
Accrued operating lease costs	54	64
Accrued capital lease costs	—	—
Total	<u>309</u>	<u>809</u>
Imputed interest	—	—
Total	<u>309</u>	<u>809</u>
Less current portion	(146)	(398)
Other long term liabilities, less current portion	<u>\$ 163</u>	<u>\$ 411</u>

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During 2003, the Company initiated activities to substantially reduce the number of employees and consolidate manufacturing and administrative facilities to improve operational effectiveness and efficiency and reduce expenses. Certain relocating expenses associated with the move have been recorded and total liability accrued from the relocation and terminations in 2003, including the severance and lease accruals, were \$54 and \$64 as of December 31, 2008 and 2007, respectively.

All leases with an initial term greater than one year are accounted for under SFAS No. 13 *Accounting for Leases*. These leases are classified as either capital leases or operating leases, as appropriate. Assets under capital leases are capitalized using interest rates appropriate at the inception of each lease. At December 31, 2008, the cost recorded for SEM Microscope and the JSM 6360 Electron Microscope under the capital lease was \$47 and \$320, respectively, and the accumulated depreciation was \$41 and \$320, respectively. At December 31, 2007, the cost recorded for the office furniture and furnishings, the SEM Microscope and the JSM 6360 Electron Microscope under the capital lease was \$112, \$47 and \$320, respectively, and the accumulated depreciation was \$112, \$36 and \$269, respectively.

## 10. Product Warranty

Management estimates product warranties as a percentage of certain bulk alloy product sales earned during the period. As of December 31, 2008 and 2007, the Company used 5% of bulk alloy product sales as an estimate of warranties to be claimed. As of December 31, 2008, the Company used 1% of coatings applications sales as estimate of warranties to be claimed. During the years ended December 31, 2008 and 2007, the Company's product warranty accrual balance had the following activity:

Balance, December 31, 2006	\$ 738
Accrual reduction	(107)
Warranty charges	—
Balance, December 31, 2007	\$ 631
Expense accrual	26
Warranty charges	(343)
Balance, December 31, 2008	<u>\$ 314</u>

The product warranty accrual balance was included in accounts payable and accrued expenses at December 31, 2008 and December 31, 2007.

## 11. Notes Payable

### Unsecured Subordinated Note

On May 17, 2006, September 21, 2006, and December 1, 2006, the Company issued 8% Unsecured Subordinated Notes due August 2007 in the aggregate principal amount of \$4,584 (the "August 2007 Subordinated Notes"). The August 2007 Subordinated Notes are unsecured and became due August 2007.

As part of a private placement offer in January 2007, \$925 of August Subordinated 2007 Notes and \$45 of accrued interest was exchanged for 8% Convertible Subordinated Notes due January 2010 (see Secured Convertible Subordinated Notes below). Additionally, as of December 31, 2007, \$900 of August Subordinated 2007 Notes and \$46 of accrued interest was retired.

As of December 30, 2008 and December 31, 2007, the Company's gross outstanding loan balance of the August 2007 Subordinated Notes totaled \$1,009 and \$2,659, respectively, and are included in current portion of long-term debt. The Company intends to fully repay the amounts due under the August 2007 Subordinated Notes. However, as of the filing of this report, the Company does not have sufficient funds to repay the August 2007 Subordinated Notes. As a result, the Company is currently in default under the August 2007 Notes. The Company has not received a formal notice of default and is currently working to resolve this matter with investors holding the August 2007 Subordinated Notes.

Interest expense for the amortization of discount on the note was \$0, \$630 and \$434 for the years ended December 31, 2008, 2007 and 2006, respectively. As of December 31, 2008, 2007 and 2006, the effective interest rate for the August 2007 Subordinated Notes was 8%, 33% and 33%, respectively.

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As part of the issuance of the August 2007 Subordinated Notes in 2006, the Company issued warrants to the purchasers of the notes and placement agents giving them right to purchase up to an aggregate of 972,964 shares of the Company's common stock. The warrants had an original exercise price of \$2.58 per share, which is subject to price adjustment for anti-dilution purposes. In October 2007, the Company reduced the exercise price of warrants to \$1.75 and increased the outstanding warrants with certain holders of the August 2007 Subordinated Notes by 30% for an extension of the maturity of the August 2007 Subordinated Notes. As of December 31, 2008, the exercise price of the warrants was reduced to \$1.72 and \$2.07 per share, respectively, and total amount of warrants was increased to 1,313,380. The warrants will expire on May 17, 2011.

### Secured Convertible Subordinated Notes

On January 3, 2007, the Company completed a private placement of 8% Convertible Subordinated Notes due January 2010 (the "January 2010 Notes"). Under the private placement, as amended, the Company issued \$16,300 in principal amount of January 2010 Notes. The January 2010 Notes were issued for aggregate cash in the amount of \$12,850, in payment of a total of \$3,377 in principal and accrued but unpaid interest under our previously issued 7% Senior Secured Convertible notes due August 2007 ("August 2007 Notes") and our 8% Unsecured Subordinated notes (the "August 2007 Subordinated Notes"), and \$73 cash discount. The January 2010 Notes are subordinate to certain secured financing from commercial lenders incurred by the Company in the future.

The payment of the previously issued notes was treated as an extinguishment of the debt in accordance with Emerging Issues Task Force No. 96-19, "Debtors Accounting for a Modification or Exchange of Debt Instruments." The placement resulted in a \$648 loss from extinguishment of debt, which consisted of

write down of \$64 of deferred issue costs, \$733 of debt discount, and decrease of \$149 in conversion feature liability as a result of the change in carrying value of exchanged notes.

The January 2010 Notes were originally convertible into the Company's common stock at \$1.55 per share. As a part of the private placement, the Company issued warrants to the purchasers of the notes giving them the right to purchase up to an aggregate of 5,257,921 shares of our common stock at an exercise price of \$1.93 per share. In connection with the private placement, the Company also issued to the placement agent for the transaction warrants to purchase an aggregate of 248,710 shares of our common stock at an exercise price of \$1.55 per share. The warrants will expire on January 3, 2012 and are subject to exercise price adjustment for anti-dilution purposes.

In April 2007, the Company entered into an amendment to the Securities Purchase Agreement, dated January 3, 2007, between the Company and the purchasers of the January 2010 Notes ("April 2007 Amendment") providing that the Company will have until October 1, 2007 to repay approximately \$15,461 of the Company's outstanding debt under previously issued promissory notes, including the August 2007 Subordinated Notes ("Debt Satisfaction Covenant"). The Company has not fully repaid \$1,009 principal due under the August 2007 Subordinated Notes as of December 31, 2008. As a result, the Company is not in compliance with the Debt Satisfaction Covenant. As of the filing of this report, the Company has received a formal notice of default under this covenant and is currently working to resolve this matter.

The April 2007 Amendment also finalized the schedule of investors in the Private Placement to show a total of \$16,300 in principal amount of Notes; decreased the conversion price of the January 2010 Notes to \$1.10, decreased the warrant exercise price for the warrants issued to \$1.55, increased the number of shares subject to such warrants issued to equal 7,657,591, and the purchasers of the Notes consented to the Company granting a security interest in its South Korean manufacturing plant to purchasers of convertible notes in a subsequent offering, provided a *pari passu* security interest is granted to the purchasers of the January 2010 Notes.

On December 28, 2007, the Company issued \$1,000 of January 2010 Notes, together with warrants to purchase up to an aggregate of 909,091 and 200,000 of the Company's common stock to purchasers of the notes and placement agents. The warrants will expire on December 28, 2012 and are subject to exercise price adjustment for anti-dilution purposes.

In December 2007, the Company entered into agreements with two holders of the January 2010 Notes and Liquidmetal Korea Co., Ltd. ("LMK"), formerly Grace Metal, a South Korean company formed by investor groups including our former Founder and director, James Kang, and the two holders, whereby LMK would assume the liabilities due under the January 2010 Notes, including principal, interest, and fees due to the two holders totaling \$434. In connection with the assumption of the liabilities by LMK, warrants to purchase 179,620 shares of our common stock held by the holders were cancelled (see Note 21).

The January 2010 Notes bear interest at 8% per annum with interest payable quarterly in arrears in cash, or, at our option, in the form of additional January 2010 Notes (in which case the interest rate will be 10% per annum). The ability to pay interest with additional January 2010 Notes is subject to specified conditions, including the existence of an effective registration statement covering the resale of the shares issued in payment of interest and certain minimum trading volumes in the stock to be issued.

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From and after an event of default under the January 2010 Notes and for so long as the event of default is continuing, the January 2010 Notes will bear default interest at a rate of 12% per annum (or 15% per annum if we elect to pay interest with additional January 2010 Notes). During 2007, the Company issued \$971 of additional January 2010 Notes for accrued interest and late registration fees. During 2008, the Company issued \$1,315 of additional January 2010 Notes for accrued interest.

The Company was required, beginning July 31, 2008 and at the end of each month thereafter, to redeem 1/36th of the principal amount of the January 2010 Notes in cash or, at the Company's election, with shares of our common stock. On July 31, 2008, the Company obtained an agreement with the majority of the January 2010 Note holders to change the amortization date of the principal to September 30, 2008 and to change the redemption amount at each amortization date to be 1/32nd of the principal amount. As a result of this amendment, the Company was required to make an aggregate payment equal to \$583 on September 30, 2008. However, the Company did not have sufficient funds to make this payment, and, accordingly, the Company is in default under the January 2010 Notes. The holders of the January 2010 Notes are entitled to accelerate all principal and interest under the January 2010 Notes. The Company has received a formal notice of default under this covenant and is currently working to resolve this matter. As a result, the outstanding principal due under the January 2010 Notes of \$19,113 is included in current portion of long-term debt as of December 31, 2008.

In connection with the January 2007 private placement, the Company entered into a Registration Rights Agreement with the purchasers of the January 2010 Notes under which the Company is subject to monetary penalties up to a maximum amount of 18% of the aggregate amount of Notes sold in the Private Placement if the registration statement is not filed or does not become effective on a timely basis. The monetary penalties will accrue at the rate of 1% per month of the then-outstanding principal amount of the January 2010 Notes. As of December 31, 2008, an aggregate of \$698 in monetary penalties under the Registration Rights Agreement had already been paid to investors in the form of additional notes, while an additional \$256 in such penalties was accrued but unpaid.

Pursuant to Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities," EITF 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock," EITF 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments," and EITF 05-2 "The Meaning of 'Conventional Convertible Debt Instrument' in EITF Issue No. 00-19," the original fair value of the embedded conversion feature of \$6,205 have been recorded as conversion feature liability as the debt is considered nonconventional convertible debt. The original fair value was computed using the Black-Scholes model under the following assumptions: (1) expected life of 1.6 to 3 years; (2) volatility of 55%; (3) risk free interest of 4.69% to 4.76% and dividend rate of 0%. The original fair value of the additional embedded conversion feature of \$1,005 resulting from reduced conversion price under the amended Securities Purchase Agreement, have been recorded as conversion feature liability. The value was computed using the Black-Scholes model under the following assumptions: (1) expected life of 1.3 to 2.7 years; (2) volatility of 55%; (3) risk free

interest of 4.6% to 4.9% and dividend rate of 0%. In addition, the Company is required to report a value of the conversion liability as a fair value and record the fluctuation to the fair value of the conversion feature liability to current operations.

The change in the fair value of the conversion feature liability resulted in gains of \$1,987 and \$5,393 for years ended December 31, 2008 and 2007, respectively. The fair value of conversion feature outstanding at December 31, 2008 and 2007 was \$147 and \$2,083, respectively. The fair value conversion feature outstanding at December 31, 2008 was computed using the Black-Scholes model under the following assumptions: (1) expected life of 0 to 1.01 years; (2) volatility of 113%, (3) risk free interest of 0.11% to 0.37% and dividend rate of 0%.

Pursuant to EITF 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock", the original fair values of the warrants of \$3,964 have been recorded as warrant liability, which was computed using the Black-Scholes pricing model under the following assumptions: (1) expected life of 5 years; (2) volatility of 55%; (3) risk free interest of 4.68% and (4) dividend rate of 0%. The original fair values of the warrants of \$608 from the additional warrants issued under the amended Securities Purchase Agreement, have been recorded as additional warrant liability, which was computed using the Black-Scholes pricing model under the following assumptions: (1) expected life of 4.70 years; (2) volatility of 50%; (3) risk free interest of 4.51% and (4) dividend rate of 0%.

The original fair value of the embedded conversion feature of \$7,210 was recorded as discounts of the convertible note. The original fair value of the 7,408,881 warrants issued to investors of \$4,372, the original fair value of 248,710 warrants issued to Placement Agents of \$200, and \$73 cash discount were recorded as discounts of the convertible note. In addition, \$2,069 direct costs incurred relating to issuance of the convertible note was recorded as debt issuance cost in other assets.

The Company's gross outstanding loan balance of the January 2010 Notes totaled \$19,113 and \$17,797 as of December 31, 2008 and December 31, 2007, respectively. As of December 31, 2008 and 2007, un-amortized discounts for conversion feature, warrants, and cash discount totaled \$7,128 and \$10,471, respectively, and other asset debt issuance costs totaled \$655 and \$967,

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respectively. Interest expense for the amortization of debt issuance cost and discount on note was \$3,707 and \$2,177 for the years ended December 31, 2008 and 2007, respectively. The effective interest rate of the January 2010 Notes was 65% as of December 31, 2008 and 2007.

The following is a repayment schedule of the January 2010 based on maturity date of the notes:

<b>January 2010 Notes Repayment Schedule December 31,</b>	<b>Minimum Payments</b>
2009	\$ 9,556
2010	9,557
Total	<u>\$ 19,113</u>

**Factoring Agreement**

The Company entered into a Factoring, Loan, and Security Agreement (the "Agreement") with a financing company on April 21, 2005. The agreement will continue until February 1, 2008 and will renew annually thereafter. All borrowings are secured by outstanding receivables specifically assigned to the financing company. Further, pursuant to a Continuing Guaranty Agreement, dated January 5, 2009, the outstanding borrowings are personally guaranteed by John Kang, the Company's Chairman (see Note 22). Assigned receivables are considered "Approved" or "Non-Approved" by the financing company. Borrowings made against non-approved receivables assigned are limited to \$1,000 and total borrowings made on approved and non-approved receivables assigned are limited to \$5,000.

Payments on assigned receivables are received directly by the financing company, and applied to outstanding advances. All outstanding advances and uncollected assigned receivables are subject to fees and interest charges ranging from 0.55% to 1.5% plus prime rate as published by the Wall Street Journal, with a minimum annual fee of \$30. All receivables assigned and advances made are subject to return and recall by the financing company, respectively. As such, the advances have been classified as short-term secured borrowings in accordance with SFAS No. 140 "Accounting for Transfer and Servicing of Financial Assets and Extinguishments of Liabilities."

For the year ended December 31, 2008, the Company borrowed \$5,360 and repaid \$5,788 under the Agreement. The total outstanding advance made under the agreement is \$580 and \$1,008 as of December 31, 2008 and 2007, respectively, which is presented as short-term debt. The weighted average rate of interest for borrowings made under the Agreement was 6.85% and 8.95% for the years ended December 31, 2008 and 2007.

**Kookmin Note**

On February 4, 2003, the Company's Korean subsidiary received 6,500,000 in South Korean Won, or approximately \$5,488, under a loan from Kookmin Bank of South Korea. The loan bears interest at an annual rate of 7.1%. In the event of delayed repayment, the interest increases to a maximum of 21%, depending on the length of time the repayment is delayed. As of December 31, 2008, the interest rate was increased to 9.2% from delayed interest payments made. This loan is collateralized by the plant facilities and certain equipment in South Korea.

The Company is required to make equal monthly installments of principal and interest to repay the loan balance through August 2008. For the year ended December 31, 2008, principal payments made to Kookmin totaled \$300, which includes \$66 of foreign exchange translation gain. The outstanding loan balance totaled \$151 and \$451, as of December 31, 2008 and 2007, respectively, and are included in current portion of long-term debt. The Company intends



to fully repay the amounts due under the loan. However, as of the filing of this report the Company does not have sufficient funds to repay the loan. As a result, the Company is currently in default under the loan. The Company has received a formal notice of default and Kookmin Bank has initiated foreclosure proceedings on the loan collateral, which consists of manufacturing plant facility and certain equipment in South Korea. The foreclosure of the Company's manufacturing plant facility and equipment in South Korea would have material adverse effect on the Company's operations, financial condition, and results of operations. The Company is currently working to resolve this matter with Kookmin Bank by seeking a forbearance until the Company is able to obtain funding to repay this loan, although there is no assurance that the Company will be able to obtain any such funding.

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The notes payable from Kookmin Loan as of December 31, 2008 and 2007 and the activity for the year ended December 31, 2008 is shown in the following table:

	December 31, 2007	Borrowings	Repayments	December 31, 2008
Kookmin Loan 9.2%, principal \$5,488	\$ 451	\$ —	\$ (300)	\$ 151
<b>Kookmin Repayment Schedule</b>				<b>Minimum</b>
<b>December 31,</b>				<b>Payments</b>
2009				\$ 151
Total				\$ 151

Debt of Majority Owned Subsidiary

On July 24, 2007, the Company completed an \$11,500 financing transaction (the "Transaction") that provided funding to repay convertible notes previously issued by us that were scheduled to become due in July and August 2007. In the Transaction, the Company transferred substantially all of the assets of the Company's Liquidmetal Coatings division to a newly formed, newly capitalized subsidiary named Liquidmetal Coatings, LLC, a Delaware limited liability company ("LMC"), and LMC assumed substantially all of the liabilities of the division.

LMC was capitalized through a \$6,500 subordinated debt and equity investment by C3 Capital Partners ("C3") and a \$5,000 senior credit facility with Bank Midwest, N.A. This debt and equity resulted in cash proceeds of \$11,102 after related debt issuance costs of \$398, which proceeds LMC used to purchase all of the assets and liabilities from the Company. The Company incurred an additional \$459 in issuance costs directly related to the debt issuance. As a result, \$857 was recorded as deferred debt issuance costs to be amortized over the life of the debt. Interest expense for the amortization of debt issuance cost was \$176 and \$83 for the years ended December 31, 2008 and 2007, respectively.

The Company retains a 69.25% ownership interest in LMC, C3 holds a 19% ownership interest, Larry Buffington, the Company's President and CEO, (who also serves as the President and CEO of LMC) holds a 10% ownership interest, and CRESO Capital Partners ("CRESO"), the Company's financial advisor in the Transaction, holds a 1.75% ownership interest. The equity interests acquired by C3 and issued to CRESO were not considered a discount to debt, as the unconsolidated net assets of LMC were deemed to have an initial value of \$0 upon closing of the Transaction for financial accounting purposes. Further, LMC is fully responsible for the repayment of debt obligations.

*Midwest Debt*

In connection with the Transaction, LMC entered into a Loan Agreement, dated July 24, 2007 (the "Loan Agreement"), with Bank Midwest, N.A. ("Midwest"). The Loan Agreement provides for total loan availability of \$5,500, consisting of a \$4,000 term loan with an annual interest rate of 8.48% and a revolving loan of up to \$1,500 with a variable interest equal to prime rate as published in the Wall Street Journal. Interest payments are due monthly. The term loan has a maturity date of July 20, 2011. The revolving loan has a maturity date of July 20, 2008. Borrowing availability under the revolving loan is based in a percentage of LMC's eligible receivables and eligible inventory, and the initial advance under the revolving loan was \$1,000 on July 24, 2007.

On September 23, 2008, the Loan Agreement was amended to extend the revolving loan maturity to September 24, 2009, reduce the revolving loan limit to \$1,350, and provided for a minimum rate of interest of 6.5%. LMC's obligations under the Loan Agreement are secured by a blanket security interest in all of LMC's assets and the Company's equity interest in LMC, and pursuant to an intercreditor agreement between the C3 and Midwest. Midwest's security interest in the assets is senior to C3's security interest in the same assets.

LMC is required to make monthly principal payments under the term loan of: \$63 during months 1 through 12, \$83 during months 13 through 36, and \$104 during months 37 through 48. All remaining principal is due and payable on July 20, 2011. If the term loan is prepaid within the first twenty-four (24) months after July 24, 2007, LMC will pay a prepayment penalty of 1% of the outstanding principal balance, together with accrued interest. After the twenty-four month period has lapsed, LMC will have the right to prepay the term loan without penalty.

As of December 31, 2008 and 2007, the gross outstanding loan balance under the term loan totaled \$2,729 and \$3,688, respectively, and the gross outstanding loan balance under the revolving loan totaled \$597 and \$1,130, respectively. The loans are

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presented as long-term debt and short-term debt on the Company's consolidated balance sheet, respectively. Interest expense incurred under the term loan and revolving loan totaled \$276 and \$52 for the year ended December 31, 2008, respectively. Interest expense incurred under the term loan and revolving loan totaled \$143 and \$37 for the year ended December 31, 2007, respectively.

<b>Term Loan Repayment Schedule December 31,</b>	<b>Minimum Payments</b>
2009	\$ 1,000
2010	1,104
2011	625
Total	<u>\$ 2,729</u>

Additionally, LMC entered into Promissory Notes, dated August 29, 2007 and October 21, 2008 (the "Capital Loan"), with Midwest to provide for \$45 and \$105 to be used towards the purchase of a company truck and HVOF spray equipment, respectively, with annual interest rate of 8.25%. The Capital Loan has maturity dates of September 1, 2012 and November 1, 2013. LMC is required to make monthly principal and interest payments of \$3 per month. As of December 31, 2008 and 2007, the gross outstanding loan balance under the Capital Loan totaled \$129 and \$44, respectively, which is presented as long-term debt on the Company's consolidated balance sheet. Interest expense incurred under the Capital Loan totaled \$6 and \$1 for the years ended December 31, 2008 and 2007, respectively.

<b>Capital Loan Repayment Schedule December 31,</b>	<b>Minimum Payments</b>
2009	\$ 28
2010	30
2011	32
2012	26
2013	13
Total	<u>\$ 129</u>

*C3 Debt*

In the Transaction, LMC also entered into a Securities Purchase Agreement, dated July 24, 2007 (the "Securities Purchase Agreement"), with C3 Capital Partners, L.P. ("C3"), C3 Capital Partners II, L.P. ("C3 II", and with C3, the "C3 entities"), and Liquidmetal Coatings Solutions, LLC, a wholly owned subsidiary of LMC that will operate the thermal spray coatings business ("LMCS"). Pursuant to the Securities Purchase Agreement, LMC issued to the C3 entities subordinated promissory notes in the aggregate principal amount of \$6,500 (the "Subordinated Notes"). Under the Securities Purchase Agreement, the C3 entities have the right, beginning on the July 24, 2012 (or, if earlier, upon a default by LMC under the Subordinated Notes or Securities Purchase Agreement) to require LMC to purchase the C3 entities' membership interests in LMC for a purchase price equal to their pro rata portion of the greater of (i) the appraised fair market value of LMC or (ii) six times LMC's trailing 12-month earnings before interest taxes, depreciation, and amortization, less funded debt.

The Subordinated Notes have a maturity date of July 20, 2012 with no required principal payments before maturity other than upon specified triggering events, such as a change in control of LMC. Interest accrues at an annual rate of 14%, with 12% interest being payable monthly beginning September 2007 and the remaining 2% interest being payable at maturity. In connection with the Securities Purchase Agreement and the Subordinated Notes, the Company and LMC entered into pledge agreements with the C3 entities in which the Company pledged its membership interest in LMC to secure the obligations under the notes and LMC pledged its membership interests in LMCS to secure its obligations under the notes. LMC and LMCS also granted to C3 a blanket security interest in all of their assets to secure their obligations under the Subordinated Notes.

The gross outstanding loan balance including accrued interest payable upon maturity of the Subordinated Note totaled \$6,690 and \$6,557 as of December 31, 2008 and 2007, respectively. Interest expense incurred under the Subordinated Notes totaled \$926 and \$344 for the years ended December 31, 2008 and 2007, respectively.

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<b>C3 Notes Repayment Schedule December 31,</b>	<b>Minimum Payments</b>
2009	\$ —
2010	—
2011	—
2012	6,690
Total	<u>\$ 6,690</u>

**12. Shareholders' Equity (Deficiency)**

**Initial Public Offering.** Pursuant to the Company's Registration Statement (Registration No. 333-73716) on Form S-1, as amended, initially filed with the Securities and Exchange Commission on November 20, 2001 and declared effective May 21, 2002, the Company closed an initial public offering of 5,000,000 registered shares of common stock on May 28, 2002, plus an additional 229,000 shares on June 10, 2002 pursuant to an over allotment option, at a price of \$15.00 per share (which sale is referred to herein as the "Offering"). The Offering generated net cash proceeds for the Company during the second quarter 2002 of approximately \$70,721, net of underwriting commissions of \$5,490 and other transaction fees of approximately \$2,224.

**Stock Split.** On June 29, 2001 the Company declared a ten-for-one stock split to its common shareholders of record on June 29, 2001. This stock split was effected in the form of a stock dividend. On April 4, 2002, the Company declared a one-for-3.1 reverse stock split to its common shareholders of record on April 4, 2002. The consolidated financial statements and accompanying notes have been retroactively adjusted to reflect the effects of the split and reverse split.

**Reincorporation.** On May 21, 2003, the Company completed a reincorporation by transitioning from a California corporation to a Delaware corporation. The reincorporation was effected through the merger of the former California entity into its newly created wholly owned Delaware subsidiary. In connection with the reincorporation, the number of authorized common shares was reduced from 200,000,000 to 100,000,000. Additionally, the par value of the common stock was changed from no par value common stock to common stock with a par value of \$0.001 per share. For purposes of these notes, the term "Company" refers to the former California entity with respect to periods prior to May 21, 2003.

**Preferred Stock.** As of December 31, 2001, the Company received net proceeds of \$5,577 from the sale of the preferred stock at a per share price of \$12.40, as adjusted for the revised stock split. Upon the completion of the Offering, each share of preferred stock was converted automatically into one share of Class A common stock pursuant to the terms of the preferred stock issued.

#### Warrants

As of December 31, 2008, outstanding warrants to acquire shares of the Company's common stock are as follows:

<u>Number of Shares</u>	<u>Exercise Price</u>	<u>Expiration Date</u>
1,039,255	\$ 1.72	June 13, 2010
125,000	1.55	March 17, 2009
3,353,486	1.72	August 2, 2010
25,000	1.75	May 17, 2011
452,859	1.72	May 17, 2011
860,521	2.07	May 17, 2011
7,477,971	1.55	January 3, 2012
1,109,091	1.55	December 28, 2012
<u>14,443,183</u>		

Pursuant to EITF 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock", the Company is required to report a value of the warrant as a fair value and record the fluctuation to the fair value of the

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warrant liability to current operations. The change in the fair value of the warrants resulted in gains of \$1,890, \$4,923 and \$279 for the years ended December 31, 2008, 2007 and 2006. The fair value of warrants outstanding at December 31, 2008 of \$692 was computed using the Black-Scholes model under the following assumptions: (1) expected life of 0.21 to 3.99 years; (2) volatility of 113%, (3) risk free interest of 0.11% to 1.55%, and dividend rate of 0%. The fair value of warrants outstanding at December 31, 2007 of \$2,583 was computed using the Black-Scholes model under the following assumptions: (1) expected life of 1.21 to 4.99 years; (2) volatility of 63%, (3) risk free interest of 3.07% to 3.45%, and dividend rate of 0%.

#### **13. Stock Compensation Plan**

Under the Company's 1996 Stock Option Plan ("1996 Company Plan") the Company could grant to employees, directors or consultants options to purchase up to 12,903,226 shares of common stock as adjusted for the reverse stock split. The stock options are exercisable over a period determined by the Board of Directors or the Compensation Committee, but no longer than 10 years.

On April 4, 2002, our shareholders and board of directors adopted the 2002 Equity Incentive Plan ("2002 Equity Plan"). The 2002 Equity Plan provides for the grant of stock options to officers, employees, consultants and directors of the Company and its subsidiaries. In addition, the plan permits the granting of stock appreciation rights with, or independently of, options, as well as stock bonuses and rights to purchase restricted stock. A total of 10,000,000 shares of our common stock may be granted under the 2002 Equity Plan. As of December 31, 2008, there are 2,621,421 options outstanding under the 2002 Equity Plan.

Certain of our current and former non-employee directors and our former Chief Executive Officer were given the opportunity to receive stock under the 2002 Equity Plan in lieu of past-due director and consulting fees that were due to them. During 2008, 2007 and 2006, the Company issued 99,107, 49,072 and 138,397 shares of stock, respectively, at prices ranging from \$0.70 to \$1.50 per share under the 2002 Equity Plan for such fees that were due to them.

Prior to the approval of the 2002 Equity Plan, options were primarily granted under the Company's 1996 Stock Option Plan ("1996 Company Plan"). On April 4, 2002, our board of directors terminated the 1996 Company Plan. The termination will not affect any outstanding options under the 1996 Company

Plan and all such options will continue to remain outstanding and be governed by the Plan. No additional options may be granted under the 1996 Company Plan. As of December 31, 2008, there were 3,039,198 options outstanding under the 1996 Company Plan.

On April 4, 2002, our shareholders and board of directors adopted the 2002 Non-employee Director Stock Option Plan ("2002 Director Plan"). Only non-employee directors are eligible for grants under the 2002 Director Plan. A total of 1,000,000 shares of the Company's Common Stock may be granted under the 2002 Director Plan. There are 470,000 options outstanding under the 2002 Director Plan as of December 31, 2008.

Additionally, the Company has 1,845,163 options outstanding at December 31, 2008 which were granted outside the 1996 Company Plan, 2002 Equity Plan and 2002 Director Plan.

The Company previously applied Accounting Principles Board ("APB") Opinion No. 25 for options when the exercise price of options granted to employees is less than the fair value of the underlying stock on the date of grant. As permitted, the Company had previously elected to adopt provisions of Statement of Financial Accounting Standard ("SFAS") No. 123, Accounting for Stock-Based Compensation for options granted to non-employees who perform services for the Company and the disclosure-only provisions of options granted to employees.

In December 2004, the FASB issued SFAS No. 123 (revised 2004), Share-Based Payment ("SFAS 123R"), which replaces SFAS No. 123, Accounting for Stock-Based Compensation, ("SFAS 123") and supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, ("APB 25"). SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. Under SFAS 123R, the Company is required to measure the cost of employee services received in exchange for stock options and similar awards based on the grant-date fair value of the award and recognize this cost in the income statement over the period during which an employee is required to provide service in exchange for the award. The pro forma disclosures previously permitted under SFAS 123 are no longer an alternative to financial statement recognition. The Company adopted SFAS 123R on January 1, 2006 using the modified prospective method and recorded \$578, \$643 and \$1,075 for the years ended December 31, 2008, 2007 and 2006, respectively, of non-cash charges for stock compensation related to amortization of the fair value of restricted stock and unvested stock options representing a \$2,296, or \$0.05 per share, increase from the stock compensation that would have been recorded under APB 25 and SFAS 123. Under this method, the Company will recognize compensation cost, on a prospective basis, for the portion of outstanding awards for which the requisite service has not yet been rendered as of January 1, 2006 and any new grants, based

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upon the grant-date fair value of those awards calculated under SFAS 123 for pro forma disclosure purposes. Accordingly, we have not restated prior period amounts.

The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the assumptions noted in the following table. Expected volatilities are based on historical volatility expected over the expected life of the options. The Company uses historical data to estimate option exercise and employee termination within the valuation model. The expected term of options granted is represents the period of time that options granted are expected to be outstanding. Actual forfeitures were used for years ended December 31, 2008, 2007 and 2006. The risk free rate for period within the expected life of the options is based on U.S. Treasury rates in effect at the time of grant.

	December 31,		
	2008	2007	2006
Expected volatility	63% - 94%	58% - 100%	100%
Expected dividends	—	—	—
Expected term (in years)	6	5 - 6	5
Risk-free rate	2.13% - 3.54%	3.84% - 4.68%	4.3% - 4.82%

The following table summarizes the Company's stock option transactions for the three years ended December 31, 2008:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (in thousands)
Options outstanding at December 31, 2005	7,993,755	\$ 4.45		
Granted	992,500	1.42		
Exercised	—	—		
Forfeited	(1,193,664)	2.56		
Options outstanding at December 31, 2006	7,792,591	4.35		
Granted	1,334,565	0.08		
Exercised	—	—		
Forfeited	(930,010)	2.00		
Options outstanding at December 31, 2007	8,197,146	4.04		
Granted	673,966	0.50		
Exercised	—	—		
Forfeited	(895,330)	3.41		
Options outstanding at December 31, 2008	7,975,782	\$ 3.81	4.2	\$ —
Options vested or expected to vest at December 31, 2008	7,907,779	\$ 4.60	4.2	\$ —
Options exercisable at December 31, 2008	6,302,382	\$ 4.57	2.7	\$ —

The weighted average fair value of options granted during the years ended December 31, 2008, 2007 and 2006 was \$0.50, \$0.81 and \$1.10, respectively. There were 6,303,382 options with a weighted average exercise price of \$4.57 exercisable at December 31, 2008 and there were 6,263,146 options with a weighted average exercise price of \$4.93 exercisable at December 31, 2007.

Included in the above tables are certain options granted where their exercise prices were below the fair market value of the common stock at the grant date (measurement date). Such options totaled 358,582 with a weighted average fair value of \$11.22 and 734,927 with a weighted average fair value of \$7.56 at December 31, 2008 and 2007, respectively.

The following table summarizes the Company's stock options outstanding and exercisable by ranges of option prices as of December 31, 2008:

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Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Numbers of options Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Options Exercisable	Weighted Average Exercise Price
\$0.00 - \$1.55	2,136,661	8.50	\$ 0.82	676,261	\$ 0.93
1.56 - 3.10	1,477,856	3.50	2.43	1,274,856	2.47
3.11 - 4.65	1,694,163	2.10	4.62	1,684,163	4.63
4.66 - 6.20	2,580,646	2.40	6.20	2,580,646	6.20
6.21 - 7.75	—	—	—	—	—
7.76 - 9.30	—	—	—	—	—
9.31 - 10.85	10,000	4.00	9.81	10,000	9.81
10.86 - 12.40	4,518	2.60	12.40	4,518	12.40
12.41 - 13.95	—	—	—	—	—
13.96 - 15.50	71,938	3.30	15.00	71,938	15.00
Total	<u>7,975,782</u>			<u>6,302,382</u>	

**14. Discontinued Operations**

*Liquidmetal Golf*

On April 30, 2002, management terminated the operations of the retail golf segment by means of liquidating substantially all of the retail golf assets and liabilities. The disposition of the retail golf operations represents the disposal of a business segment. Accordingly, the accompanying consolidated financial statements reflect the retail golf segment as a discontinued operation for all periods presented.

There were no assets associated with discontinued retail golf operations at December 31, 2008 and 2007, and there were no gain or loss resulted from the discontinued operations for the years ended December 31, 2008, 2007 and 2006.

*Stock Compensation Plan.* Historically, Liquidmetal Golf granted its own options to employees, directors and consultants under a stock option plan ("1997 Golf Plan") approved by Liquidmetal Golf's Board of Directors pursuant to which Liquidmetal Golf could have granted stock options exercisable over a period determined by the Board of Directors to purchase up to 500,000 shares of common stock of Liquidmetal Golf. In connection with the Company's plan to discontinue the retail golf operations, the Company does not intend to issue additional options under the 1997 Golf Plan.

Liquidmetal Golf previously applied Accounting Principles Board ("APB") Opinion No. 25 for options when the exercise price of options granted to employees is less than the fair value of the underlying stock on the date of grant. As permitted, the Company had previously elected to adopt provisions of Statement of Financial Accounting Standard ("SFAS") No. 123, Accounting for Stock-Based Compensation for options granted to non-employees who perform services for the Company and the disclosure-only provisions of options granted to employees. There was no compensation expense recorded during the years ended December 31, 2008, 2007 and 2006.

In December 2004, the FASB issued SFAS No. 123 (revised 2004), Share-Based Payment ("SFAS 123R"), which replaces SFAS No. 123, Accounting for Stock-Based Compensation, ("SFAS 123") and supersedes APB Opinion No. 25, Accounting for Stock Issued to Employees, ("APB 25"). SFAS 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. Under SFAS 123R, the Company is required to measure the cost of employee services received in exchange for stock options and similar awards based on the grant-date fair value of the award and recognize this cost in the income statement over the period during which an employee is required to provide service in exchange for the award. The pro forma disclosures previously permitted under SFAS 123 are no longer an alternative to financial statement recognition. The Company adopted SFAS 123R on January 1, 2006 using the modified prospective method for outstanding option. Under this method, the Company would recognize compensation cost, on a

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prospective basis, for the portion of outstanding awards for which the requisite service has not yet been rendered as of January 1, 2006 and any new grants, based upon the grant-date fair value of those awards calculated under SFAS 123 for pro forma disclosure purposes. Accordingly, we have not restated prior period amounts. There were no charges for stock compensation related to amortization of the fair value of restricted stock as the outstanding options were fully vested as of December 31, 2005 and no new grants were made during the years ended December 31, 2008, 2007 and 2006.

The following table summarizes Liquidmetal Golf's stock option transactions for the three years ended December 31, 2008:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (in thousands)
Options outstanding at December 31, 2005	78,200	\$ 8.14		
Granted	—	—		
Exercised	—	—		
Forfeited	(78,200)	8.14		
Options outstanding at December 31, 2006	—	—		
Granted	—	—		
Exercised	—	—		
Forfeited	—	—		
Options outstanding at December 31, 2007	—	—		
Granted	—	—		
Exercised	—	—		
Forfeited	—	—		
Options outstanding at December 31, 2008	—	\$ —	—	\$ —
Options vested or expected to vest at December 31, 2008	—	\$ —	—	\$ —
Options exercisable at December 31, 2008	—	\$ —	—	\$ —

There were no options exercisable at December 31, 2008 and 2007.

#### 15. Preferred Units of Subsidiary

On February 22, 2008, LMC completed a transaction under which it issued and sold \$2,500 in preferred membership units to two minority members of LMC (the "Preferred Units Transaction"). Immediately following the sale of the preferred membership units, the subscription proceeds (after a 1% transaction fee) were distributed to LMC's common unit members, and as a result of such distribution, the Company received approximately \$1,714 in the distribution. The preferred units issued by LMC have an accruing priority return of 14% per year that are priority over any distribution made by LMC and may be redeemed at any time within four years of issuance through cash payment or distribution in excess of the 14% priority return. If LMC fails to redeem the preferred units on or before the second anniversary of the issue date, the preferred units will receive an additional 200 common membership units (equal to 2% of the currently outstanding common units) per quarter until the preferred units are redeemed in full.

As of December 31, 2008, LMC has redeemed \$236 of its preferred units and distributed \$281 in priority return to the preferred unit holders. The total preferred units outstanding are \$2,264 as of December 31, 2008.

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#### 16. Income Taxes

Significant components of deferred tax assets are as follows:

	Years Ended December 31,	
	2008	2007
Loss carry forwards	\$ 43,359	\$ 36,577
Other	1,117	2,227
Total deferred tax asset	44,476	38,804
Valuation allowance	(44,476)	(38,804)
Total deferred tax asset, net	\$ —	\$ —

The following table accounts for the differences between the expected federal tax benefit (based on the statutory U.S. federal income tax rate of 34%) and the actual tax provision:

	Years Ended December 31,		
	2008	2007	2006

Expected federal tax benefit	(34)%	(34)%	(34)%
State tax expense, net of expected federal tax benefit	(3)%	0%	(4)%
Foreign loss not subject to U.S. federal income tax	12%	33%	7%
Net operating loss utilized or expired	(38)%	88%	0%
Other	0%	0%	(38)%
Increase (decrease) in valuation allowance	63%	(87)%	70%
<b>Total tax provision</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

As of December 31, 2008, the Company had approximately \$118 of net operating loss (“NOL”) carryforwards for U.S. federal income tax purposes expiring in 2009 through 2028. In addition, the Company has California state NOL carryforwards of approximately \$63 expiring in 2009 through 2018. The Company and Liquidmetal Golf filed on a separate company basis for federal income tax purposes. Accordingly, the federal NOL carryforwards of one legal entity are not available to offset federal taxable income of the other. As of December 31, 2008, Liquidmetal Technologies, Inc. had approximately \$81 in federal NOL carryforwards, expiring in 2009 through 2028 and Liquidmetal Golf, Inc. had approximately \$38 in federal NOL carryforwards, expiring in 2013 through 2028.

As of December 31, 2008, the Company had approximately \$209 of Research & Development (“R&D”) credit carryforwards for U.S. federal income tax purposes expiring in 2021 through 2028. In addition, the Company has California R&D credit carryforwards of approximately \$265, which do not expire under current California law.

Section 382 of the Internal Revenue Code (“IRC”) imposes limitations on the use of NOL’s and credits following changes in ownership as defined in the IRC. The limitation could reduce the amount of benefits that would be available to offset future taxable income each year, starting with the year of an ownership change. The Company has not completed the complex analysis required by the IRC to determine if an ownership change has occurred.

The ability to realize the tax benefits associated with deferred tax assets, which includes benefits related to NOL’s, is principally dependent upon the Company’s ability to generate future taxable income from operations. The Company has provided a full valuation allowance for its net deferred tax assets due to the Company’s net operating losses.

The Company adopted the provisions of FIN 48 on January 1, 2007. At the adoption date and as of December 31, 2008, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense which were \$0 for the year ended December 31, 2008.

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Tax years 2005 through 2008 and 1998 through 2008 are subject to examination by the federal and state taxing authorities, respectively. There are no income tax examinations currently in process.

**17. Segment Reporting and Geographic Information**

SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information*, requires companies to provide certain information about their operating segments. In April 2002, the Company began classifying operations into two reportable segments: Liquidmetal alloy industrial coatings and bulk Liquidmetal alloys. The Liquidmetal alloy industrial coatings are used primarily as a protective coating for industrial machinery and equipment, such as drill pipe used by the oil drilling industry and boiler tubes used by coal burning power plants. Bulk Liquidmetal alloys include market opportunities to manufacture and sell casing components for electronic devices, medical devices, sporting goods, tooling, prototype sampling, defense applications and metal processing equipment. The expenses incurred by the bulk Liquidmetal alloy segment are manufacturing, research and development costs, and selling expenses associated with identifying and developing market opportunities. Bulk Liquidmetal alloy products can be distinguished from Liquidmetal alloy coatings in that the bulk Liquidmetal alloy can have significant thickness, up to approximately one inch, which allows for their use in a wider variety of applications other than a thin protective coating applied to machinery and equipment. Revenue and expenses associated with research and development services are included in the bulk Liquidmetal alloy segment. The accounting policies of the reportable segments are the same as those described in Note 3 above.

Summarized financial information concerning the Company’s reportable segments is shown in the following tables:

	<u>Coatings</u>	<u>Bulk Alloy</u>	<u>Segment Totals</u>
<b>Year ended December 31, 2008:</b>			
Revenue to external customers	\$ 12,508	\$ 9,575	\$ 22,083
Gross profit	4,451	501	4,952
Total segment income (loss)	1,374	(1,347)	27
Total identifiable assets at end of period	2,931	7,837	10,768
<b>Year ended December 31, 2007:</b>			
Revenue to external customers	\$ 14,393	\$ 14,629	\$ 29,022
Gross profit (loss)	5,638	(3,075)	2,563
Total segment income (loss)	3,337	(5,003)	(1,666)
Total identifiable assets at end of period	4,441	13,519	17,960

Year ended December 31, 2006:						
Revenue to external customers	\$	9,419	\$	18,250	\$	27,669
Gross profit		3,879		1,372		5,251
Total segment income (loss)		3,075		(1,815)		1,260
Total identifiable assets at end of period		1,281		19,005		20,286

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Reconciling information for the statements of operations between reportable segments and the Company's consolidated totals is shown in the following table:

	Years ended December 31,		
	2008	2007	2006
Total segment income (loss) before interest expense and discontinued operations	\$ 27	\$ (1,666)	\$ 1,260
General and administrative expenses, excluded	(3,765)	(6,206)	(6,349)
Loss before interest, other income, income taxes, and discontinued operations	(3,738)	(7,872)	(5,089)
Loss from extinguishment of debt	—	(648)	—
Change in value of warrants, gain	1,890	4,923	279
Change in value of conversion feature, gain (loss)	1,987	6,965	(226)
Interest expense	(6,293)	(8,747)	(9,509)
Interest income	3	123	23
Minority interests	(421)	(384)	—
Consolidated net loss	\$ (6,572)	\$ (5,640)	\$ (14,522)

Included in bulk alloy segment income for the year ended December 31, 2008 is \$429 of other income recognized from \$182 deferred gain on disposal of assets in connection with a 2007 equipment purchase agreement with Liquidmetal Korea (see Note 21) and \$247 gain from accounts payables write off, and \$17 of other expense recognized from loss from disposal of assets. Included in bulk alloy segment income for the year ended December 31, 2007 is \$226 of other income recognized from gain on disposal of assets in connection with the equipment purchase agreement and transfer agreement of the Weihei operations to Liquidmetal Korea (see Note 21). Included in bulk alloy segment income for the year ended December 31, 2006 is \$572 of other income recognized from \$480 gain on termination of a distribution agreement in March 2006 and \$92 gain on disposal of idle equipment in June 2006.

Excluded general and administrative expenses are attributable to the Company's corporate headquarters. These expenses primarily include corporate salaries, consulting, professional fees and facility costs. Research and development expenses are included in the operating costs of the segment that performed the research and development.

Reconciling information for the balance sheets between reportable segments and the Company's consolidated totals is shown in the following table:

	December 31,	
	2008	2007
Total segment assets	\$ 10,768	\$ 17,960
Cash and cash equivalents	56	1,055
Prepaid expenses and other current assets	866	809
Other property, plant and equipment	97	123
Intangibles, net	1,049	1,120
Other assets	404	1,446
Total consolidated assets	\$ 13,240	\$ 22,513

Assets excluded from segments include assets attributable to the Company's corporate headquarters. The largest asset represents the Company's intangible assets, consisting primarily of the Company's patents and trademarks.

Certain customers accounted for more than 10% of revenues from continuing operations as follows:

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Years Ended December 31,		
2008	2007	2006

Samsung	0%	2%	5%
Flextronics Manufacturing, LTD	5%	6%	13%
Grant Prideco	10%	10%	5%
Liquidmetal Korea (Grace Metal)	9%	12%	0%

Revenues from sales to companies in the United States were \$13,374, \$15,003 and \$12,142 during the years ended December 31, 2008, 2007 and 2006, respectively. The revenue related to the United States of America was earned under defense-related research and development contracts, sales of coatings products, and sales of Liquidmetal bulk alloy products.

During the years ended December 31, 2008, 2007 and 2006 the Company had revenue on sales to companies outside of the United States of \$8,709, \$14,019 and \$15,527, respectively, of which \$1,067, \$7,850 and \$3,211 represented sales to companies located in South Korea, respectively.

Long-lived assets include net property, plant, and equipment and net intangible assets. The Company had long-lived assets of \$1,813 and \$1,613 located in the United States at December 31, 2008 and 2007, respectively. The Company had long-lived assets of \$6,277 and \$8,935 located in South Korea at December 31, 2008 and 2007, respectively.

## 18. Income (Loss) Per Common Share

Basic EPS is computed by dividing earnings (loss) attributable to common shareholders by the weighted average number of common shares outstanding for the periods. Diluted EPS reflects the potential dilution of securities that could share in the earnings. A reconciliation of the number of common shares used in calculation of basic and diluted EPS is presented below:

	For the Years Ended December 31,		
	2008	2007	2006
Weighted average basic shares	44,734,554	44,730,091	43,809,339
Effect of dilutive securities:			
Stock options	—	—	—
Conversion of notes payable	—	—	—
Weighted average diluted shares	44,734,554	44,730,091	43,809,339

Options to purchase 7,975,782 shares of common stock at prices ranging from \$0.09 to \$15.00 per share were outstanding at December 31, 2008, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive. Options to purchase 8,197,146 shares of common stock at prices ranging from \$0.75 to \$15.00 per share were outstanding at December 31, 2007, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive. Options to purchase 7,792,591 shares of common stock at prices ranging from \$0.77 to \$15.00 per share were outstanding at December 31, 2006, but were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive.

Warrants to purchase 14,443,183 shares of common stock between \$1.55 and \$2.07 per share outstanding at December 31, 2008 were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive. Warrants to purchase 14,418,183 shares of common stock between \$1.55 and \$2.07 per share outstanding at December 31, 2007 were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive. Warrants to purchase 4,875,778 shares of common stock between \$2.00 and \$2.58 per share outstanding at December 31, 2006 were not included in the computation of diluted EPS for the same period as the inclusion would have been antidilutive.

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### LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS For the Years Ended December 31, 2008, 2007, and 2006 (in thousands, except share data)

17,375,707 shares of common stock issuable upon conversion of the Company's senior convertible notes with conversion prices of \$1.10 per share outstanding at December 31, 2008 were not included in the computation of diluted EPS for the period as the inclusion would have been antidilutive. 16,179,548 shares of common stock issuable upon conversion of the Company's senior convertible notes with conversion prices of \$1.10 per share outstanding at December 31, 2007 were not included in the computation of diluted EPS for the period as the inclusion would have been antidilutive. 7,021,935 shares of common stock issuable upon conversion of the Company's senior convertible notes with conversion prices between \$1.00 and \$2.00 per share outstanding at December 31, 2006, respectively, were not included in the computation of diluted EPS for the period as the inclusion would have been antidilutive.

## 19. Commitments and Contingencies

The Company is from time to time a party to certain legal proceedings arising in the ordinary course of business. Although outcomes cannot be predicted with certainty, the Company does not believe that any legal proceeding to which it is a party will have a material adverse effect on the Company's financial position, results of operations, and cash flows.

On June 26, 2006, the Company entered into a joint venture agreement with SAGA, SpA in Padova, Italy, ("SAGA") a specialist precision parts manufacturer. The joint venture is named Liquidmetal SAGA Italy, Srl ("LSI"). The Company also entered into an exclusive manufacturing license agreement for the eyewear industry with LSI. Under the joint venture agreement, the Company has option to buy ownership interest in LSI, initially, of 19.9% to up to 50%. In December 2006, the Company exercised the 19.9% interest in LSI and will have two years to purchase the additional interest at a nominal price. In January 2007 and June 2007, the Company contributed additional \$217 and \$86, respectively, into LSI as additional investment. The contribution did not change the Company's 19.9% interest in LSI. Under the licensing agreement, at any time following 18 months after the effective date of the agreement, LSI may exercise its option to sell to the Company certain business assets including manufacturing equipment acquired under the joint

venture. During the years ended December 31, 2008, 2007 and 2006, the Company recognized revenues of \$0, \$103 and \$702, respectively, of Liquidmetal alloys sold to LSI for use in the joint venture.

The Company has outstanding liens and judgments on its assets by various creditors for past-due trade payables totaling approximately \$1,404, of which approximately \$1,173 is held by creditors in South Korea, as of December 31, 2008. The Company is currently working to resolve the matter with each creditor by seeking a forbearance until we are able to obtain funding to repay the amounts due, although there is no assurance that we will be able to obtain any such funding. If the Company cannot repay the amounts due or obtain forbearance, the creditors may seek to foreclose on the Company's assets. Such a foreclosure would have material adverse effect on the Company's operations, financial condition, and results of operations.

### Operating Leases

The Company leases its offices and warehouse facilities under various lease agreements, certain of which are subject to escalations based upon increases in specified operating expenses or increases in the Consumer Price Index. Future minimum lease payments under non-cancelable operating leases during subsequent years are as follows:

December 31,	Minimum Payments
2009	\$ 324
2010	312
2011	306
2012	118
2013	—
Total	<u>\$ 1,060</u>

Rent expense was \$322, \$464 and \$449 for the years ended December 31, 2008, 2007 and 2006, respectively.

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**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2008, 2007, and 2006**  
**(in thousands, except share data)**

### 20. 401(k) Savings Plan

The Company has a tax-qualified employee savings and retirement plan, or 401(k) plan, which covers all of its United States-based employees. Our Korean employees are covered under a government sponsored pension program and do not participate in the U.S. based 401(k) program.

Under the U.S. based 401 (k) plan, participants may elect to reduce their current compensation, on a pre-tax basis, by up to 15% of their taxable compensation or of the statutorily prescribed annual limit, whichever is lower, and have the amount of the reduction contributed to the 401(k) plan. The 401(k) plan permits the Company, in its sole discretion, to make additional employer contributions to the 401(k) plan. However, the Company did not make employer contributions to the 401(k) plan during any of the periods presented in the accompanying consolidated financial statements.

### 21. Related Party Transactions

The Company is a party to a consulting agreement with William Johnson, a member of the Company's board of directors, on a month-to-month basis starting from 2005. During each of the years ended December 31, 2008, 2007 and 2006, the Company incurred \$60 in consulting fees from Mr. Johnson.

Soo Buchanan, the sister of John Kang, the Company's Chairman, provides services to the Company as a consultant. During the years ended December 31, 2008, 2007 and 2006, the Company incurred \$70, \$0 and \$0, respectively, for her services as a consultant. Additionally, Otis Buchanan, the husband of Ms. Buchanan, was employed by the Company and was paid aggregate compensation of approximately \$110 during each of the years ended December 31, 2008, 2007 and 2006.

On December 23, 2008, John Kang advanced the Company \$200 to be used to repay the Company's outstanding borrowings made under the Factoring, Loan and Security Agreement (the "Factoring Agreement"), dated April 21, 2005, with a financing company. Further, Mr. Kang entered into a Continuing Guarantee Agreement, dated January 5, 2009, with the financing company to personally guarantee repayment of the outstanding borrowings made under the Factoring Agreement (see Note 22). Subsequently in January 2009, the \$200 advance was offset with \$178 outstanding receivable from Mr. Kang arising from liabilities incurred from certain stock transactions in August 2002.

As of December 31 2008 and 2007, CK Cho, a member of our Board of Directors, held \$503 and \$467 of the convertible subordinated notes, respectively, and held 305,918 exercisable warrants for both periods.

As of December 31, 2008 and 2007, Ricardo Salas, the Company's former Chief Executive Officer, held \$381 and \$354 of the convertible unsecured subordinated notes, respectively, and \$259 of the unsecured subordinated notes for both periods. He also held a total of 377,691 of exercisable warrants as of December 31, 2008 and 2007.

On June 1, 2007, the Company entered into a transaction with Grace Metal (currently Liquidmetal Korea Co., Ltd. "LMK"), under which (i) LMK agreed to purchase various equipments (including die casting machines and vacuum induction melters) used in the Company's bulk amorphous alloy business segment and (ii) the Company granted LMK a 10-year exclusive license to manufacture products made from bulk Liquidmetal alloys for customers whose principal headquarters or whose major operations are located in South Korea. LMK was formed by an investor group that includes the former director and officer of the Company, James Kang, who is also the brother of John Kang, Chairman of our company. Under an equipment purchase agreement between the Company and LMK, LMK agreed to buy the purchased equipment for a total purchase price of \$2,000, of which \$759 were received as of December 31, 2008. The



equipment purchase agreement provides that delivery of the equipment can be delayed to accommodate the Company's continuing manufacturing needs, and it also provides that the Company will retain a security interest in the purchased equipment until full payment of the purchase price.

In consideration of the license agreement with LMK, the Company will be entitled to royalty of 10% of LMK's net sales of licensed products (unless LMK's margin on the products falls below specified levels, in which case a new royalty will be negotiated in good faith). Effective June 1, 2008, the royalty rate was adjusted to 5%. The agreement provides that the Company may convert the license to a non-exclusive in the event that the net sales in the second year of the contract or thereafter are not sufficient to result in royalties of \$500 or more per year. The agreement also provides that LMK will be required to purchase all alloy feedstock from the Company, and the Company will have the right to continue to manufacture Liquidmetal alloy products for South Korean customers until all purchased equipment has been commissioned.

Additionally, effective June 1, 2007, the Company discontinued its post-processing operation in Weihai, China and transferred the manufacturing staff and equipment in Weihai to LMK under an amendment to the equipment purchase agreement with LMK.

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**LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2008, 2007, and 2006**  
**(in thousands, except share data)**

Further, the Company transferred certain of its manufacturing staff from its South Korean plant to LMK. As a result, LMK assumed \$370 of accrued severance liability for the transferred employees. The equipment purchase agreement and the transfer agreement regarding our Weihai operations resulted in a total net gain of \$226, which is recorded as other income during the year ended December 31, 2007.

The Company purchased production supplies and outsourced production of certain bulk alloy production with LMK, Lead Metal, and SDM, which are controlled by James Kang, a former director and officer of the Company and the brother of our current Chairman. In June 2008, the Company began sharing the use of its manufacturing facility and production equipment in Pyongtaek, South Korea, with LMK as the Company began significant outsourcing of its bulk alloy parts production. The Company incurred expenses for purchase of production supplies and outsourcing fees of \$2,053, \$650 and \$466 during the years ended December 31, 2008, 2007 and 2006, respectively. The Company recognized revenue from sales of raw materials and royalties for a total of \$2,000 and \$3,392 during the years ended December 31, 2008 and 2007, respectively. Approximately, \$212 and \$401 is included in accounts receivables as of December 31, 2008 and 2007, respectively for outstanding trade receivables due.

Effective October 20, 2006, James Kang began providing services to the Company as a consultant, which would have continued through December 31, 2009. On December 31, 2007, the terms of the consulting agreement were accelerated whereby the remaining two years of Mr. Kang's consulting fees were settled for \$435.

In December 2007, the Company entered into agreements with two holders of our convertible subordinated notes (the "January 2010 Notes") and LMK, a South Korean company formed by investor groups including our former Founder and director, James Kang, and the two former noteholders, whereby LMK would assume the liabilities due under the January 2010 Notes, including principal, interest, and fees due by our company to the two noteholders totaling \$434 and the Company released obligations due from LMK for outstanding trade accounts receivables. In connection with the assumption of the liabilities by LMK, warrants to purchase 179,620 shares of our common stock held by the holders were cancelled.

**22. Subsequent Events**

On January 5, 2009, John Kang, the Company's Chairman, entered into a Continuing Guarantee Agreement (the "Guarantee"), with the Company's financing company to personally guarantee repayment of the outstanding borrowings made under the Factoring, Loan and Security Agreement (the "Factoring Agreement"), dated April 21, 2005 (see Note 11). The Guarantee was made as the total outstanding borrowings exceeded the receivables assigned as collateral. As of the filing of this report, approximately \$457 outstanding borrowings made under the Factoring Agreement was unsecured. The Company is currently working to repay this amount.

On March 17, 2009, the Company issued \$723 of new 8% Convertible Subordinated Notes Due January 2010 (the "New Notes"). The New Notes were dated January 1, 2009 and were issued in satisfaction of accrued interest due under (i) the original 8% Convertible Subordinated Notes issued by the Company in January 2007 (the "Original Notes") and (ii) 8% Convertible Subordinated Notes that were subsequently issued by the Company in satisfaction of interest due under the Original Notes through December 1, 2008 (the "Interest Notes"). The New Notes become due in January 2010 with monthly payments of 1/36th of the principal amount beginning on January 31, 2009. The New Notes and the Interest Notes (but not the Original Notes) are subject to accelerated repayment in the event of any sale of company assets exceeding \$5,000 (excluding sales of inventory in the ordinary course). In addition, the New Notes and the Interest Notes (but not the Original Notes), may be redeemed by the holder if the Company receives financing involving an amount of \$25,000 or more in net proceeds at any time. The New Notes bear interest at 8% per annum with interest payable quarterly in arrears in cash and are subordinate to certain secured financing from commercial lenders incurred by us in the future.

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**Schedule II – Valuation and Qualifying Accounts**

<u>Schedule II - Valuation and Qualifying Accounts</u>	<u>Balance at Beginning of Period</u>	<u>Additions Charged to Expenses</u>	<u>Write-offs and Payments</u>	<u>Balance at End of Period</u>
Allowance for doubtful accounts				
Year ended December 31, 2008	\$ 89	\$ 32	\$ —	\$ 121

Year ended December 31, 2007	82	7	—	89
Year ended December 31, 2006	61	47	(26)	82
<b>Product warranty accrual</b>				
Year ended December 31, 2008	\$ 631	\$ 26	\$ (343)	\$ 314
Year ended December 31, 2007	738	—	(107)	631
Year ended December 31, 2006	634	46	58	738
<b>Deferred tax asset valuation allowance *</b>				
Year ended December 31, 2008	\$ 38,804	\$ 5,672	\$ —	44,476
Year ended December 31, 2007	43,134	—	\$ (4,330)	38,804
Year ended December 31, 2006	32,771	10,363	—	43,134

\* The deferred tax asset valuation allowance represents a 100% reserve against the deferred tax asset accounts at December 31, 2008, 2007 and 2006, respectively.

\*000000002000209914095510212008\*  
 PROMISSORY NOTE

Principal	Loan Date	Maturity	Loan No.	Call / Coll	Account	Officer	Initials
\$ 104,800.04	10-21-2008	11-01-2013	2000209914	7100	379885	1106	

References in the boxes above are for Lender's use only and do not limit the applicability of this document to any particular loan or item. Any item above containing " " " " has been omitted due to text length limitations,

Borrower:	LIQUIDMETAL COATINGS, LLC LIQUIDMETAL COATINGS SOLUTIONS, LLC 1525 LAKESVILLE DRIVE, SUITE 114 KINGWOOD, TX 77339	Lender:	Bank Midwest N.A. Town Pavilion Facility 1111 Main Street Kansas City, MO 64105
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**Principal Amount: \$104,800.04**

**Date of Note. October 21, 2008**

**PROMISE TO PAY.** LIQUIDMETAL COATINGS, LLC; and UOUIDMETAL COATINGS SOLUTIONS, LLC ("Borrower") jointly and severally promise to pay to Bank Midwest N.A. ("Lender"), or order, in lawful money of the United States of America, the principal amount One Hundred Four Thousand Eight Hundred & 04/100 Dollars (\$104,800.04), together with interest on the unpaid principal balance from October 21, 2008, calculated as described in the "INTEREST CALCULATION METHOD" paragraph using an interest rate of 8.250% per annum based on a year of 360 days, until paid in full. The interest rate may change under the terms and conditions of the "INTEREST AFTER DEFAULT" section.

**PAYMENT.** Borrower will pay this loan in 60 payments of \$2,148.51 each payment. Borrower's first payment is due December 1, 2008, and all subsequent payments are due on the same day of each month after that. Borrower's final payment will be due on November 1, 2013, and will be for all principal and all accrued interest not yet paid. Payments include principal and interest. Unless otherwise agreed or required by applicable law, payments will be applied first to any accrued unpaid interest; then to principal; then to any late charges; and then to any unpaid collection costs. Borrower will pay Lender at Lender's address shown above or at such other place as Lender may designate in writing.

**INTEREST CALCULATION METHOD.** Interest on this Note is computed on a 365/360 basis; that is, by applying the ratio of the interest rate over a year of 360 days, multiplied by the outstanding principal balance, multiplied by the actual number of days the principal balance is outstanding. All interest payable under this Note is computed using this method.

**PREPAYMENT.** Borrower agrees that all loan fees and other prepaid finance charges are earned fully as of the date of the loan and will not be subject to refund upon early payment (whether voluntary or as a result of default), except as otherwise required by law. Except for the foregoing, Borrower may pay without penalty all or a portion of the amount owed earlier than it is due. Early payments will not, unless agreed to by Lender in writing, relieve Borrower of Borrower's obligation to continue to make payments under the payment schedule. Rather, early payments will reduce the principal balance due and may result in Borrower's making fewer payments. Borrower agrees not to send Lender payments marked "paid in full", "without recourse", or similar language. If Borrower sends such a payment, Lender may accept it without losing any of Lender's rights under this Note, and Borrower will remain obligated to pay any further amount owed to Lender. All written communications concerning disputed amounts, including any check or other payment instrument that indicates that the payment constitutes "payment in full" of the amount owed or that is tendered with other conditions or limitations or as full satisfaction of a disputed amount must be mailed or delivered to: Bank Midwest N.A., Town Pavilion Facility, 1111 Main Street, Kansas City, MO 64105.

**LATE CHARGE.** If a payment is more than 10 days late, Borrower will be charged 5.000% of the unpaid portion of the regularly scheduled payment.

**INTEREST AFTER DEFAULT.** Upon default, including failure to pay upon final maturity, the interest rate on this Note shall be increased by 5.000 percentage points. However, in no event will the interest rate exceed the maximum interest rate limitations under applicable law.

**DEFAULT.** Each of the following shall constitute an event of default ("Event of Default") under this Note:

Payment Default. Borrower fails to make any payment when due under this Note.

Other Defaults. Borrower fails to comply with or to perform any other term, obligation, covenant or condition contained in this Note or in any of the related documents or to comply with or to perform any term, obligation, covenant or condition contained in any other agreement between Lender and Borrower.

Default in Favor of Third Parties. Borrower or any Grantor defaults under any loan, extension of credit, security agreement, purchase or sales agreement, or any other agreement, in favor of any other creditor or person that may materially affect any of Borrower's property or Borrower's ability to repay this Note or perform Borrower's obligations under this Note or any of the related documents.

False Statements. Any warranty, representation or statement made or furnished to Lender by Borrower or on Borrower's behalf under this Note or the related documents is false or misleading in any material respect, either now or at the time made or furnished or becomes false or misleading at any time thereafter.

Death or Insolvency. The dissolution of Borrower (regardless of whether election to continue is made), any member withdraws from Borrower, or any other termination of Borrower's existence as a going business or the death of any member, the insolvency of Borrower, the appointment of a receiver for any part of Borrower's property, any assignment for the benefit of creditors, any type of creditor workout, or the commencement of any proceeding under any bankruptcy or insolvency laws by or against Borrower.

Creditor or Forfeiture Proceedings. Commencement of foreclosure or forfeiture proceedings, whether by judicial proceeding, self-help, repossession or any other method, by any creditor of Borrower or by any governmental agency against any collateral securing the loan. This includes a garnishment of any of Borrower's accounts, including deposit accounts, with Lender. However, this Event of Default shall not apply if there is a good faith dispute by Borrower as to the validity or reasonableness of the claim which is the basis of the creditor or forfeiture proceeding and if Borrower gives Lender written notice of the creditor or forfeiture proceeding and deposits with Lender monies or a Surety bond for the creditor or forfeiture proceeding, in an amount determined by Lender, in its sole discretion, as being an adequate reserve or bond for the dispute.

Events Affecting Guarantor. Any of the preceding events occurs with respect to any guarantor, endorser, surety, or accommodation party of any of the indebtedness or any guarantor, endorser, surety, or accommodation party dies or becomes incompetent, or revokes or disputes the validity of, or liability under. any guaranty of the indebtedness evidenced by this Note.

Adverse Change. A material adverse change occurs in Borrowers financial condition, or Lender believes the prospect of payment or performance of this Note is impaired.

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Cure Provisions. If any default, other than a default in payment is curable and if Borrower has not been given a notice of a breach of the same provision of this Note within the preceding twelve (12) months, it may be cured if Borrower, after receiving written notice from Lender demanding cure of such default: (1) cures the default within ten (10) days; or (2) if the cure requires more than ten (10) days, immediately initiates steps which Lender deems in Lender's sole discretion to be sufficient to cure the default and thereafter continues and completes all reasonable and necessary steps sufficient to produce compliance as soon as reasonably practical.

LENDER'S RIGHTS. Upon default, Lender may declare the entire unpaid principal balance under this Note and all accrued unpaid interest immediately due, and their Borrower will pay that amount.

ATTORNEYS FEES; EXPENSES. Lender may hire or pay someone else to help collect this Note if Borrower does not pay. Borrower will pay Lender that amount. This includes, subject to any limits under applicable law, Lender's attorneys' fees and Lender's legal expenses whether or not there is a lawsuit, including attorneys' fees and expenses for bankruptcy proceedings (including efforts to modify or vacate any automatic stay or injunction), and appeals. If not prohibited by applicable law, Borrower also will pay any court costs, in addition to all other sums provided by law.

GOVERNING LAW. This Note will be governed by federal law applicable to Lender and, to the extent not preempted by federal law, the laws of the State of Missouri without regard to its conflicts of law provisions. This Note has been accepted by Lender in the State of Missouri.

CHOICE OF VENUE. If there is a lawsuit, Borrower agrees upon Lender's request to submit to the jurisdiction of the courts of Jackson County, State of Missouri.

DISHONORED ITEM FEE. Borrower will pay a fee to Lender of \$15.00 if Borrower makes a payment on Borrower's loan and the check or preauthorized charge with which Borrower pays is later dishonored.

RIGHT OF SETOFF. To the extent permitted by applicable law, Lender reserves a right of setoff in all Borrower's accounts with Lender (whether checking, savings, or some other account). This includes all accounts Borrower holds jointly with someone else and all accounts Borrower may open in the future. However, this does not include any IRA or Keogh accounts, or any trust accounts for which setoff would be prohibited by law. Borrower authorizes Lender, to the extent permitted by applicable law, to charge or setoff all sums owing on the indebtedness against any and all such accounts.

COLLATERAL. Borrower acknowledges this Note is secured by A COMMERCIAL SECURITY AGREEMENT DATED OCTOBER 21, 2008.

LINE OF CREDIT. This Note evidences a straight line of credit. Once the total amount of principal has been advanced, Borrower is not entitled to further loan advances. Advances under this Note may be requested orally by Borrower or as provided in this paragraph. All oral requests shall be confirmed in writing on the day of the request. All communications, instructions, or directions by telephone or otherwise to Lender are to be directed to Lender's office shown above. The following persons currently are authorized, except as provided in this paragraph, to request advances and authorize payments under the line of credit until Lender receives from Borrower, at Lender's address shown above, written notice of revocation of their authority: LARRY BUFFINGTON, PRESIDENT & CEO of LIQUIDMETAL COATINGS, LLC; and LARRY BUFFINGTON, PRESIDENT & CEO of LIQUIDMETAL COATINGS, LLC, Member of LIQUIDMETAL COATINGS SOLUTIONS, LLC. FUNDS ARE TO BE DISEIURSED AT BORROWER'S REQUEST AND LOAN OFFICERS APPROVAL. Borrower agrees to be liable for all sums either: (A) advanced in accordance with the instructions of an authorized person or (B) credited to any of the Borrower's accounts with Lender. The unpaid principal balance owing on this Note at any time may be evidenced by endorsements on this Note or by Lender's internal records, including daily computer printouts. Lender will have no obligation to advance funds under this Note if: (AS) Borrower or any guarantor is in default under the terms of this Note or any agreement that Borrower or any guarantor has with Lender, including any agreement made in connection with the signing of this Note; (B) Borrower or any guarantor ceases doing business or is insolvent; (C) any guarantor seeks, claims or otherwise attempts to limit, modify or revoke such guarantor's guarantee of this Note or any other loan with Lender; or (D) Borrower has applied funds provided pursuant to this Note for purposes other than those authorized by Lender.

SUCCESSOR INTERESTS. The terms of this Note shall be binding upon Borrower, and upon Borrower's heirs, personal representatives, successors and assigns, and shall inure to the benefit of Lender and its successors and assigns.

GENERAL PROVISIONS. If any part of this Note cannot be enforced, this fact will not affect the rest of the Note. Lender may delay or forgo enforcing any of its rights or remedies under this Note without losing them. Each Borrower understands and agrees that, with or without notice to Borrower, Lender may with respect to any other Borrower (a) make one or more additional secured or unsecured loans or otherwise extend additional credit; (b) alter, compromise, renew, extend, accelerate, or otherwise change one or more times the time for payment or other terms of any indebtedness, including increases and decreases of the rate of interest on the indebtedness; (c) exchange, enforce, waive, subordinate, fail or decide not to perfect, and release any security, with or without the substitution of new collateral; (d) apply such security and direct the order or manner of sale thereof, including without limitation, any non-judicial sale permitted by the terms of the controlling security agreements, as Lender in its discretion may determine; (e) release, substitute, agree not to sue, or deal with any one or more of Borrower's sureties, endorsers, or other guarantors on any terms or in any manner Lender may choose; and (f) determine how, when and what application of payments and credits shall be made on any other indebtedness owing by such other Borrower. Borrower and any other person who signs, guarantees or endorses this Note, to the extent allowed by law, waive presentment, demand for payment, and notice of dishonor. Upon any change in the terms of this Note, and unless otherwise expressly stated in writing, no party who signs this Note, whether as maker, guarantor, accommodation maker or endorser, shall be released from liability. All such parties agree that Lender may renew or extend (repeatedly and for any length of time) this loan or release any party or guarantor or collateral; or impair, fail to realize upon or perfect Lender's security interest in the collateral; and take any other action deemed necessary by Lender without the consent of or notice to anyone. All such parties also agree that Lender may modify this loan without the consent of or notice to anyone other than the party with whom the modification is made. The obligations under this Note are joint and several.

ORAL AGREEMENTS OR COMMITMENTS TO LOAN MONEY, EXTEND CREDIT OR TO FOREBEAR FROM ENFORCING REPAYMENT OF A DEBT INCLUDING PROMISES TO EXTEND OR RENEW SUCH DEBT ARE NOT ENFORCEABLE, REGARDLESS OF THE LEGAL THEORY

UPON WHICH IT IS BASED THAT IS IN ANY WAY RELATED TO THE CREDIT AGREEMENT. TO PROTECT YOU (BORROWER(S)) AND US (CREDITOR) FROM MISUNDERSTANDING OR DISAPPOINTMENT, ANY AGREEMENTS WE REACH COVERING SUCH MATTERS ARE CONTAINED IN THIS WRITING, WHICH IS THE COMPLETE AND EXCLUSIVE STATEMENT OF THE AGREEMENT BETWEEN US, EXCEPT AS WE MAY LATER AGREE IN WRITING TO MODIFY IT.

JURY WAIVER. Lender and Borrower hereby waive the right to any jury trial in any action, proceeding, or counterclaim brought by either Lender or Borrower against the other.

PRIOR TO SIGING THIS NOTE, EACH BORROWER READ AND UNDERSTOOD ALL THE PROVISIONS OF THIS NOTE. EACH BRRROWER AGREES TO THE TERMS OF THE NOTE.

BORROWER ACKNOWLEDGES RECEIPT OF A COMPLTETED COPY OF THIS PROMISSORY NOTE.

**BRRROWER:**

LIQUIMDETAL COATINGS, LLC

By: /s/ Larry Buffington  
LARRY BUFFINGTON, PRESIDENT & CEO of  
LIQUIDMETAL COATINGS, LLC

LIQUIDMETAL COATINGS SOLUTIONS, LLC

LIQUIDMETAL COATINGS, LLC, Member of LIQUIDMETAL COATINGS SOLUTIONS, LLC

By: /s/ Larry Buffington  
LARRY BUFFINGTON, PRESIDENT & CEO of  
LIQUIDMETAL COATINGS, LLC

\*000000002000209914095510212008\*  
BUSINESS LOAN AGREEMENT

Principal	Loan Date	Maturity	Loan No.	Call / Coll	Account	Officer	Initials
\$ 104,800.04	10-21-2008	11-01-2013	2000209914	7100	379885	1106	

References in the boxes above are for Lender’s use only and do not limit the applicability of this document to any particular loan or item.  
Any item above containing “ ‘ ‘ ‘ ” has been omitted due to text length limitations,

Borrower: LIQUIDMETAL COATINGS, LLC  
LIQUIDMETAL COATINGS SOLUTIONS, LLC  
1525 LAKESVILLE DRIVE, SUITE 114  
KINGWOOD , TX 77339

Lender: Bank Midwest N.A.  
Town Pavilion Facility  
1111 Main Street  
Kansas City, MO 64105

THIS BUSINESS LOAN AGREEMENT dated October 21, 2008, is made and executed between LIQUIDMETAL COATINGS, LLC; and LIQUIDMETAL COATINGS SOLUTIONS, LLC (“Borrower”) and Bank Midwest N.A. (“Lender”) on the following terms and conditions. Borrower has received prior commercial loans from Lender or has applied to Lender for a commercial loan or loans or other financial accommodations, including those which may be described on any exhibit or schedule attached to this Agreement. Borrower understands and agrees that; (A) in granting, renewing, or extending any Loan. Lender is relying upon Borrower’s representations, warranties, and agreements as set forth in this Agreement; (B) the granting, renewing, or extending of any Loan by Lender at all times shall be subject to Lender’s sole judgment and discretion; and (C) all such Loans shall be and remain subject to the terms and conditions of this Agreement.

TERM. This Agreement shall be effective as of October 21, 2008, and shall continue in full force and effect until such time as all of Borrower’s Loans in favor of Lender have been paid in full, including principal, interest, costs, expenses, attorneys’ fees, and other fees and charges, or until November 1, 2013.

ADVANCE AUTHORITY. The following person or persons are authorized to request advances and authorize payments under the loan until Lender receives from Borrower, at Lender’s address shown above, written notice of revocation of such authority: LARRY BUFFINGTON, PRESIDENT & CEO of LIQUIDMETAL COATINGS, LLC; and LARRY BUFFINGTON, PRESIDENT & CEO of LIQUIDMETAL COATINGS, LLC, Member of LIQUIDMETAL COATINGS SOLUTIONS, LLC.

CONDITIONS PRECEDENT TO EACH ADVANCE. Lender’s obligation to make the initial Advance and each subsequent Advance under this Agreement shall be subject to the fulfillment to Lender’s satisfaction of all of the conditions set forth in this Agreement and in the Related Documents.

Loan Documents. Borrower shall provide to Lender the following documents for the Loan: (1) the Note; (2) Security Agreements granting to Lender security interests in the Collateral; (3) financing statements and all other documents perfecting Lender’s Security Interests; (4) evidence of insurance ns



required below; (5) together with all such Related Documents as Lender may require for the Loan; all in form and substance satisfactory to Lender and Lender's counsel.

**Borrower's Authorization.** Borrower shall have provided in form and substance satisfactory to Lender properly certified resolutions, duly authorizing the execution and delivery of this Agreement, the Note and the Relaxed Documents. In addition, Borrower shall have provided such other resolutions, authorizations, documents and instruments as Lender or its counsel, may require.

**Payment of Fees and Expenses.** Borrower shall have paid to Lender all fees, charges, and other expenses which are then due and payable as specified in this Agreement or any Related Document.

**Representations and Warranties.** The representations and warranties set forth in this Agreement, in the Related Documents, and in any document or certificate delivered to Lender under this Agreement are true and correct.

**No Event of Default.** There shall not exist at the time of any Advance a condition which would constitute an Event of Default under this Agreement or under any Related Document.

**MULTIPLE BORROWERS.** This Agreement has been executed by multiple obligors who are referred to in this Agreement individually, collectively and interchangeably as "Borrower." Unless specifically stated to the contrary, the word "Borrower" as used in this Agreement, including without limitation all representations, warranties and covenants, shall include all Borrowers. Borrower understands and agrees that, with or without notice to any one Borrower, Lender may (A) make one or more additional secured or unsecured loans or otherwise extend additional credit with respect to any other Borrower; (B) with respect to any other Borrower alter, compromise, renew, extend, accelerate, or otherwise change one or more times the time for payment or other terms of any indebtedness, including increases and decreases of the rate of interest on the indebtedness; (C) exchange, enforce, waive, subordinate, foil or decide not to perfect, and release any security, with or without the substitution of new collateral; (D) release, substitute, agree not to sue, or deal with any one or more of Borrower's or any other Borrower's sureties, endorsers, or other guarantors on any terms or in any manner Lender may choose; (E) determine how, when and what application of payments and credits shall be made on any indebtedness; (F) apply such security and direct the order or manner of sale of any Collateral, including without limitation, any non-judicial sale permitted by the terms of the controlling security agreement or deed of trust, as Lender in its discretion may determine; (G) sell, transfer, assign or grant participations in all or any part of the Loan; (H) exercise or refrain from exercising any rights against Borrower or others, or otherwise act or refrain from acting; (I) settle or compromise any indebtedness; and (J) subordinate the payment of all or any part of any of Borrower's indebtedness to Lender to the payment of any liabilities which may be due Lender or others.

**REPRESENTATIONS AND WARRANTIES.** Borrower represents and warrants to Lender, as of the date of this Agreement, as of the date of each disbursement of loan proceeds, as of the date of any renewal, extension or modification of any Loan, and at all times any Indebtedness exists:

**Organization.** LIQUIDMETAL COATINGS, LLC is a limited liability company which is, and at all times shall be, duly organized, validly existing, and in good standing under and by virtue of the laws of the State of Delaware. LIQUIDMETAL COATINGS, LLC is duly authorized to transact business in all other states in which LIQUIDMETAL COATINGS, LLC is doing business, having obtained all necessary filings, governmental licenses and approvals for each state in which LIQUIDMETAL COATINGS, LLC is doing business. Specifically, LIQUIDMETAL COATINGS, LLC is, and at all times shall be, duly qualified as a foreign limited liability company in all states in which the failure to so qualify would have a material adverse effect on its business or financial condition. LIQUIDMETAL COATINGS, LLC has the full power and authority to own its properties and to transact the business in which it is presently engaged or presently proposes to engage. LIQUIDMETAL COATINGS, LLC maintains an office at 1525 LAKESVILLE DRIVE, SUITE 114, KINGWOOD, TX 77339. Unless LIQUIDMETAL COATINGS, LLC has designated otherwise in writing, the principal office is the office at which LIQUIDMETAL COATINGS, LLC keeps its books and records including its records concerning the Collateral. LIQUIDMETAL COATINGS, LLC will notify Lender prior to

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any change in the location of LIQUIDMETAL COATINGS, LLC's state of organization or any change in LIQUIDMETAL COATINGS, LLC's name. LIQUIDMETAL COATINGS, LLC shall do all things necessary to preserve and to keep in full force and effect its existence, rights and privileges, and shall comply with all regulations, rules, ordinances, statutes, orders and decrees of any governmental or quasi-governmental authority or court applicable to LIQUIDMETAL COATINGS, LLC and LIQUIDMETAL COATINGS, LLC's business activities.

LIQUIDMETAL COATINGS SOLUTIONS, LLC is a limited liability company which is, and at all times shall be, duly organized, validly existing, and in good standing under and by virtue of the laws of the State of Delaware. LIQUIDMETAL COATINGS SOLUTIONS, LLC is duly authorized to transact business in all other states in which LIQUIDMETAL COATINGS SOLUTIONS, LLC is doing business, having obtained all necessary filings, governmental licenses and approvals for each state in which LIQUIDMETAL COATINGS SOLUTIONS, LLC is doing business. Specifically, LIQUIDMETAL COATINGS SOLUTIONS, LLC is, and at all times shall be, duly qualified as a foreign limited liability company in all states in which the failure to so qualify would have a material adverse effect on its business or financial condition. LIQUIDMETAL COATINGS SOLUTIONS, LLC has the full power and authority to own its properties and to transact the business in which it is presently engaged or presently proposes to engage. LIQUIDMETAL COATINGS SOLUTIONS, LLC maintains an office at 1525 LAKESVILLE DRIVE, SUITE 114, KINGWOOD, TX 77339. Unless LIQUIDMETAL COATINGS SOLUTIONS, LLC has designated otherwise in writing, the principal office is the office at which LIQUIDMETAL COATINGS SOLUTIONS, LLC keeps its books and records including its records concerning the Collateral. LIQUIDMETAL COATINGS SOLUTIONS, LLC will notify Lender prior to any change in the location of LIQUIDMETAL COATINGS SOLUTIONS, LLC's state of organization or any change in LIQUIDMETAL COATINGS SOLUTIONS, LLC's name. LIQUIDMETAL COATINGS SOLUTIONS, LLC shall do all things necessary to preserve and to keep in full force and effect its existence, rights and privileges, and shall comply with all regulations, rules, ordinances, statutes, orders and decrees of any governmental or quasigovernmental authority or court applicable to LIQUIDMETAL COATINGS SOLUTIONS, LLC and LIQUIDMETAL COATINGS SOLUTIONS, LLC's business activities.

**Assumed Business Names.** Borrower has filed or recorded all documents or filings required by law relating to all assumed business names used by Borrower. Excluding the name of Borrower, the following is a complete list of all assumed business names under which Borrower does business: None.

**Authorization.** Borrower's execution, delivery, and performance of this Agreement and all the Related Documents have been duly authorized by all necessary action by Borrower and do not conflict with, result in a violation of, or constitute a default under (1) any provision of (a) Borrower's articles of organization or membership agreements, or (b) any agreement or other instrument binding upon Borrower or (2) any law, governmental regulation, court decree, or order applicable to Borrower or to Borrower's properties.

Financial Information. Each of Borrower's financial statements supplied to Lender truly and completely disclosed Borrower's financial condition as of the date of the statement, and there has been no material adverse change in Borrower's financial condition subsequent to the date of the most recent financial statement supplied to Lender. Borrower has no material contingent obligations except as disclosed in such financial statements.

Legal Effect. This Agreement constitutes, and any instrument or agreement Borrower is required to give under this Agreement when delivered will constitute legal, valid, and binding obligations of Borrower enforceable against Borrower in accordance with their respective terms.

Properties. Except as contemplated by this Agreement or as previously disclosed in Borrowers financial statements or in writing to Lender and as accepted by Lender, and except for property tax liens for taxes not presently due and payable, Borrower owns and has good title to all of Borrower's properties free and clear of all Security Interests, and has not executed any security documents or financing statements relating to such properties. All of Borrower's properties are titled in Borrower's legal name, and Borrower has not used or filed a financing statement under any other name for at least the last live (5) years.

Hazardous Substances. Except as disclosed to and acknowledged by Lender in writing, Borrower represents and warrants that: (1) During the period of Borrower's ownership of the Collateral, there has been no use, generation, manufacture, storage, treatment, disposal, release or threatened release of any Hazardous Substance by any person on, under, about or from any of the Collateral. (2) Borrower has no knowledge of, or reason to believe that there has been (a) any breach or violation of any Environmental Laws; (b) any use, generation, manufacture, storage, treatment, disposal, release or threatened release of any Hazardous Substance on, under, about or from the Collateral by any prior owners or occupants of any of the Collateral; or (c) any actual or threatened litigation or claims of any kind by any person relating to such matters. (3) Neither Borrower nor any tenant, contractor, agent or other authorized user or any of the Collateral shall use, generate, manufacture, store, treat, dispose of or release any Hazardous Substance on, under, about or from any of the Collateral; and any such activity shall be conducted in compliance with all applicable federal, state, and local laws, regulations, and ordinances, including without limitation all Environmental Laws. Borrower authorizes Lender and its agents to enter upon the Collateral to make such inspections and tests as Lender may deem appropriate to determine compliance of the Collateral with this section of the Agreement. Any inspections or tests made by Lender shall be at Borrower's expense and for Lender's purposes only and shall not be construed to create any responsibility or liability on the part of Lender to Borrower or to any other person. The representations and warranties contained herein are based on Borrower's due diligence in investigating the Collateral for hazardous waste and Hazardous Substances, Borrower hereby (1) releases and waives any future claims against Lender for indemnity or contribution in the event Borrower becomes liable for cleanup or other costs under any such laws, and (2) agrees to indemnify, defend, and hold harmless Lender against any and all claims, losses, liabilities, damages, penalties, and expenses which Lender may directly or indirectly sustain or suffer resulting from a breach of this section of the Agreement or as a consequence of any use, generation, manufacture, storage, disposal, release or threatened release of a hazardous waste or substance on the Collateral. The provisions of this section of the Agreement, including the obligation to indemnify and defend, shall survive the payment of the indebtedness and the termination, expiration or satisfaction of this Agreement and shall not be affected by Lender's acquisition of any interest in any of the Collateral, whether by foreclosure or otherwise.

Litigation and Claims. No litigation, claim, investigation, administrative proceeding or similar action {including those for unpaid taxes) against Borrower is pending or threatened, and no other event has occurred which may materially adversely affect Borrower's financial condition or properties, other than litigation, claims, or other events, if any, that have been disclosed to and acknowledged by Lender in writing.

Taxes. To the best of Borrower's knowledge, all of Borrower's tax returns and reports that are or were required to be filed, have been filed, and all taxes, assessments and other governmental charges have been paid in full, except those presently being or to be contested by Borrower in good faith in the ordinary course of business and for which adequate reserves have been provided.

Lien Priority. Unless otherwise previously disclosed to Lender in writing, Borrower has not entered into or granted any Security Agreements, or permitted the filing or attachment of any Security interests on or affecting any of the Collateral directly or indirectly securing repayment of Borrower's Loan and Note, that would be prior or that may in any way be superior to Lender's Security Interests and rights in and to such Collateral.

Binding Effect. This Agreement, the Note, all Security Agreements (if any), and all Related Documents are binding upon the signers

thereof, as well as upon their successors, representatives and assigns, and are legally enforceable in accordance with their respective terms.

**AFFIRMATIVE COVENANTS.** Borrower covenants and agrees with Lender that, so long as this Agreement remains in effect, Borrower will:

**Notices of Claims and Litigation.** Promptly inform Lender in writing of (1) all material adverse changes in Borrower's financial condition, and (2) all existing and all threatened litigation, claims, investigations, administrative proceedings or similar actions affecting Borrower or any Guarantor which could materially affect the financial condition of Borrower or the financial condition of any Guarantor.

**Financial Records.** Maintain its books and records in accordance with GAAP, applied on a consistent basis, and permit Lender to examine and audit Borrower's books and records at all reasonable times.

**Financial Statements.** Furnish Lender with the following:

**Annual Statements.** As soon as available after the end of each fiscal year, Borrower's balance sheet and income statement for the year ended, prepared by Borrower In form satisfactory to Lender.

**Tax Returns.** As soon as available after the applicable filing date for the tax reporting period ended, Federal and other governmental tax returns, prepared by a tax professional satisfactory to Lender.

All financial reports required to be provided under this Agreement shall be prepared in accordance with GAAP, applied on a consistent basis, and certified by Borrower as being true and correct.

**Additional information.** Furnish such additional information and statements, as Lender may request from time to time.

**insurance.** Maintain fire and other risk insurance, public liability insurance, and such other insurance as Lender may require with respect to Borrower's properties and operations, in form, amounts, coverages and with insurance companies acceptable to Lender. Borrower, upon request of Lender, will deliver to Lender from time to time the policies or certificates of insurance in form satisfactory to Lender, including stipulations that coverages will not be

cancelled or diminished without at least ten (10) days prior written notice to Lender. Each insurance policy also shall include an endorsement providing that coverage in favor of Lender will not be impaired in any way by any act, omission or default of Borrower or any other person. In connection with all policies covering assets in which Lender holds or is offered a security interest for the Loans, Borrower will provide Lender with such lender's loss payable or other endorsements as Lender may require.

**Insurance Reports.** Furnish to Lender, upon request of Lender, reports on each existing insurance policy showing such information as Lender may reasonably request, including without limitation the following: (1) the name of the insurer; (2) the risks insured; (3) the amount of the policy; (4) the properties insured; (5) the then current property values on the basis of which insurance has been obtained, and the manner of determining those values; and (6) the expiration date of the policy. In addition, upon request of Lender (however not more often than annually), Borrower will have an Independent appraiser satisfactory to Lender determine, as applicable, the actual cash value or replacement cost of any Collateral. The cost of such appraisal shall be paid by Borrower.

**Other Agreements.** Comply with all terms and conditions of all other agreements, whether now or hereafter existing, between Borrower and any other party and notify Lender immediately in writing of any default in connection with any other such agreements.

**Loan Proceeds.** Use all Loan proceeds solely for Borrower's business operations, unless specifically consented to the contrary by Lender in writing.

**Taxes, Charges and Liens.** Pay and discharge when due all of its indebtedness and obligations, including without limitation all assessments, taxes, governmental charges, levies and liens, of every kind and nature, imposed upon Borrower or its properties, income, or profits, prior to the date on which penalties would attach, and all lawful claims that, if unpaid, might become a lien or charge upon any of Borrower's properties, income, or profits. Provided however, Borrower will not be required to pay and discharge any such assessment, tax, charge, levy, lien or claim so long as (1) the legality of the same shall be contested in good faith by appropriate proceedings, and (2) Borrower shall have established on Borrower's books adequate reserves with respect to such contested assessment, tax, charge, levy, lien, or claim in accordance with GAAP.

**Performance.** Perform and comply, in a timely manner, with all terms, conditions, and provisions set forth in this Agreement, in the Related Documents, and in all other instruments and agreements between Borrower and Lender. Borrower shall notify Lender immediately in writing of any default in connection with any agreement.

**Operations.** Maintain executive and management personnel with substantially the same qualifications and experience as the present executive and management personnel; provide written notice to Lender of any change in executive and management personnel; conduct its business affairs in a reasonable and prudent manner.

**Environmental Studies.** Promptly conduct and complete, at Borrower's expense, all such investigations, studies, samplings and tastings as may be requested by Lender or any governmental authority relative to any substance, or any waste or by-product of any substance defined as toxic or a hazardous substance under applicable federal, state, or local law, rule, regulation, order or directive, at or affecting any property or any facility owned, leased or used by Borrower.

**Compliance with Governmental Requirements.** Comply with all laws, ordinances, and regulations, now or hereafter in effect, of all governmental authorities applicable to the conduct of Borrower's properties, businesses and operations, and to the use or occupancy of the Collateral, including without limitation, the Americans With Disabilities Act. Borrower may contest in good faith any such law, ordinance, or regulation and withhold compliance during any proceeding, including appropriate appeals, so long as Borrower has notified Lender in writing prior to doing so and so long as, in Lender's sole opinion, Lender's interests in the Collateral are not jeopardized. Lender may require Borrower to post adequate security or a surety bond, reasonably satisfactory to Lender, to protect Lender's interest.

**Inspection.** Permit employees or agents of Lender at any reasonable time to inspect any and all Collateral for the Loan or Loans and Borrower's other properties and to examine or audit Borrower's books, accounts, and records and to make copies and memoranda of Borrower's books, accounts, and records. If Borrower now or at any time hereafter maintains any records (including without limitation computer generated records and computer software programs for the generation of such records) in the possession of a third party, Borrower, upon request of Lender, shall notify such party to permit Lender free access to such records at all reasonable times and to provide Lender with copies of any records it may request, all at Borrower's expense.

**Compliance Certificates.** Unless waived in writing by Lender, provide Lender at least annually, with a certificate executed by Borrower's chief financial officer, or other officer or person acceptable to Lender, certifying that the representations and warranties set forth to this Agreement are true and correct as of the date of the certificate and further certifying that, as of the date of the certificate, no Event of Default exists under this Agreement.

**Environmental Compliance and Reports.** Borrower shall comply in all respects with any and all Environmental Laws; not cause or permit to exist, as a result of an intentional or unintentional action or omission on Borrower's part

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owned and/or occupied by Borrower, any environmental activity where damage may result to the environment, unless such environmental activity is pursuant to and in compliance with the conditions of a permit issued by the appropriate federal, state or local governmental authorities; shall furnish to Lender promptly and in any event within thirty (30) days after receipt thereof a copy of any notice, summons, lien, citation, directive, letter or other communication from any governmental agency or instrumentality concerning any intentional or unintentional action or omission on Borrower's part in connection with any environmental activity whether or not there is damage to the environment and/or other natural resources.

**Additional Assurances.** Make, execute and deliver to Lender such promissory notes, mortgages, deeds of trust, security agreements, assignments, financing statements, instruments, documents and other agreements as Lender or its attorneys may reasonably request to evidence and secure the Loans and to perfect all Security Interests.

**LENDEFVS EXPENDITURES.** If any action or proceeding is commenced that would materially affect Lender's interest in the Collateral or if Borrower fails to comply with any provision of this Agreement or any Related Documents, including but not limited to Borrower's failure to discharge or pay when due any amounts Borrower is required to discharge or pay under this Agreement or any Related Documents, Lender on Borrower's behalf may (but shall not be obligated to) take any action that Lender deems appropriate, including but not limited to discharging or paying all taxes, liens, security interests, encumbrances and other claims, at any time levied or placed on any Collateral and paying all costs for insuring, maintaining and preserving any Collateral.

All such expenditures incurred or paid by Lender for such purposes will then bear interest at the rate charged under the Note from the date incurred or paid by Lender to the date of repayment by Borrower. All such expenses will become a part of the Indebtedness and, at Lender's option, will (A) be payable on demand; (B) be added to the balance of the Note and be apportioned among and be payable with any installment payments to become due during either (1) the term of any applicable insurance policy; or (2) the remaining term of the Note; or (C) be treated as a balloon payment which will be due and payable at the Note's maturity.

**NEGATIVE COVENANTS.** Borrower covenants and agrees with Lender that while this Agreement is in effect, Borrower shall not, without the prior written consent of Lender:

**Indebtedness and Liens.** (1) Except for trade debt incurred in the normal course of business and indebtedness to Lender contemplated by this Agreement, create, incur or assume indebtedness for borrowed money, including capital leases, (2) sell, transfer, mortgage, assign, pledge, lease, grant a security interest in, or encumber any of Borrower's assets (except as allowed as Permitted Liens), or (3) sell with recourse any of Borrower's accounts, except to Lender.

**Continuity of Operations.** (1) Engage in any business activities substantially different than those in which Borrower is presently engaged, (2) cease operations, liquidate, merge, transfer, acquire or consolidate with any other entity, change its name, dissolve or transfer or sell Collateral out of the ordinary course of business, or (3) make any distribution with respect to any capital account, whether by reduction of capital or otherwise.

**Loans, Acquisitions and Guaranties.** (1) Loan, invest in or advance money or assets to any other person, enterprise or entity, (2) purchase, create or acquire any interest in any other enterprise or entity, or (3) incur any obligation as surety or guarantor other than in the ordinary course of business.

**Agreements.** Borrower will not enter into any agreement containing any provisions which would be violated or breached by the performance of Borrower's obligations under this Agreement or in connection herewith.

**CESSATION OF ADVANCES.** If Lender has made any commitment to make any Loan to Borrower, whether under this Agreement or under any other agreement, Lender shall have no obligation to make Loan Advances or to disburse Loan proceeds if: (A) Borrower or any Guarantor is in default under the terms of this Agreement or any of the Related Documents or any other agreement that Borrower or any Guarantor has with Lender; (B) Borrower or any Guarantor dies, becomes incompetent or becomes insolvent, files a petition in bankruptcy or similar proceedings, or is adjudged a bankrupt; (C) there occurs a material adverse change in Borrower's financial condition, in the financial condition of any Guarantor, or in the value of any Collateral securing any Loan; or (D) any Guarantor seeks, claims or otherwise attempts to limit, modify or revoke such Guarantor's guaranty of the Loan or any other loan with Lender.

**RIGHT OF SETOFF.** To the extent permitted by applicable law, Lender reserves a right of setoff in all Borrower's accounts with Lender (whether checking, savings, or some other account). This includes all accounts Borrower holds jointly with someone else and all accounts Borrower may open in the future. However, this does not include any IRA or Keogh accounts, or any trust accounts for which setoff would be prohibited by law. Borrower authorizes Lender, to the extent permitted by applicable law, to charge or setoff all sums owing on the indebtedness against any and all such accounts.

**DEFAULT.** Each of the following shall constitute an Event of Default under this Agreement:

**Payment Default.** Borrower fails to make any payment when due under the Loan.

**Other Defaults.** Borrower fails to comply with or to perform any other term, obligation, covenant or condition contained in this Agreement or in any of the Related Documents or to comply with or to perform any term, obligation, covenant or condition contained in any other agreement between Lender and Borrower.

**Default in Favor of Third Parties.** Borrower or any Grantor defaults under any loan, extension of credit, security agreement, purchase or sales agreement, or any other agreement, in favor of any other creditor or person that may materially affect any of Borrower's or any Grantor's property or Borrower's or any Grantor's ability to repay the Loans or perform their respective obligations under this Agreement or any of the Related Documents.

**False Statements.** Any warranty, representation or statement made or furnished to Lender by Borrower or on Borrower's behalf under this Agreement or the Related Documents is false or misleading in any material respect, either now or at the time made or furnished or becomes false or misleading at any time thereafter.

**Death or Insolvency.** The dissolution of Borrower (regardless of whether election to continue is made), any member withdraws from Borrower, or any other termination of Borrower's existence as a going business or the death of any member, the insolvency of Borrower, the appointment of a receiver for any part of Borrower's property, any assignment for the benefit of creditors, any type of creditor workout, or the commencement of any proceeding under any bankruptcy or insolvency laws by or against Borrower.

**Defective Collateralization.** This Agreement or any of the Related Documents ceases to be in full force and effect (including failure of any collateral document to create a valid and perfected security interest or lien) at any time and for any reason.

**Creditor or Forfeiture Proceedings.** Commencement of foreclosure or forfeiture proceedings, whether by judicial proceeding, self-help, repossession or any other method, by any creditor of Borrower or by any governmental agency against any collateral securing the Loan, This includes a garnishment of any of Borrower's accounts, including deposit accounts, with Lender. However, this Event of Default shall not apply if there is a good faith dispute by Borrower as to the validity or reasonableness of the claim which is the basis of the creditor or forfeiture proceeding and if Borrower gives Lender written notice of the creditor or forfeiture proceeding and deposits with Lender monies or a surety bond for the creditor or forfeiture proceeding, in an amount determined by Lender, in its sole discretion, as being an adequate

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reserve or bond for the dispute.

**Events Affecting Guarantor.** Any of the preceding events occurs with respect to any Guarantor of any of the indebtedness or any Guarantor dies or becomes incompetent, or revokes or disputes the validity of, or liability under, any Guaranty of the Indebtedness.

**Adverse Change.** A material adverse change occurs in Borrower's financial condition, or Lender believes the prospect of payment or performance of the Loan is impaired.

**Right to Cure.** If any default, other than a default on Indebtedness, is curable and if Borrower or Grantor, as the case may be, has not been given a notice of a similar default within the preceding twelve (12) months, it may be cured if Borrower or Grantor, as the case may be, after receiving written notice from Lender demanding cure of such default: (1) cure the default within ten (10) days; or (2) if the cure requires more than ten (10) days, immediately initiate steps which Lender deems in Lender's sole discretion to be sufficient to cure the default and thereafter continue and complete all reasonable and necessary steps sufficient to produce compliance as soon as reasonably practical.

**EFFECT OF AN EVENT OF DEFAULT.** If any Event of Default shall occur, except where otherwise provided in this Agreement or the Related Documents, all commitments and obligations of Lender under this Agreement or the Related Documents or any other agreement immediately will terminate (including any obligation to make further Loan Advances or disbursements), and, at Lender's option, all Indebtedness immediately will become due and payable, all without notice of any kind to Borrower, except that in the case of an Event of Default of the type described in the "Insolvency" subsection above, such acceleration shall be automatic and not optional. In addition, Lender shall have all the rights and remedies provided in the Related Documents or available at law, in equity, or otherwise. Except as may be prohibited by applicable law, all of Lender's rights and remedies shall be cumulative and may be exercised singularly or concurrently. Election by Lender to pursue any remedy shall not exclude pursuit of any other remedy, and an election to make expenditures or to take action to perform an obligation of Borrower or of any Grantor shall not affect Lender's right to declare a default and to exercise its rights and remedies.

**FINANCIAL COVENANTS. Minimum Senior Debt Service Coverage Ratio.** Borrower shall have, on a consolidated basis at the end of each fiscal quarter of Borrower, a Senior Debt Service Coverage Ratio of NOK less than 1.60:1.00.

**Minimum Fixed Charge Coverage Ratio.** Borrower shall have, on a consolidated basis at the end of each fiscal quarter of Borrower, a Fixed Charge Coverage Ratio of not less than 1.10:1.00.

**Maximum Senior Funded Debt to EBITDA.** Borrower shall have, on a consolidated basis at the end of each fiscal quarter of Borrower set forth below, at ratio of (i) Senior Funded Debt measured as of the last day of such fiscal quarter of Borrower to (ii) EBITDA for such fiscal quarter of not more than the following:

1.50:1.00 for the fiscal quarters ending September 30, 2008, December 31, 2008, March 31, 2009, and June 30, 2009; and

1.25:1.00 for each fiscal quarter ending thereafter,

**Minimum Tangible Net Worth.** Borrower shall have, on a consolidated basis at the end of each fiscal quarter of Borrower set forth below, a Tangible Net Worth of not less than the following:

\$7,500,000.00 for the fiscal quarters ending December 31, 2008

March 31, 2009, and June 30, 2009;

\$8,500,000.00 for the fiscal quarters ending September 30, 2009, December 31, 2009,

March 31, 2010, and June 30, 2010;

\$9,000,000.00 for the fiscal quarters ending September 30, 2010, December 31, 2010,

March 31, 2011, and June 30, 2011;

\$9,500,000.00 for each fiscal quarter ending thereafter.

**Excess Cash Flow Payments to Lender,**

Within ninety (90) days after the end of Borrower's fiscal year ending December 31, 2008 and each fiscal year thereafter, Borrower shall pay Lender the lesser of (i) Excess Cash Flow, provided Excess Cash Flow for purposes of this Section shall not be less than zero, or (ii) \$256,000.00.

**MISCELLANEOUS PROVISIONS.** The following miscellaneous provisions are a part of this Agreement:

**Amendments.** This Agreement, together with any Related Documents, constitutes the entire understanding and agreement of the parties as to the matters set forth in this Agreement. No alteration of or amendment to this Agreement shall be effective unless given in writing and signed by the party or parties sought to be charged or bound by the alteration or amendment.

**Attorneys' Fees; Expenses.** Borrower agrees to pay upon demand all of Lender's costs and expenses, including Lender's attorneys' fees and Lender's legal expenses, incurred in connection with the enforcement of this Agreement. Lender may hire or pay someone else to help enforce this Agreement, and Borrower shall pay the costs and expenses of such enforcement. Costs and expenses include Lender's attorneys fees and legal expenses whether or not there is a lawsuit, including attorneys' fees and legal expenses for bankruptcy proceedings (including efforts to modify or vacate any automatic stay or injunction), and appeals. Borrower also shall pay all court costs and such additional fees as may be directed by the court.

**Caption Headings.** Caption headings in this Agreement are for convenience purposes only and are not to be used to interpret or define the provisions of this Agreement.

**Consent to Loan Participation.** Borrower agrees and consents to Lender's sale or transfer, whether now or later, of one or more participation interests in the Loan to one or more purchasers, whether related or unrelated to Lender. Lender may provide, without any limitation whatsoever, to any one or more purchasers, or potential purchasers, any information or knowledge Lender may have about Borrower or about any other matter relating to the Loan, and Borrower hereby waives any rights to privacy Borrower may have with respect to such matters. Borrower additionally waives any and all notices of sale of participation interests, as well as all notices of any repurchase of such participation interests. Borrower also agrees that the purchasers of any such participation interests will be considered as the absolute owners of such interests in the Loan and will have all the rights granted under the participation agreement or agreements governing the sale of such participation interests. Borrower further waives all rights of offset or counterclaim that it may have now or later against Lender or against any purchaser of such a participation interest and unconditionally agrees that either Lender or such purchaser may enforce Borrower's obligation under the Loan irrespective of the failure or insolvency of any holder of any interest in the Loan. Borrower



further agrees that the purchaser of any such participation interests may enforce its interests irrespective of any personal claims or defenses that Borrower may have against Lender,

**Governing Law.** This Agreement will be governed by federal law applicable to Lender and, to the extent not preempted by federal law, the laws of the State of Missouri without regard to its conflicts of law provisions. This Agreement has been accepted by Lender in the State of Missouri.  
**Choice of Venue.** If there is a lawsuit, Borrower agrees upon Lender's request to submit to the jurisdiction of the courts of Jackson County, State of Missouri.

**Joint and Several Liability.** All obligations of Borrower under this Agreement shall be joint and several, and all references to Borrower shall mean each and every Borrower. This means that each Borrower signing below is responsible for all obligations in this Agreement. Where any one or more of the parties is a corporation, partnership, limited liability company or similar entity, it is not necessary for Lender to inquire into the powers of any of the officers, directors, partners, members, or other agents acting or purporting to act on the entity's behalf, and any obligations made or created in reliance upon the professed exercise of such powers shall be guaranteed under this Agreement.

**No Waiver by Lender.** Lender shall not be deemed to have waived any rights under this Agreement unless such waiver is given in writing and signed by Lender. No delay or omission on the part of Lender in exercising any right shall operate as a waiver of such right or any other right. A waiver by Lender of a provision of this Agreement shall not prejudice or constitute a waiver of Lender's right otherwise to demand strict compliance with that provision or any other provision of this Agreement. No prior waiver by Lender, nor any course of dealing between Lender and Borrower, or between Lender and any Grantor, shall constitute a waiver of any of Lender's rights or of any of Borrower's or any Grantor's obligations as to any future transactions. Whenever the consent of Lender is required under this Agreement, the granting of such consent by Lender in any instance shall not constitute continuing consent to subsequent instances where such consent is required and in all cases such consent may be granted or withheld in the sole discretion of Lender.

**Notices.** Any notice required to be given under this Agreement shall be given in writing, and shall be effective when actually delivered, when actually received by telefacsimile (unless otherwise required by law), when deposited with a nationally recognized overnight courier, or, if mailed, when deposited in the United States mail, as first class, certified or registered mail postage prepaid, directed to the addresses shown near the beginning of this Agreement. Any party may change its address for notices under this Agreement by giving formal written notice to the other parties, specifying that the purpose of the notice is to change the party's address. For notice purposes, Borrower agrees to keep Lender informed at all times of Borrower's current address. Unless otherwise provided or required by law, if there is more than one Borrower, any notice given by Lender to any Borrower is deemed to be notice given to all Borrowers.  
**Severability.** If a court of competent jurisdiction finds any provision of this Agreement to be illegal, invalid, or unenforceable as to any person or circumstance, that finding shall not make the offending provision illegal, invalid, or unenforceable as to any other person or circumstance. If feasible, the offending provision shall be considered modified so that it becomes legal, valid and enforceable. If the offending provision cannot be so modified, it shall be considered deleted from this Agreement. Unless otherwise required by law, the illegality, invalidity, or unenforceability of any provision of this Agreement shall not affect the legality, validity or enforceability of any other provision of this Agreement.

**Subsidiaries and Affiliates of Borrower.** To the extent the context of any provisions of this Agreement makes it appropriate, including without limitation any representation, warranty or covenant, the word "Borrower" as used in this Agreement shall include all of Borrower's subsidiaries and affiliates. Notwithstanding the foregoing however, under no circumstances shall this Agreement be construed to require Lender to make any Loan or other financial accommodation to any of Borrower's subsidiaries or affiliates.

**Successors and Assigns.** All covenants and agreements by or on behalf of Borrower contained in this Agreement or any Related Documents shall bind Borrower's successors and assigns and shall inure to the benefit of Lender and its successors and assigns. Borrower shall not, however, have the right to assign Borrower's rights under this Agreement or any interest therein, without the prior written consent of Lender.

**Survival of Representations and Warranties.** Borrower understands and agrees that in making the Loan, Lender is relying on all representations, warranties, and covenants made by Borrower in this Agreement or in any certificate or other instrument delivered by Borrower to Lender under this Agreement or the Related Documents. Borrower further agrees that regardless of any investigation made by Lender, all such representations, warranties and covenants will survive the making of the Loan and delivery to Lender of the Related Documents, shall be continuing in nature, and shall remain in full force and effect until such time as Borrower's Indebtedness shall be paid in full, or until this Agreement shall be terminated in the manner provided above, whichever is the last to occur.

**Time is of the Essence.** Time is of the essence in the performance of this Agreement.

**DEFINITIONS.** The following capitalized words and terms shall have the following meanings when used in this Agreement. Unless specifically stated to the contrary, all references to dollar amounts shall mean amounts in lawful money of the United States of America. Words and terms used in the singular shall include the plural, and the plural shall include the singular, as the context may require. Words and terms not otherwise defined in this Agreement shall have the meanings attributed to such terms in the Uniform Commercial Code. Accounting words and terms not otherwise defined in this Agreement shall have the meanings assigned to them in accordance with generally accepted accounting principles as in effect on the date of this Agreement:

**Advance.** The word "Advance" means a disbursement of Loan funds made, or to be made, to Borrower or on Borrower's behalf on a line of credit or multiple advance basis under the terms and conditions of this Agreement.

**Agreement.** The word "Agreement" means this Business Loan Agreement, as this Business Loan Agreement may be amended or modified from time to time, together with all exhibits and schedules attached to this Business Loan Agreement from time to time.

**Borrower.** The word "Borrower" means LIQUIDMETAL COATINGS, LLC; and LIQUIDMETAL COATINGS SOLUTIONS, LLC and includes all co-signers and co-makers signing the Note and all their successors and assigns.

**Collateral.** The word "Collateral" means all property and assets granted as collateral security for a Loan, whether real or personal property, whether granted directly or indirectly, whether granted now or in the future, and whether granted in the form of a security interest, mortgage, collateral mortgage, deed of trust, assignment, pledge, crop pledge, chattel mortgage, collateral chattel mortgage, chattel trust, factor's lien, equipment trust, conditional sale, trust receipt, lien, charge, lien or title retention contract, lease or consignment intended as a security device, or any other security or lien interest whatsoever, whether created by law, contract, or otherwise.

Environmental Laws. The words "Environmental Laws" mean any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment, including without limitation the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. Section 9601, et seq. ("CERCLA"), the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499 ("SARA"), the Hazardous Materials Transportation Act, 49 U.S.C. Section 1801, et seq.,

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the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901, et seq., or other applicable state or federal laws, rules, or regulations adopted pursuant thereto.

Event of Default. The words "Event of Default" mean any of the events of default set forth in this Agreement in the default section of this Agreement.

GAAP. The word "GAAP" means generally accepted accounting principles.

Grantor. The word "Grantor" means each and all of the persons or entities granting a Security Interest in any Collateral for the Loan, including without limitation all Borrowers granting such a Security Interest,

Guarantor. The word "Guarantor" means any guarantor, surety, or accommodation party of any or all of the Loan.

Guaranty. The word "Guaranty" means the guaranty from Guarantor to Lender, including without limitation a guaranty of all or part of the Note.

Hazardous Substances. The words "Hazardous Substances" mean materials that, because of their quantity, concentration or physical, chemical or infectious characteristics, may cause or pose a present or potential hazard to human health or the environment when improperly used, treated, stored, disposed of, generated, manufactured, transported or otherwise handled. The words "Hazardous Substances" are used in their very broadest sense and include without limitation any and all hazardous or toxic substances, materials or waste as defined by or listed under the Environmental Laws. The term "Hazardous Substances" also includes, without limitation, petroleum and petroleum byproducts or any fraction thereof and asbestos.

Indebtedness. The word "Indebtedness" means the indebtedness evidenced by the Note or Related Documents, including all principal and interest together with all other indebtedness and costs and expenses for which Borrower is responsible under this Agreement or under any of the Related Documents.

Lender. The word "Lender" means Bank Midwest N.A., its successors and assigns.

Loan. The word "Loan" means any and all loans and financial accommodations from Lender to Borrower whether now or hereafter existing, and however evidenced, including without limitation those loans and financial accommodations described herein or described on any exhibit or schedule attached to this Agreement from time to time.

Note. The word "Note" means the Note executed by LIQUIDMETAL COATINGS, LLC; and LIQUIDMETAL COATINGS SOLUTIONS, LLC in the principal amount of \$104,800.04 dated October 2<sup>nd</sup>, 2008, together with all renewals of, extensions of, modifications of, refinancings of, consolidations of, and substitutions for the note or credit agreement.

Permitted Liens. The words "Permitted Liens" mean (1) liens and security interests securing Indebtedness owed by Borrower to Lender; (2) liens for taxes, assessments, or similar charges either not yet due or being contested in good faith; (3) liens of materialmen, mechanics, warehousemen, or carriers, or other like liens arising in the ordinary course of business and securing obligations which are not yet delinquent; (4) purchase money liens or purchase money security interests upon or in any property acquired or held by Borrower in the ordinary course of business to secure indebtedness outstanding on the date of this Agreement or permitted to be incurred under the paragraph of this Agreement titled "indebtedness and Liens"; (5) liens and security interests which, as of the date of this Agreement, have been disclosed to and approved by the Lender in writing; and (6) those liens and security interests which in the aggregate constitute an immaterial and insignificant monetary amount with respect to the net value of Borrower's assets.

Related Documents. The words "Related Documents" mean all promissory notes, credit agreements, loan agreements, environmental agreements, guaranties, security agreements, mortgages, deeds of trust, security deeds, collateral mortgages, and all other instruments, agreements and documents, whether now or hereafter existing, executed in connection with the Loan.

Security Agreement. The words "Security Agreement" mean and include without limitation any agreements, promises, covenants, arrangements, understandings or other agreements, whether created by law, contract, or otherwise, evidencing, governing, representing, or creating a Security Interest.

Security Interest. The words "Security Interest" mean, without limitation, any and all types of collateral security, present and future, whether in the form of a lien, charge, encumbrance, mortgage, deed of trust, security deed, assignment, pledge, crop pledge, chattel mortgage, collateral chattel mortgage, chattel trust, factor's lien, equipment trust, conditional sale, trust receipt, lien or title retention contract, lease or consignment intended as a security device, or any other security or lien interest whatsoever whether created by law, contract, or otherwise,

ORAL AGREEMENTS OR COMMITMENTS TO LOAN MONEY, EXTEND CREDIT OR TO FOREBEAR FROM ENFORCING REPAYMENT OF A DEBT INCLUDING PROMISES TO EXTEND OR RENEW SUCH DEBT ARE NOT ENFORCEABLE, REGARDLESS OF THE LEGAL THEORY UPON WHICH IT IS BASED THAT IS IN ANY WAY RELATED TO THE CREDIT AGREEMENT, TO PROTECT YOU (BORROWER(S)) AND US (CREDITOR) FROM MISUNDERSTANDING OR DISAPPOINTMENT. ANY AGREEMENTS WE REACH COVERING SUCH MATTERS ARE CONTAINED IN THIS WRITING, WHICH IS THE COMPLETE AND EXCLUSIVE STATEMENT OF THE AGREEMENT BETWEEN US. EXCEPT AS WE MAY LATER AGREE IN WRITING TO MODIFY IT.

WAIVE JURY. All parties to this Agreement hereby waive the right to any jury trial in any action, proceeding, or counterclaim brought by any party against any other party.

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**BORROWER:**

LIQUIDMETAL COATINGS, LLC

By: /s/ Larry Buffington  
LARRY BUFFINGTON, PRESIDENT & CEO of  
LIQUIDMETAL COATINGS, LLC

LIQUIDMETAL COATINGS SOLUTIONS, LLC

LIQUIDMETAL COATINGS, LLC, Member of LIQUIDMETAL COATINGS SOLUTIONS, LLC

By: /s/ Larry Buffington  
LARRY BUFFINGTON, PRESIDENT & CEO of  
LIQUIDMETAL COATINGS, LLC

**LENDER:**

BANK MIDWEST N.A.

By: \_\_\_\_\_  
Authorized Signer

\*000000002000209914095510212008\*  
COMMERCIAL SECURITY AGREEMENT

Principal	Loan Date	Maturity	Loan No.	Call / Coll	Account	Officer	Initials
\$ 104,800.04	10-21-2008	11-01-2013	2000209914	7100	379885	1106	

References in the boxes above are for Lender's use only and do not limit the applicability of this document to any particular loan or item. Any item above containing " " " " has been omitted due to text length limitations,

Grantor:	LIQUIDMETAL COATINGS, LLC LIQUIDMETAL COATINGS SOLUTIONS, LLC 1525 LAKESVILLE DRIVE, SUITE 114 KINGWOOD , TX 77339	Lender:	Bank Midwest N.A. Town Pavilion Facility 1111 Main Street Kansas City, MO 64105
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THIS COMMERCIAL SECURITY AGREEMENT dated October 21, 2008, is made and executed between LIQUIDMETAL COATINGS, LLC; and LIQUIDMETAL COATINGS SOLUTIONS, LLC ("Grantor") and Bank Midwest N.A. ("Lender").

GRANT OF SECURITY INTEREST. For valuable consideration, Grantor grants to Lender a security interest in the Collateral to secure the Indebtedness and agrees that Lender shall have the rights stated in this Agreement with respect to the Collateral. in addition to all other rights which Lender may have by law.

COLLATERAL DESCRIPTION. The word "Collateral" as used in this Agreement means the following described property whether now owned or hereafter acquired, whether now existing or hereafter arising, and wherever located, in which Grantor is giving to Lender a security interest for the payment of the Indebtedness and performance of all other obligations under the Note and this Agreement:

SEE EXHIBIT "A" Together with all additions. replacements, substitutions. attachments, accessions, accessories, fittings, increases. tools, parts, repairs. supplies and commingled goods relating to the foregoing property; all whether now existing or hereafter arising, whether now owned or hereafter acquired and whether now hereafter subject to any rights in the foregoing property; and all products and proceeds (including but not limited to all insurance payments) of or relating to the foregoing property

In addition, the word "Collateral" also includes all the following, whether now owned or hereafter acquired, whether now existing or hereafter arising and wherever located:

- (A) All accessions, attachments, accessories, replacements of and additions to any of the collateral described herein, whether added new or later.
- (B) All products und produce of any of the property described in this Collateral section.
- (C) All accounts, general intangibles, instruments, rents, monies, payments, and all other rights. arising out of a sale, lease, consignment or other disposition of any of the property described in this Collateral section.
- (D) All proceeds (including insurance proceeds) from the sale, destruction, loss, or other disposition of any of the property described in this Collateral section, and sums due from a third party who has damaged or destroyed the Collateral or from that party's insurer, whether due to judgment, settlement or other process,
- (E) All records and data relating to any of the property described in this Collateral section, whether in the form of a writing. photograph, microfilm, microfiche, or electronic media, together with all of Grantor's right, title, and interest in and to all computer software required to utilize, create, maintain, and process any such records or data on electronic media.

CROSS-COLLATERALIZATION. In addition to the Note, this Agreement secures all obligations, debts and liabilities, plus interest thereon, of Grantor to Lender, or any one or more of them, as well as all claims by Lender against Grantor or any one or more of them, whether new existing or hereafter arising, whether related or unrelated to the purpose of the Note, whether voluntary or otherwise, whether due or not due, direct or indirect, determined or

undetermined, absolute or contingent, liquidated or unliquidated, whether Grantor may be liable individually or jointly with others, whether obligated as guarantor, surety, accommodation party or otherwise, and whether recovery upon such amounts may be or hereafter may become barred by any statute of limitations, and whether the obligation to repay such amounts may be or hereafter may become otherwise unenforceable.

**RIGHT OF SETOFF.** To the extent permitted by applicable law, Lender reserves a right of setoff in all Grantor's accounts with Lender (whether checking, savings, or some other account). This includes all accounts Grantor holds jointly with someone else and all accounts Grantor may open in the future. However, this does not include any IRA or Keogh accounts, or any trust accounts for which setoff would be prohibited by law. Grantor authorizes Lender, to the extent permitted by applicable law, to charge or setoff all sums owing on the Indebtedness against any and all such accounts

**GRANTOR'S REPRESENTATIONS AND WARRANTIES WITH RESPECT TO THE COLLATERAL.** With respect to the Collateral, Grantor represents and promises to Lender that:

**Perfection of Security Interest.** Grantor agrees to take whatever actions are requested by Lender to perfect and continue Lender's security interest in the Collateral. Upon request of Lender, Grantor will deliver to Lender any and all of the documents evidencing or constituting the Collateral, and Grantor will note Lender's interest upon any and all chattel paper and instruments if not delivered to Lender for possession by Lender. This is a continuing Security Agreement and will continue in effect even though all or any part of the Indebtedness is paid in full and even though for a period of time Grantor may not be indebted to Lender.

**Notices to Lender.** Grantor will promptly notify Lender in writing at Lender's address shown above for such other addresses as Lender may designate from time to time) prior to any (1) change in Grantor's name; (2) change in Grantor's assumed business name(s); (3) change in the management or in the members or managers of the limited liability company Grantor; (4) change in the authorized signer(s); (5) change in Grantor's principal office address; (6) change in Grantor's state of organization; (7) conversion of Grantor to a new or different type of business entity; or (8) change many other aspect of Grantor that directly or indirectly relates to any agreements between Grantor and Lender. No change in Grantor's name or state of organization will take effect until after Lender has received notice.

**No Violation.** The execution and delivery of this Agreement will not violate any law or agreement governing Grantor or to which Grantor is a party, and its membership agreement does not prohibit any term or condition of this Agreement

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**Enforceability of Collateral.** To the extent the Collateral consists of accounts, chattel paper, or general intangibles, as defined by the Uniform Commercial Code, the Collateral is enforceable in accordance with its terms, is genuine, and fully complies with all applicable laws and regulations concerning form, content and manner of preparation and execution, and all persons appearing to be obligated on the Collateral have authority and capacity to contract and are in fact obligated as they appear to be on the Collateral. There shall be no setoffs or counterclaims against any of the Collateral, and no agreement shall have been made under which any deductions or discounts may be claimed concerning the Collateral except those disclosed to Lender in writing.

**Location of the Collateral.** Except in the ordinary course of Grantor's business, Grantor agrees to keep the Collateral at Grantor's address shown above or at such other locations as are acceptable to Lender. Upon Lender's request, Grantor will deliver to Lender in form satisfactory to Lender a schedule of real properties and Collateral locations relating to Grantor's operations, including without limitation the following: (1) all real property Grantor owns or is purchasing; (2) all real property Grantor is renting or leasing; (3) all storage facilities Grantor owns, rents, leases, or uses; and (4) all other properties where Collateral is or may be located.

**Removal of the Collateral.** Except in the ordinary course of Grantor's business, Grantor shall not remove the Collateral from its existing location without Lender's prior written consent. Grantor shall, whenever requested, advise Lender of exact location of the Collateral.

**Transactions Involving Collateral.** Except for inventory sold or accounts collected in the ordinary course of Grantor's business, or as otherwise provided for in this Agreement, Grantor shall not sell, offer to sell, or otherwise transfer or dispose of the Collateral. Grantor shall not pledge, mortgage, encumber or otherwise permit the Collateral to be subject to any lien, security interest, encumbrance, or charge, other than the security interest provided for in this Agreement, without the prior written consent of Lender. This includes security interests even if junior in right to the security interests granted under this Agreement. Unless waived by Lender, all proceeds from any disposition of the Collateral (for whatever reason) shall be held in trust for Lender and shall not be commingled with any other funds; provided however, this requirement shall not constitute consent by Lender to any sale or other disposition. Upon receipt, Grantor shall immediately deliver any such proceeds to Lender.

**Title.** Grantor represents and warrants to Lender that Grantor holds good and marketable title to the Collateral, free and clear of all liens and encumbrances except for the lien of this Agreement. No financing statement covering any of the Collateral is on file in any public office other than those which reflect the security interest created by this Agreement or to which Lender has specifically consented. Grantor shall defend Lender's rights in the Collateral against the claims and demands of all other persons.

**Repairs and Maintenance.** Grantor agrees to keep and maintain, and to cause others to keep and maintain, the Collateral in good order, repair mid condition at all times while this Agreement remains in effect, Grantor further agrees to pay when due all claims for work done on, or services rendered or material furnished in connection with the Collateral so that no lien or encumbrance may ever attach to or be tiled against the Collateral.

**Inspection of Collateral.** Lender and Lender's designated representatives and agents shall have the right at all reasonable times to examine and inspect the Collateral wherever located.

**Taxes, Assessments and Liens.** Grantor will pay when due all taxes, assessments and liens upon the Collateral, its use or operation, upon this Agreement, upon any promissory note or notes evidencing the Indebtedness, or upon any of the other Related Documents. Grantor may withhold any such payment or may elect to contest any lien if Grantor is in good faith conducting an appropriate proceeding to contest the obligation to pay and so long as Lender's interest in the Collateral is not jeopardized in Lender's sole opinion. If the Collateral is subjected to a lien which is not discharged within fifteen (15) days, Grantor shall deposit with Lender cash, a sufficient corporate surety bond or other security satisfactory to Lender in an amount adequate to provide for the discharge of the lien plus any interest, costs, reasonable attorneys' fees or other charges that could accrue as a result of foreclosure or sale of the Collateral. In any contest Grantor shall defend itself and Lender and shall satisfy any final adverse judgment before enforcement against the Collateral. Grantor shall name Lender as an additional obligee under any surety bond furnished in the contest proceedings. Grantor further agrees to furnish Lender with evidence that such taxes, assessments, and governmental and other charges have been paid in full and in a timely manner. Grantor may withhold any such payment or may elect to contest any lien if Grantor is in good faith conducting an appropriate proceeding to contest the obligation to pay and so long as Lender's interest in the Collateral is not jeopardized.

Compliance with Governmental Requirements. Grantor shall comply promptly with all laws, ordinances, rules and regulations of all governmental authorities, now or hereafter in effect, applicable to the ownership, production, disposition, or use of the Collateral, including all laws or regulations relating to the undue erosion of highly-erodible land or relating to the conversion of wetlands for the production of an agricultural product or commodity. Grantor may contest in good faith any such law, ordinance or regulation and withhold compliance during any proceeding, including appropriate appeals, so long as Lender's interest in the Collateral, in Lender's opinion, is not jeopardized.

Hazardous Substances. Grantor represents and warrants that the Collateral never has been, and never will be so long as this Agreement remains a lien on the Collateral, used in violation of any Environmental Laws or for the generation, manufacture, storage, transportation, treatment, disposal, release or threatened release of any Hazardous Substance. The representations and warranties contained herein are based on Grantor's due diligence in investigating the Collateral for Hazardous Substances. Grantor hereby (1) releases and waives any future claims against Lender for indemnity or contribution in the event Grantor becomes liable for cleanup or other costs under any Environmental Laws, and (2) agrees to indemnify, defend, and hold harmless Lender against any and all claims and losses resulting from a breach of this provision of this Agreement. This obligation to indemnify and defend shall survive the payment of the indebtedness and the satisfaction of this Agreement.

Maintenance at Casualty Insurance. Grantor shall procure and maintain all risks insurance, including without limitation fire, theft and liability coverage together with such other insurance as Lender may require with respect to the Collateral, in form, amounts, coverages and basis reasonably acceptable to Lender and issued by a company or companies reasonably acceptable to Lender. Grantor, upon request of Lender, will deliver to Lender from time to time the policies or certificates of insurance in form satisfactory to Lender, including stipulations that coverages will not be cancelled or diminished without at least ten (10) days' prior written notice to Lender and not including any disclaimer of the insurer's liability for failure to give such a notice. Each insurance policy also shall include an endorsement providing that coverage in favor of Lender will not be impaired in any way by any act, omission or default of Grantor or any other person. In connection with all policies covering assets in which Lender holds or is offered a security interest, Grantor will provide Lender with such loss payable or other endorsements as Lender may require. If Grantor at any time fails to obtain or maintain any insurance as required under this Agreement, Lender may (but shall not be obligated to) obtain such insurance as Lender deems appropriate, including if Lender so chooses "single interest insurance," which will cover only Lender's interest in the Collateral.

Application of Insurance Proceeds. Grantor shall promptly notify Lender of any loss or damage to the Collateral, whether or not such casualty or loss is covered by insurance. Lender may make proof of loss if Grantor fails to do so within fifteen (15) days of the casualty. All proceeds of any insurance on the Collateral, including accrued proceeds thereon, shall be held by Lender as part of the Collateral. If Lender consents to repair or replacement of the damaged or destroyed Collateral, Lender shall, upon satisfactory proof of expenditure, pay or reimburse Grantor from the proceeds for the reasonable cost of repair or restoration. If Lender does not consent to repair or replacement of the Collateral, Lender shall retain a sufficient amount of the proceeds to pay all of the Indebtedness, and shall pay the balance to

Grantor. Any proceeds which have not been disbursed within six (6) months after their receipt and which Grantor has not committed to the repair or restoration of the Collateral shall be used to prepay the Indebtedness.

Insurance Reserves. Lender may require Grantor to maintain with Lender reserves for payment of insurance premiums, which reserves shall be created by monthly payments from Grantor of a sum estimated by Lender to be sufficient to produce, at least fifteen (15) days before the premium due date, amounts at least equal to the insurance premiums to be paid. If fifteen (15) days before payment is due, the reserve funds are insufficient, Grantor shall upon demand pay any deficiency to Lender. The reserve funds shall be held by Lender as a general deposit and shall constitute a non-interest-bearing account which Lender may satisfy by payment of the insurance premiums required to be paid by Grantor as they become due. Lender does not hold the reserve funds in trust for Grantor, and Lender is not the agent of Grantor for payment of the insurance premiums required to be paid by Grantor. The responsibility for the payment of premiums shall remain Grantor's sole responsibility.

Insurance Reports. Grantor, upon request of Lender, shall furnish to Lender reports on each existing policy of insurance showing such information as Lender may reasonably request including the following: (1) the name of the insurer; (2) the risks insured; (3) the amount of the policy; (4) the property insured; (5) the then current value on the basis of which insurance has been obtained and the manner of determining that value; and (6) the expiration date of the policy. In addition, Grantor shall upon request by Lender (however not more often than annually) have an independent appraiser satisfactory to Lender determine, as applicable, the cash value or replacement cost of the Collateral.

Financing Statements. Grantor authorizes Lender to file a UCC financing statement, or alternatively, a copy of this Agreement to perfect Lender's security interest. At Lender's request, Grantor additionally agrees to sign all other documents that are necessary to perfect, protect, and continue Lender's security interest in the Property, Grantor will pay all filing fees, title transfer fees, and other fees and costs involved unless prohibited by law or unless Lender is required by law to pay such fees and costs. Grantor irrevocably appoints Lender to execute documents necessary to transfer title if there is a default, Lender may file a copy of this Agreement as a financing statement. If Grantor changes Grantor's name or address, or the name or address of any person granting a security interest under this Agreement changes, Grantor will promptly notify the Lender of such change.

**GRANTOR'S RIGHT TO POSSESSION.** Until default, Grantor may have possession of the tangible personal property and beneficial use of all the Collateral and may use it in any lawful manner not inconsistent with this Agreement or the Related Documents, provided that Grantor's right to possession and beneficial use shall not apply to any Collateral where possession of the Collateral by Lender is required by law to perfect Lender's security interest in such Collateral. If Lender at any time has possession of any Collateral, whether before or after an Event of Default, Lender shall be deemed to have exercised reasonable care in the custody and preservation of the Collateral if Lender takes such action for that purpose as Grantor shall request or as Lender, in Lender's sole discretion, shall deem appropriate under the circumstances, but failure to honor any request by Grantor shall not of itself be deemed to be a failure to exercise reasonable care, Lender shall not be required to take any steps necessary to preserve any rights in the Collateral against prior parties, nor to protect, preserve or maintain any security interest given to secure the Indebtedness.

**LENDEFTS EXPENDITURES.** If any action or proceeding is commenced that would materially affect Lender's interest in the Collateral or if Grantor fails to comply with any provision of this Agreement or any Related Documents, including but not limited to Grantor's failure to discharge or pay when due any amounts Grantor is required to discharge or pay under this Agreement or any Related Documents, Lender on Grantor's behalf may (but shall not be obligated to) take any action that Lender deems appropriate, including but not limited to discharging or paying all taxes, liens, security interests, encumbrances and other claims, at any time levied or placed on the Collateral and paying all costs for insuring, maintaining and preserving the Collateral. All such expenditures incurred or paid by Lender for such purposes will then bear interest at the rate charged under the Note from the date incurred or paid by Lender to the date of repayment by Grantor. All such expenses will become a part of the indebtedness and, at Lender's option, will (A) be payable on demand; (B) be added to the balance of the Note and be apportioned among and be payable with any installment payments to become due during either (1) the term of any applicable

insurance policy; or (2) the remaining term of the Note; or (C) be treated as a balloon payment which will be due and payable at the Note's maturity, The Agreement also will secure payment of these amounts. Such right shall be in addition to all other rights and remedies to which Lender may be entitled upon Default.

DEFAULT. Each of the following shall constitute an Event of Default under this Agreement:

Payment Default. Grantor fails to make any payment when due under the Indebtedness,

Other Defaults. Grantor fails to comply with or to perform any other term, obligation, covenant or condition contained in this Agreement or in any of the Related Documents or to comply with or to perform any term, obligation, covenant or condition contained in any other agreement between Lender and Grantor.

Default in Favor of Third Parties. Grantor defaults under any loan, extension of credit, security agreement, purchase or sales agreement, or any other agreement, in favor of any other creditor or person that may materially affect any of Grantor's property or ability to perform Grantor's obligations under this Agreement or any of the Related Documents.

False Statements. Any warranty, representation or statement made or furnished to Lender by Grantor or on Grantor's behalf under this Agreement or the Related Documents is false or misleading in any material respect. either now or at the time made or furnished or becomes false or misleading at any time thereafter.

Defective Collateralization. This Agreement or any of the Related Documents ceases to be in full force and affect (including failure of any collateral document to create a valid and perfected security interest or lien) at any time and for any reason.

Insolvency. The dissolution of Grantor (regardless of whether election to continue is made), any member withdraws from the limited liability company, or any other termination of Grantor's existence as a going business or the death of any member, the insolvency of Grantor, the appointment of a receiver for any part of Grantor's property, any assignment for the benefit of creditors, any type of creditor workout, or the commencement of any proceeding under any bankruptcy or insolvency laws by or against Grantor.

Creditor or Forfeiture Proceedings. Commencement of foreclosure or forfeiture proceedings, whether by judicial proceeding, self-help, repossession or any other method, by any creditor of Grantor or by any governmental agency against any collateral securing the Indebtedness. This includes a garnishment of any of Grantor's accounts, including deposit accounts, with Lender. However, this Event of Default shall not apply if there is a good faith dispute by Grantor as to the validity or reasonableness of the claim which is the basis of the creditor or forfeiture proceeding and if Grantor gives Lender written notice of the creditor or forfeiture proceeding and deposits with Lender monies or a surety bond for the creditor or forfeiture proceeding, in an amount determined by Lender, in its sole discretion, as being an adequate reserve or bond for the dispute.

Events Affecting Guarantor. Any of the preceding events occurs with respect to any guarantor, endorser, surety, or accommodation party or any of the Indebtedness or guarantor, endorser, surety, or accommodation party dies or becomes incompetent or revokes or disputes the validity of, or liability under, any Guaranty of the Indebtedness

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Adverse Change. A material adverse change occurs in Grantor's financial condition, or Lender believes the prospect of payment or performance of the Indebtedness is impaired,

Cure Provisions. If any default, other than a default in payment is curable and if Grantor has not been given a notice of a breach of the same provision of this Agreement within the preceding twelve (12) months, it may be cured if Grantor, after receiving written notice from Lender demanding cure of such default: (1) cures the default within ten (10) days; or (2) if the cure requires more than ten (10) days, immediately initiates steps which Lender deems in Lender's sole discretion to be sufficient to cure the default and thereafter continues and completes all reasonable and necessary steps sufficient to produce compliance as soon as reasonably practical.

RIGHTS AND REMEDIES ON DEFAULT. If an Event of Default occurs under this Agreement, at any time thereafter, Lender shall have all the rights of a secured party under the Delaware Uniform Commercial Code. In addition and without limitation, Lender may exercise any one or more of the following rights and remedies:

Accelerate indebtedness. Lender may declare the entire indebtedness, including any prepayment penalty which Grantor would be required to pay, immediately due and payable, without notice of any kind to Grantor,

Assemble Collateral. Lender may require Grantor to deliver to Lender all or any portion of the Collateral and any and all certificates of title and other documents relating to the Collateral. Lender may require Grantor to assemble the Collateral and make it available to Lender at a place to be designated by Lender. Lender also shall have full power to enter upon the property of Grantor to take possession of and remove the Collateral. If the Collateral contains other goods not covered by this Agreement at the time of repossession, Grantor agrees Lender may take such other goods, provided that Lender makes reasonable efforts to return them to Grantor after repossession.

Sell the Collateral. Lender shall have full power to sell, lease, transfer, or otherwise deal with the Collateral or proceeds thereof in Lender's own name or that of Grantor. Lender may sell the Collateral at public auction or private sale. Unless the Collateral threatens to decline speedily in value or is of a type customarily sold on a recognized market, Lender will give Grantor, and other persons as required by law, reasonable notice of the time and place of any public sale, or the time after which any private sale or any other disposition of the Collateral is to be made. However, no notice need be provided to any person who, after Event of Default occurs, enters into and authenticates an agreement waiving that person's right to notification of sale. The requirements of reasonable notice shall be met if such notice is given at least ten (10) days before the time of the sale or disposition. All expenses relating to the disposition of the Collateral, including without limitation the expenses of retaking, holding, insuring, preparing for sale and selling the Collateral, shall become a part of the Indebtedness secured by this Agreement and shall be payable on demand, with interest at the Note rate from date of expenditure until repaid.

Appoint Receiver. Lender shall have the right to have a receiver appointed to take possession of all or any part of the Collateral, with the power to protect and preserve the Collateral, to operate the Collateral preceding foreclosure or sale, and to collect the Rents from the Collateral and apply the proceeds, over and above the cost of the receivership, against the Indebtedness. The receiver may serve without bond if permitted by law. Lender's right to the



appointment of a receiver shall exist whether or not the apparent value of the Collateral exceeds the indebtedness by a substantial amount. Employment by Lender shall not disqualify a person from serving as a receiver.

Collect Revenues, Apply Accounts. Lender, either itself or through a receiver, may collect the payments, rents, income, and revenues from the Collateral, Lender may at any time in Lender's discretion transfer any Collateral into Lender's own name or that of Lender's nominee and receive the payments, rents, income, and revenues therefrom and hold the same as security for the indebtedness or apply it to payment of the Indebtedness in such order of preference as Lender may determine. insofar as the Collateral consists of accounts, general intangibles, insurance policies, instruments, chattel paper, choses in action, or similar property, Lender may demand. collect, receipt for. settle, compromise, adjust, sue for, foreclose, or realize on the Collateral as Lender may determine, whether or not Indebtedness or Collateral is then due. For these purposes, Lender may, on behalf of and in the name of Grantor, receive, open and dispose of mail addressed to Grantor; change any address to which mail and payments are to be sent; and endorse notes, checks, drafts, money orders, documents of title, instruments and items pertaining to payment, shipment, or storage of any Collateral. To facilitate collection, Lender may notify account debtors and obligors on any Collateral to make payments directly to Lender.

Obtain Deficiency. If Lender chooses to sell any or all of the Collateral, Lender may obtain a judgment against Grantor for any deficiency remaining on the Indebtedness due to Lender after application of all amounts received from the exercise of the rights provided in this Agreement. Grantor shall be liable for a deficiency even if the transaction described in this subsection is a sale of accounts or chattel paper

Other Rights and Remedies, Lender shall have all the rights and remedies of a secured creditor under the provisions of the Uniform Commercial Code, as may be amended from time to time. In addition, Lender shall have and may exercise any or all other rights and remedies it may have available at law, in equity, or otherwise.

Election of Remedies. Except as may be prohibited by applicable law, all of Lender's rights and remedies, whether evidenced by this Agreement, the Related Documents, or by any other writing, shall be cumulative and may be exercised singularly or concurrently. Election by Lender to pursue any remedy shall not exclude pursuit of any other remedy, and an election to make expenditures or to take action to perform an obligation of Grantor under this Agreement, after Grantor's failure to perform, shall not affect Lender's right to declare a default and exercise its remedies.

MISCELLANEOUS PROVISIONS. The following miscellaneous provisions are a part of this Agreement:

Amendments. This Agreement, together with any Related Documents, constitutes the entire understanding and agreement of the parties as to the matters set forth in this Agreement. No alteration of or amendment to this Agreement shall be effective unless given in writing and signed by the party or parties sought to be charged or bound by the alteration or amendment.

Attorneys' Fees; Expenses. Grantor agrees to pay upon demand all of Lender's costs and expenses, including Lender's reasonable attorneys' fees and Lender's legal expenses, incurred in connection with the enforcement of this Agreement. Lender may hire or pay someone else to help enforce this Agreement, and Grantor shall pay the costs and expenses of such enforcement. Costs and expenses include Lender's reasonable attorneys fees and legal expenses whether or not there is a lawsuit, including reasonable attorneys' fees and legal expenses for bankruptcy proceedings (including efforts to modify or vacate any automatic stay or injunction), appeals, and any anticipated post-judgment collection services. Lender may also recover from Grantor all court, alternative dispute resolution or other collection costs (including, without limitation, fees and charges of collection agencies) actually incurred by Lender.

Caption Headings. Caption headings in this Agreement are for convenience purposes only and are not to be used to interpret or define the provisions of this Agreement.

Governing Law. With respect to procedural matters related to the perfection and enforcement of Lender's rights against the Collateral, this Agreement will be governed by federal law applicable to Lender and to the extent not preempted by federal law, the laws of the State of Delaware. In all other respects, this Agreement will be governed by federal law applicable to Lender end, to the extent not preempted by federal law, the laws of the State of Missouri without regard to its conflicts of law provisions. However, if there ever is a question about whether any provision of this Agreement is valid or enforceable, the provision that is questioned will be governed by whichever state or

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federal law would find the provision to be valid and enforceable. The loan transaction that is evidenced by the Note and this Agreement has been applied for, considered, approved and made, and all necessary loan documents have been accepted by Lender in the State of Missouri.

Choice of Venue. If there is a lawsuit, Grantor agrees upon Lender's request to submit to the jurisdiction of the courts of Jackson County, State of Missouri.

Joint and Several Liability. All obligations of Grantor under this Agreement shall be joint and several, and all references to Grantor shall mean each and every Grantor. This means that each Grantor signing below is responsible for all obligations in this Agreement. Where any one or more of the parties is a corporation, partnership, limited liability company or similar entity, it is not necessary for Lender to inquire into the powers of any of the officers, directors, partners, members, or other agents acting or purporting to act on the entity's behalf, and any obligations made or created in reliance upon the professed exercise of such powers shall be guaranteed under this Agreement.

No Waiver by Lender. Lender shall not be deemed to have waived any rights under this Agreement unless such waiver is given in writing and signed by Lender. No delay or omission on the part of Lender in exercising any right shall operate as a waiver of such right or any other right. A waiver by Lender of a provision of this Agreement shall not prejudice or constitute a waiver of Lenders right otherwise to demand strict compliance with that provision or any other provision of this Agreement. No prior waiver by Lender, nor any course of dealing between Lender and Grantor, shall constitute a waiver of any of Lender's rights or of any of Grantor's obligations as to any future transactions. Whenever the consent of Lender is required under this Agreement, the granting of such consent by Lender in any instance shall not constitute continuing consent to subsequent instances where such consent is required and in all cases such consent may be granted or withheld in the sole discretion of Lender.

Notices. Any notice required to be given under this Agreement shall be given in writing, and shall be effective when actually delivered. when actually received by telefacsimile (unless otherwise required by law), when deposited with a nationally recognized overnight courier, or, if mailed, when deposited in the United States mail, as first class, certified or registered mail postage prepaid, directed to the addresses shown near the beginning of this Agreement. Any party may change its address for notices under this Agreement by giving formal written notice to the other parties, specifying that the purpose of the notice is to change the party's address. For notice purposes, Grantor agrees to keep Lender informed at all times of Grantor's current address, Unless

otherwise provided or required by law, if there is more than one Grantor, any notice given by Lender to any Grantor is deemed to be notice given to all Grantors.

**Power of Attorney.** Grantor hereby appoints Lender as Grantor's irrevocable attorney-in-fact for the purpose of executing any documents necessary to perfect, amend, or to continue the security interest granted in this Agreement or to demand termination of filings of other secured parties. Lender may at any time, and without further authorization from Grantor, file a carbon, photographic or other reproduction of any financing statement or of this Agreement for use as a financing statement. Grantor will reimburse Lender for all expenses for the perfection and the continuation of the perfection of Lender's security interest in the Collateral.

**Severability.** If a court of competent jurisdiction finds any provision of this Agreement to be illegal, invalid, or unenforceable as to any person or circumstance, that finding shall not make the offending provision illegal, invalid, or unenforceable as to any other person or circumstance. If feasible, the offending provision shall be considered modified so that it becomes legal, valid and enforceable. If the offending provision cannot be so modified, it shall be considered deleted from this Agreement. Unless otherwise required by law, the illegality, invalidity, or unenforceability of any provision of this Agreement shall not affect the legality, validity or enforceability of any other provision of this Agreement.

**Successors and Assigns.** Subject to any limitations stated in this Agreement on transfer of Grantor's interest, this Agreement shall be binding upon and inure to the benefit of the parties, their successors and assigns. If ownership of the Collateral becomes vested in a person other than Grantor, Lender, without notice to Grantor, may deal with Grantor's successors with reference to this Agreement and the Indebtedness by way of forbearance or extension without releasing Grantor from the obligations of this Agreement or liability under the Indebtedness.

**Survival of Representations and Warranties.** All representations, warranties, and agreements made by Grantor in this Agreement shall survive the execution and delivery of this Agreement, shall be continuing in nature, and shall remain in full force and effect until such time as Grantor's Indebtedness shall be paid in full.

**Time is of the Essence.** Time is of the essence in the performance of this Agreement.

**Waive Jury.** All parties to this Agreement hereby waive the right to any jury trial in any action, proceeding, or counterclaim brought by any party against any other party.

**DEFINITIONS.** The following capitalized words and terms shall have the following meanings when used in this Agreement. Unless specifically slated to the contrary, all references to dollar amounts shall mean amounts in lawful money of the United States of America. Words and terms used in the singular shall include the plural, and the plural shall include the singular, as the context may require. Words and terms not otherwise defined in this Agreement shall have the meanings attributed to such terms in the Uniform Commercial Code:

**Agreement.** The word "Agreement" means this Commercial Security Agreement, as this Commercial Security Agreement may be amended or modified from time to time, together with all exhibits and schedules attached to this Commercial Security Agreement from time to time

**Borrower.** The word "Borrower" means LIQUIDMETAL COATINGS, LLC; and LIQUIDMETAL COATINGS SOLUTIONS, LLC and includes all co-signers and co-makers signing the Note and all their successors and assigns.

**Collateral.** The word "Collateral" means all of Grantor's right, title and interest in and to all the Collateral as described in the Collateral Description section of this Agreement.

**Default.** The word "Default" means the Default set forth in this Agreement in the section titled "Default".

**Environmental Laws.** The words "Environmental Laws" mean any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment, including without limitation the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. Section 9601, et seq. ("CERCLA"), the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499 ("SARA"), the Hazardous Materials Transportation Act, 49 U.S.C. Section 1801, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901, et seq., or other applicable state or federal laws, rules, or regulations adopted pursuant thereto.

**Event of Default.** The words "Event of Default" mean any of the events of default set forth in this Agreement in the default section of this Agreement.

**Grantor.** The word "Grantor" means LIQUIDMETAL COATINGS, LLC; and LIQUIDMETAL COATINGS SOLUTIONS, LLC.

**Guaranty.** The word "Guaranty" means the guaranty from guarantor, endorser, surety, or accommodation party to Lender, including without limitation a guaranty of all or part of the Note.

**Hazardous Substances.** The words "Hazardous Substances" mean materials that, because of their quantity, concentration or physical, chemical or infectious characteristics, may cause or pose a present or potential hazard to human health or the environment when improperly used, treated, stored, disposed of, generated, manufactured, transported or otherwise handled. The words "Hazardous Substances" are used in their very broadest sense and include without limitation any and all hazardous or toxic substances, materials or waste as defined by or listed under the Environmental Laws. The term "Hazardous Substances" also includes, without limitation, petroleum and petroleum byproducts or any fraction thereof and asbestos.

**Indebtedness.** The word "Indebtedness" means the Indebtedness evidenced by the Note or Related Documents, including all principal and interest together with all other indebtedness and costs and expenses for which Borrower is responsible under this Agreement or under any of the Related Documents.

**Lender.** The word "Lender" means Bank Midwest N.A., its successors and assigns.

**Note.** The word "Note" means the Note executed by LIQUIDMETAL COATINGS, LLC; and LIQUIDMETAL COATINGS SOLUTIONS, LLC in the principal amount of \$104,800.04 dated October 21, 2008, together with all renewals of, extensions of, modifications of, refinancings of, consolidations of, and substitutions for the note or credit agreement.

Property. The word "Property" means all of Grantor's right, title and interest in and to all the Property as described in the "Collateral Description" section of this Agreement.

Related Documents. The words "Related Documents" mean all promissory notes, credit agreements, loan agreements, environmental agreements, guaranties, security agreements, mortgages, deeds of trust, security deeds, collateral mortgages, and all other instruments, agreements and documents, whether now or hereafter existing, executed in connection with the Loan.

GRANTER AHS READ AND UNDERSTOOD ALL THE PROVISION OF THIS COMMERCIAL SECURITY AGREEMENT AND AGREES TO ITS TERMS. THIS AGREEMENT IS DATED OCTOBER 21, 2008.

THIS AGREEMENT IS GIVEN UNDER SEAL AND IT IS INTENDED THAT THIS AGREEMENT IS AND SHALL CONSTITUTE AND HAVE THE EFFECT OF A SEALED INSTRUMENT ACCORDING TO LAW.

**GRANTOR:**

LIQUIMDETAL COATINGS, LLC

By: /s/ Larry Buffington  
LARRY BUFFINGTON, PRESIDENT & CEO of  
LIQUIDMETAL COATINGS, LLC

LIQUIDMETAL COATINGS SOLUTIONS, LLC

LIQUIDMETAL COATINGS, LLC, Member of LIQUIDMETAL COATINGS SOLUTIONS, LLC

By: /s/ Larry Buffington  
LARRY BUFFINGTON, PRESIDENT & CEO of  
LIQUIDMETAL COATINGS, LLC

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT. ANY TRANSFEREE OF THIS NOTE SHOULD CAREFULLY REVIEW THE TERMS OF THIS NOTE, INCLUDING SECTIONS 3(c)(iii) AND 19(a) HEREOF. THE PRINCIPAL AMOUNT REPRESENTED BY THIS NOTE AND, ACCORDINGLY, THE SECURITIES ISSUABLE UPON CONVERSION HEREOF MAY BE LESS THAN THE AMOUNTS SET FORTH ON THE FACE HEREOF PURSUANT TO SECTION 3(c)(iii) OF THIS NOTE.

### CONVERTIBLE SUBORDINATED NOTE

Issuance Date: October 1, 2008

Principal: U.S. \$ [ ]

**FOR VALUE RECEIVED**, LIQUIDMETAL TECHNOLOGIES, INC., a Delaware corporation (the “**Company**”), hereby promises to pay to the order of [INSERT HOLDER] or registered assigns (“**Holder**”) the amount set out above as the Principal (as reduced pursuant to the terms hereof pursuant to redemption, conversion or otherwise, the “**Principal**”) when due, whether upon the Maturity Date (as defined below), acceleration, redemption or otherwise (in each case in accordance with the terms hereof) and to pay interest (“**Interest**”) on any outstanding Principal at the rate of interest as determined pursuant to Section 2, from the date set out above as the Issuance Date (the “**Issuance Date**”) until the same becomes due and payable, whether upon an Interest Date (as defined below), the Maturity Date, acceleration, conversion, redemption or otherwise (in each case in accordance with the terms hereof). This Convertible Subordinated Note (including all Convertible Subordinated Notes issued in exchange, transfer or replacement hereof, this “**Note**”) is one of an issue of Convertible Subordinated Notes issued on January 3, 2007 (the “**Original Date**”) pursuant to the Securities Purchase Agreement (the “**Original Notes**”) or issued after January 3, 2007 in satisfaction of interest and/or other amounts owing by the Company to the holders of the Original Notes (the “**Interest Notes**”) (the Original Notes and Interest Notes are collectively referred to as the “**Notes**” herein, and any Notes other than this Note are collectively referred to as the “**Other Notes**”). This Note is deemed to be issued pursuant to Section 2 of the Holder’s Original Note and is subject to the terms and provisions of the Securities Purchase Agreement. Certain capitalized terms are defined in Section 29.

#### (1) MATURITY AND AMORTIZATION PAYMENTS.

(a) Payment on Maturity. On January 3, 2010 (the “**Maturity Date**”), the Holder shall surrender this Note to the Company and the Company shall pay to the Holder an amount in cash representing all outstanding Principal and accrued and unpaid Interest, and following receipt of such payment, the Holder shall mark this Note as “Cancelled” and shall surrender such cancelled Note to the Company by courier, registered mail, or other traceable means. Beginning on the first day of the eighteenth (18<sup>th</sup>) calendar month following the calendar month in which the Original Date occurs, the Company may, upon thirty (30) calendar days prior written notice to Holder and at the sole election of the Company, prepay this Note in whole or in part for a cash redemption price equal to One Hundred Five Percent (105%) of the the portion of the principal amount being redeemed plus all accrued and unpaid interest on the portion of the principal amount being redeemed, provided that following such notice the Holder may convert all or any part of the portion of the Note to be redeemed so long as the Company receives a duly executed Conversion Notice pursuant to Section 3 of this Note prior to the date on which prepayment is actually made. Notwithstanding the foregoing, in the event that prior to the Maturity Date the Company completes a public or private equity or debt offering or an Asset Sale pursuant to which the Company receives aggregate cash proceeds (net of placement agent fees, underwriter’s discounts, and other similar fees or commissions, and net of transaction fees) in excess of Five Million Dollars (\$5,000,000), but excluding financings for the purpose of purchasing capital assets, then any net proceeds from such transaction after payment in full of transaction expenses and the full payment of the Company’s 8% Unsecured Subordinated Notes Due 2007 shall, within five (5) Business Days of the Company’s receipt of such net proceeds, be paid to reduce the Principal and accrued but unpaid interest under this Note and the other Interest Notes (and if such net proceeds are insufficient to pay the Interest Notes in full, then such net proceeds will be paid to the holders of the Interest Notes on a pro rata basis in accordance with the then-outstanding Principal under the Interest Notes held by them). For this purpose, an “Asset Sale” means any sale of assets by the Company in a single transaction or series of related transactions, other than (i) sales of inventory or other assets in the ordinary course of the Company’s business, (ii) sale of obsolete equipment.

(b) Amortization Payments. Beginning on October 31, 2008 and at the end of each month thereafter (each, an “**Amortization Date**”) until there is no outstanding Principal of this Note, the Company shall redeem \$[ ] [1/36th of the original Principal amount of this Note] of this Note (each, an “**Amortization Redemption Amount**”). If the Company is unable to redeem all Principal and Interest with respect to all Amortization Redemption Amounts on this Note and the Other Notes, then the Company shall redeem a pro rata amount from each holder of the Notes (including the Holder) based on the principal amount of the Notes subject to payment of an Amortization Redemption Amount on such Amortization Date pursuant to this Note and the Other Notes.

(c) Payment of Amortization Redemption Amount. The Company shall pay the Amortization Redemption Amount in cash in accordance with the provisions of Section 12; provided, however, that if the Conditions to Amortization Conversion (as defined

below) are satisfied or waived in writing by the Holder and the Company provides the Amortization Conversion Notice (as defined below), then the Company shall have the right to require the Holder to convert all or any such portion of the Amortization Redemption Amount designated in the Amortization Conversion Notice into fully paid, validly issued and nonassessable shares of Common Stock in accordance with the applicable provisions of Section 3(c)(i). The Company may exercise its right to require conversion under this Section 1(c) by delivering at least 20 Trading Days prior to such Amortization Date a written notice thereof by facsimile and overnight courier to all, but not less than all, of the holders of Notes and the Transfer Agent that specifically describes the portion of the Amortization Redemption Amount for this Note and the Other Notes that will be paid in Common Stock (the “**Amortization Conversion Notice**” and the date all of the holders received such notice is referred to as the “**Amortization Conversion Notice Date**”). The Amortization Conversion Notice shall be irrevocable; provided, that if any of the Conditions to Amortization Conversion is not satisfied on the applicable Amortization Date or waived by the Holder, the Company will notwithstanding delivery of the Amortization Conversion Notice be required to pay the Amortization Redemption Amount in cash. The conversion price applicable to an Amortization Conversion (the “**Amortization Price**”) that is being paid in Common Stock pursuant to this

Section 1(c) shall be 90% of the Weighted Average Price of the Common Stock for the 20 consecutive Trading Days immediately preceding the Amortization Date. For purposes of this Section 1(c), “**Conditions to Amortization Conversion**” means the following conditions: (i) the Common Stock shall be traded on the Principal Market, the NASDAQ Global Market or NASDAQ Capital Market, or the American Stock Exchange on the applicable Amortization Date, (ii) on the Amortization Date, either (x) the Registration Statement or Registration Statements contemplated by the Registration Rights Agreement shall be effective and available for the sale for all of the Registrable Securities (as defined in the Registration Rights Agreement) then outstanding, together with the Common Stock to be issued on such Amortization Date, in accordance with the terms of the Registration Rights Agreement or (y) all shares of Common Stock issuable upon conversion of the Notes shall be eligible for sale without restriction and without the need for registration under any applicable federal or state securities laws, (iii) an Authorized Share Failure shall not be in effect on the Amortization Date; and (iv) any such payment of the Amortization Redemption Amount in Common Stock shall not consist of more than 20% of the total dollar volume traded in the Common Stock for the 20 Trading Days prior to the Amortization Date.

(d) Special Redemption Right. Within two (2) trading days after the closing of one or more Qualified Transactions resulting in \$25,000,000 (Twenty Five Million Dollars) in aggregate proceeds after transaction expenses and placement agent or broker commissions or fees, the Company will notify the Holder of said closing (a “**Transaction Notice**”). Upon the closing of the Qualified Transaction, the Holder may elect to have all or part of the outstanding principal amount of this Note and all accrued but unpaid interest thereunder redeemed within five (5) Trading Days of the Company’s receipt of written notice of the Holder’s election to effect such redemption. In order to elect such redemption, the Holder must deliver written notice of redemption to the Company within twenty (20) Trading Days after its receipt of the Transaction Notice, and such written notice must be accompanied by the surrender of the originally executed Note, which must be marked “cancelled” (provided that in lieu of

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surrendering the Notes (if not fully redeemed), the Holder may deliver a certification to the Company affirming that the requisite principal amount of Notes is being forfeited as a result of such redemption, in which case the change in the Notes will be noted by book entry by the Company). For purposes hereof, the term “**Qualified Transactions**” means (A) the sale of Liquidmetal Korea’s manufacturing facility in Pyong-Taek, Republic of Korea and that the appropriate authorities or banks in the Republic of Korea approve the transfer of such proceeds from Liquidmetal Korea to the Company and/or (B) the raising of capital in a debt or equity offering after the date hereof (subject to any restrictions or limitations thereon set forth in the Purchase Agreement or the Notes).

(2) INTEREST; INTEREST RATE. Interest on this Note shall commence accruing on the Issuance Date and shall be computed on the basis of a 365-day year and actual days elapsed and shall be payable in arrears on the first day of each Calendar Quarter and on the Maturity Date during the period beginning on the Issuance Date and ending on, and including, the Maturity Date (each, an “**Interest Date**”) with the first Interest Date being January 1, 2008. Interest shall be payable on each Interest Date in cash at the rate of 8.00% per annum (the “**Interest Rate**”). Prior to the payment of Interest on an Interest Date, Interest on this Note shall accrue at the Interest Rate and be payable by way of inclusion of the Interest in the Conversion Amount in accordance with Section 3(b)(i). From and after the occurrence of an Event of Default, the Interest Rate shall be increased so that the Interest Rate shall be twelve percent (12.00%) per annum. In the event that such Event of Default is subsequently cured, the adjustment referred to in the preceding sentence shall cease to be effective as of the date of such cure; provided that the Interest as calculated at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of cure of such Event of Default.

(3) CONVERSION OF NOTES. This Note shall be convertible into shares of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”), on the terms and conditions set forth in this Section 3.

(a) Conversion Right. Subject to the provisions of Section 3(d), at any time or times on or after the Issuance Date, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) in increments of at least \$50,000 of Principal (or such lesser amount if such amount represents the remaining Principal amount) into fully paid and nonassessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all taxes that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate. The number of shares of Common Stock

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issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (as defined below) (the “**Conversion Rate**”).

(i) “**Conversion Amount**” means the sum of (A) the portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made, plus (B) accrued and unpaid Interest with respect to such Principal.

(ii) “**Conversion Price**” means, as of any Conversion Date (as defined below) or other date of determination, and subject to adjustment as provided herein, \$1.10.

(c) Mechanics of Conversion.

(i) Optional Conversion. To convert any Conversion Amount into shares of Common Stock on any date (a “**Conversion Date**”), the Holder shall (A) transmit by facsimile (or otherwise deliver), for receipt on or prior to 5:00 p.m., New York Time, on such date, a copy of an executed notice of conversion in the form attached hereto as Exhibit I (the “**Conversion Notice**”) to the Company and (B) if required by Section 3(c)(iii), surrender this Note to a common carrier for delivery to the Company as soon as practicable on or following such date (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first Business Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile a confirmation of receipt of such Conversion Notice to the Holder and the Company’s transfer agent (the “**Transfer Agent**”). On or before the second Business Day following the date of receipt of a Conversion Notice (the “**Share Delivery Date**”), the Company shall (X) credit such aggregate number of shares of Common Stock to which the Holder shall be entitled to the Holder’s or its

designee's balance account with Depository Trust Company ("DTC") through its Deposit Withdrawal At Custodian system or (Y) if the Transfer Agent is not participating in DTC Fast Automated Securities Transfer Program, issue and deliver to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled. If this Note is physically surrendered for conversion as required by Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than five Business Days after receipt of this Note and at its own expense, issue and deliver to the holder a new Note (in accordance with Section 19(d)) representing the outstanding Principal not converted. The Person or Persons entitled to receive the shares of Common Stock issuable upon a conversion of this Note shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the Conversion Date.

(ii) Company's Failure to Timely Convert. If the Company shall fail to issue a certificate to the Holder or credit the Holder's balance account with DTC for the number of shares of Common Stock to which the Holder is entitled upon conversion of any

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Conversion Amount on or prior to the date which is five Business Days after the Conversion Date (a "**Conversion Failure**"), then (A) the Company shall pay liquidated damages to the Holder for each day of such Conversion Failure in an amount equal to 1.0% of the product of (I) the sum of the number of shares of Common Stock not issued to the Holder on or prior to the Share Delivery Date and to which the Holder is entitled, and (II) the Closing Sale Price of the Common Stock on the Share Delivery Date and (B) the Holder, upon written notice to the Company, may void its Conversion Notice with respect to, and retain or have returned, as the case may be, any portion of this Note that has not been converted pursuant to such Conversion Notice; provided that the voiding of a Conversion Notice shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 3(c)(ii) or otherwise. In addition to the foregoing, if within three (3) Trading Days after the Company's receipt of the facsimile copy of a Conversion Notice the Company shall fail to issue and deliver a certificate to the Holder or credit the Holder's balance account with DTC for the number of shares of Common Stock to which the Holder is entitled upon such holder's conversion of any Conversion Amount, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) Common Stock to deliver in satisfaction of a sale by the Holder of Common Stock issuable upon such conversion that the Holder anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within five (5) Business Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to issue such Common Stock) shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Common Stock and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the Conversion Date.

(iii) Book-Entry. Notwithstanding anything to the contrary set forth herein, upon conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting physical surrender and reissue of this Note. The Holder and the Company shall maintain records showing the Principal and Interest converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion.

(iv) Pro Rata Conversion; Disputes. In the event that the Company receives a Conversion Notice from more than one holder of Notes for the same Conversion Date and the Company can convert some, but not all, of such portions of the Notes submitted

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for conversion, the Company, subject to Section 3(d), shall convert from each holder of Notes electing to have Notes converted on such date a pro rata amount of such holder's portion of its Notes submitted for conversion based on the principal amount of Notes submitted for conversion on such date by such holder relative to the aggregate principal amount of all Notes submitted for conversion on such date. In the event of a dispute as to the number of shares of Common Stock issuable to the Holder in connection with a conversion of this Note, the Company shall issue to the Holder the number of shares of Common Stock not in dispute and resolve such dispute in accordance with Section 24.

(d) Limitations on Conversions.

(i) Beneficial Ownership. Unless waived by the Holder upon no less than sixty one (61) days prior written notice to the Company, the Company shall not effect any conversion of this Note pursuant to Section 3(a) to the extent that after giving effect to such conversion the Holder (together with the Holder's affiliates) would beneficially own in excess of 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. Even if the Holder waives the limitation set forth in the preceding sentence, the Company shall in no event effect any conversion of this Note, and the Holder of this Note shall not have the right to convert any portion of this Note pursuant to Section 3(a), to the extent that after giving effect to such conversion, the Holder (together with the Holder's affiliates) would beneficially own in excess of 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentences, the number of shares of Common Stock beneficially owned by the Holder and its affiliates shall include the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of its affiliates and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any Other Notes or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its affiliates. Except as set forth in the preceding sentence, for purposes of this Section 3(d)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. For purposes of this Section 3(d)(i), in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Form 10-Q or Form 10-K, (y) a more recent public announcement by the Company or (z) any other notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written or oral request of the Holder, the Company shall within two Business Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder



or its affiliates since the date as of which such number of outstanding shares of Common Stock was reported.

(ii) Principal Market Regulation. The Company shall not be obligated to issue any shares of Common Stock upon conversion of this Note if the issuance of such shares of Common Stock would exceed that number of shares of Common Stock that the Company may issue upon conversion of the Notes without breaching the Company's obligations under the rules or regulations of the Principal Market (the "**Exchange Cap**"), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules of the Principal Market for issuances of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the holders of the Notes representing at least a majority of the principal amounts of the Notes then outstanding. Until such approval or written opinion is obtained, no holders of Notes (the "**Purchasers**") shall be issued, upon conversion of Notes, shares of Common Stock in an amount greater than the product of the Exchange Cap multiplied by a fraction, the numerator of which is the principal amount of Original Notes issued to such Purchaser pursuant to the Securities Purchase Agreement on the Issuance Date and the denominator of which is the aggregate principal amount of all Original Notes issued to the Purchasers pursuant to the Securities Purchase Agreement on the Issuance Date (with respect to each Purchaser, the "**Exchange Cap Allocation**"). In the event that any Purchaser shall sell or otherwise transfer any of such Purchaser's Notes, the transferee shall be allocated a pro rata portion of such Purchaser's Exchange Cap Allocation, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation allocated to such transferee. In the event that any holder of Notes shall convert all of such holder's Notes into a number of shares of Common Stock which, in the aggregate, is less than such holder's Exchange Cap Allocation, then the difference between such holder's Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder shall be allocated to the respective Exchange Cap Allocations of the remaining holders of Notes on a pro rata basis in proportion to the aggregate principal amount of the Notes then held by each such holder.

(4) RIGHTS UPON EVENT OF DEFAULT.

(a) Event of Default. Each of the following events shall constitute an "**Event of Default**":

(i) the Company's failure to pay to the Holder any amount of Principal or Interest when and as due under this Note if such failure continues for a period of at least five Business Days;

(ii) the Company's failure to pay to the Holder any amounts other than Principal or Interest when and as due under this Note, the Securities Purchase Agreement, or the

Registration Rights Agreement, which failure is not cured within five Business Days after notice of such default sent by the Holder to the Company;

(iii) any default under, redemption of or acceleration prior to maturity of any Indebtedness (as defined below) of the Company or any of its Subsidiaries (as defined in the Securities Purchase Agreement) other than with respect to any Other Notes and the Senior Indebtedness; provided that in the case of a payment default of such Indebtedness, such default is not cured within applicable cure periods; further provided that in the case of a non-payment default of such Indebtedness that has not resulted in an acceleration or redemption of such Indebtedness prior to its maturity, only upon acceleration or redemption of such Indebtedness;

(iv) the Company shall fail to observe or perform any other material covenant or agreement contained in the Securities Purchase Agreement, which failure is not cured within ten Business Days after notice of such default sent by the Holder to the Company;

(v) the Company or any of its Subsidiaries, pursuant to or within the meaning of Title 11, U.S. Code, or any similar Federal or state law for the relief of debtors (collectively, "**Bankruptcy Law**"), (A) commences a voluntary case, (B) consents to the entry of an order for relief against it in an involuntary case, (C) consents to the appointment of a receiver, trustee, assignee, liquidator or similar official (a "**Custodian**"), or (D) makes a general assignment for the benefit of its creditors;

(vi) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (A) is for relief against the Company or any of its Subsidiaries in an involuntary case that remains undismissed for a period of 90 days, (B) appoints a Custodian of the Company or any of its Subsidiaries that remains undischarged or unstayed for a period of 90 days, or (C) orders the liquidation of the Company or any of its Subsidiaries;

(vii) a final judgment or judgments for the payment of money aggregating in excess of \$500,000 are rendered against the Company or any of its Subsidiaries and which judgments are not, within 60 days after the entry thereof, bonded, discharged or stayed pending appeal, or are not discharged within 60 days after the expiration of such stay; provided, however, that any judgment which is covered by insurance or an indemnity from a credit worthy party shall not be included in calculating the \$500,000 amount set forth above;

(viii) any breach or failure to comply with Section 15 of this Note; or

(ix) any Event of Default (as defined in the Other Notes) occurs with respect to any Other Notes.

(b) Redemption Right. Promptly after the occurrence of an Event of Default with respect to this Note or any Other Note, the Company shall deliver written notice

thereof via facsimile and overnight courier (an “**Event of Default Notice**”) to the Holder. At any time after the earlier of the Holder’s receipt of an Event of Default Notice and the Holder becoming aware of an Event of Default, the Holder may require the Company to redeem all or any portion of this Note by delivering written notice thereof (the “**Event of Default Redemption Notice**”) to the Company, which Event of Default Redemption Notice shall indicate the portion of this Note the Holder is electing to redeem. Each portion of this Note subject to redemption by the Company pursuant to this Section 4(b) shall be redeemed by the Company at a price equal to the greater of (i) the Conversion Amount to be redeemed and (ii) the product of (A) the Conversion Rate with respect to such Conversion Amount in effect at such time as the Holder delivers an Event of Default Redemption Notice and (B) the Closing Sale Price of the Common Stock on the date immediately preceding such Event of Default (the “**Event of Default Redemption Price**”). Redemptions required by this Section 4(b) shall be made in accordance with the provisions of Section 12.

(5) **RIGHTS UPON CHANGE OF CONTROL.**

(a) **Change of Control.** Each of the following events shall constitute a “**Change of Control**”:

- (i) the consolidation, merger or other business combination (including, without limitation, a reorganization or recapitalization) of the Company with or into another Person (other than (A) a consolidation, merger or other business combination (including, without limitation, reorganization or recapitalization) in which holders of the Company’s voting power immediately prior to the transaction continue after the transaction to hold, directly or indirectly, the voting power of the surviving entity or entities necessary to elect a majority of the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities, or (B) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company);
- (ii) the sale or transfer of all or substantially all of the Company’s assets; or
- (iii) a purchase, tender or exchange offer made to and accepted by the holders of more than the 50% of the outstanding shares of Common Stock.

No sooner than 15 days nor later than 10 days prior to the consummation of a Change of Control, but not prior to the public announcement of such Change of Control, the Company shall deliver written notice thereof via facsimile and overnight courier to the Holder (a “**Change of Control Notice**”).

(b) **Assumption.** Prior to the consummation of any Change of Control, the Company will secure from any Person purchasing the Company’s assets or Common Stock or any successor resulting from such Change of Control (in each case, an “**Acquiring Entity**”) a written agreement (in form and substance satisfactory to the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding) to deliver to

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each holder of Notes in exchange for such Notes, a security of the Acquiring Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts and the interest rates of the Notes held by such holder, and satisfactory to the holders of Notes representing at least a majority of the principal amount of the Notes then outstanding. In the event that an Acquiring Entity is directly or indirectly controlled by a company or entity whose common stock or similar equity interest is listed, designated or quoted on a securities exchange or trading market, the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding may elect to treat such Person as the Acquiring Entity for purposes of this Section 5(b).

(c) **Redemption Right.** At any time during the period beginning after the Holder’s receipt of a Change of Control Notice and ending on the date of the consummation of such Change of Control (or, in the event a Change of Control Notice is not delivered at least 10 days prior to a Change of Control, at any time on or after the date which is 10 days prior to a Change of Control and ending ten days after the consummation of such Change of Control), the Holder may require the Company to redeem all or any portion of this Note by delivering written notice thereof (“**Change of Control Redemption Notice**”) to the Company, which Change of Control Redemption Notice shall indicate the Conversion Amount the Holder is electing to redeem; provided, however, that the Company shall not be under any obligation to redeem all or any portion of this Note or to deliver the applicable Change of Control Redemption Price unless and until the applicable Change of Control is consummated. The portion of this Note subject to redemption pursuant to this Section 5 shall be redeemed by the Company in cash at a price equal to the greater of (i) the sum of (x) the product of (A) the Applicable Percentage (as defined below) and (B) the Conversion Amount being redeemed and (y) the amount of any accrued but unpaid Interest on such Conversion Amount being redeemed through the date of such redemption payment and (ii) the product of (x) the Applicable Percentage and (y) the sum of (1) the product of (A) the Conversion Amount being redeemed multiplied by (B) the quotient determined by dividing (I) the aggregate cash consideration and the aggregate cash value of any non-cash consideration per Common Share to be paid to the holders of the Common Shares upon consummation of the Change of Control (any such non-cash consideration in the form of securities to be valued at the higher of the Closing Sale Price of such securities as of the Trading Day immediately prior to the consummation of such Change of Control, the Closing Sale Price on the Trading Day immediately following the public announcement of such proposed Change of Control and the Closing Sale Price on the Trading Day immediately prior to the public announcement of such proposed Change of Control) by (II) the Conversion Price plus (2) the amount of any accrued but unpaid Interest on such Conversion Amount being redeemed through the date of such redemption payment, (the “**Change of Control Redemption Price**”). Redemptions required by this Section 5(c) shall be made in accordance with the provisions of Section 12 and shall have priority to payments to stockholders in connection with a Change of Control. For purposes of this Note, the term “**Applicable Percentage**” means 120% if the Change of Control is consummated on or before the first (1<sup>st</sup>) anniversary of the Original Date, 115% if the Change of Control is consummated after the first (1<sup>st</sup>) anniversary of the Original Date but on or before the second (2<sup>nd</sup>) anniversary of the Original Date, and 110% if the Change

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of Control is consummated at any time after the second (2<sup>nd</sup>) anniversary of the Original Date.

(6) **RIGHTS UPON ISSUANCE OF PURCHASE RIGHTS AND OTHER CORPORATE EVENTS.**

(a) Purchase Rights. If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(b) Other Corporate Events. Prior to the consummation of any recapitalization, reorganization, consolidation, merger, spin-off or other business combination (other than a Change of Control) pursuant to which holders of Common Stock are entitled to receive securities or other assets with respect to or in exchange for Common Stock (a “**Corporate Event**”), the Company shall make appropriate provision to insure that the Holder will thereafter have the right to receive upon a conversion of this Note, (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding.

(7) RIGHTS UPON ISSUANCE OF OTHER SECURITIES.

(a) Adjustment of Conversion Price upon Issuance of Common Stock. If and whenever on or after the Issuance Date, the Company issues or sells, or in accordance with this Section 7(a) is deemed to have issued or sold, any shares of Common Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding shares of Common Stock deemed to have been issued or sold by the Company in connection with any Excluded Security) for a consideration per share (the “**New Securities Issuance Price**”) less than a price (the “**Applicable Price**”) equal to the Conversion Price in effect immediately prior to such issue or sale (the foregoing a “**Dilutive Issuance**”),

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then immediately after such Dilutive Issuance, the Conversion Price then in effect shall be reduced to an amount (rounded to the nearest cent) equal to the New Securities Issuance Price. For purposes of determining the adjusted Conversion Price under this Section 7(a), the following shall be applicable:

(i) Issuance of Options. If the Company in any manner grants or sells any Options and the lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion or exchange or exercise of any Convertible Securities issuable upon exercise of such Option is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting or sale of such Option for such price per share. For purposes of this Section 7(a)(i), the “lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion or exchange or exercise of any Convertible Securities issuable upon exercise of such Option” shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon granting or sale of the Option, upon exercise of the Option and upon conversion or exchange or exercise of any Convertible Security issuable upon exercise of such Option. No further adjustment of the Conversion Price shall be made upon the actual issuance of such Common Stock or of such Convertible Securities upon the exercise of such Options or upon the actual issuance of such Common Stock upon conversion or exchange or exercise of such Convertible Securities.

(ii) Issuance of Convertible Securities. If the Company in any manner issues or sells any Convertible Securities and the lowest price per share for which one share of Common Stock is issuable upon such conversion or exchange or exercise thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this Section 7(a)(ii), the “price per share for which one share of Common Stock is issuable upon such conversion or exchange or exercise” shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the issuance or sale of the Convertible Security and upon the conversion or exchange or exercise of such Convertible Security. No further adjustment of the Conversion Price shall be made upon the actual issuance of such Common Stock upon conversion or exchange or exercise of such Convertible Securities, and if any such issue or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of the Conversion Price had been or are to be made pursuant to other provisions of this Section 7(a), no further adjustment of the Conversion Price shall be made by reason of such issue or sale. Notwithstanding anything in this Note to the contrary, in the event that the Company agrees to decrease the conversion price of any of its 7% Convertible Secured Promissory Notes due August 2007 in connection with an agreement by the holder of any such notes to convert the same, such decrease in the conversion price will not result in any adjustment to the Conversion Price

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pursuant to this Section 7(a) of this Note.

(iii) Change in Option Price or Rate of Conversion. If the purchase price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exchange or exercise of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exchangeable or exercisable for Common Stock changes at any time, the Conversion Price in effect at the time of such change shall be adjusted to the Conversion Price which would have been in effect at such time had such Options or Convertible Securities provided for such changed purchase price, additional consideration or changed conversion rate, as the case may be, at the time initially granted, issued or sold.

(iv) Calculation of Consideration Received. In case any Option is issued in connection with the issue or sale of other securities of the Company, together comprising one integrated transaction in which no specific consideration is allocated to such Options by the parties thereto, the Options will be deemed to have been issued for a consideration of \$.01. If any Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount received by the Company therefor. If any

Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Company will be the fair value of such consideration, except where such consideration consists of securities, in which case the amount of consideration received by the Company will be the Closing Sale Price of such securities on the date of receipt. If any Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such Common Stock, Options or Convertible Securities, as the case may be. The fair value of any consideration other than cash or securities will be determined jointly by the Company and the holders of Notes representing at least a majority of the principal amounts of the Notes then outstanding. If such parties are unable to reach agreement within ten days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five Business Days after the tenth day following the Valuation Event by an independent, reputable appraiser jointly selected by the Company and the holders of Notes representing at least a majority of the principal amounts of the Notes then outstanding. The determination of such appraiser shall be deemed binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne equally by the Company, on the hand, and the holders of the Notes, on the other hand.

(v) Record Date. If the Company takes a record of the holders of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase

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Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(b) Adjustment of Conversion Price upon Subdivision or Combination of Common Stock. If the Company at any time subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased.

(c) Other Events. If any event occurs of the type contemplated by the provisions of this Section 7 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company’s Board of Directors will make an appropriate adjustment in the Conversion Price so as to protect the rights of the Holder under this Note; provided that no such adjustment will increase the Conversion Price as otherwise determined pursuant to this Section 7.

(9) COMPANY’S RIGHT OF MANDATORY CONVERSION. (a) Mandatory Conversion. If at any time from and after the Issuance Date, the Weighted Average Price of the Common Stock exceeds 250% of the conversion price of the Original Notes as of the Original Date (subject to appropriate adjustments for stock splits, stock dividends, stock combinations and other similar transactions after the Original Date) for each of any 20 consecutive Trading Days (the “**Mandatory Conversion Measuring Period**”) and the Conditions to Mandatory Conversion (as set forth in Section 9(c)) are satisfied or waived in writing by the Holder, the Company shall have the right to require the Holder to convert all or any such portion of the Conversion Amount of this Note designated in the Mandatory Conversion Notice into fully paid, validly issued and nonassessable shares of Common Stock in accordance with Section 3(c) hereof at the Conversion Rate as of the Mandatory Conversion Date (as defined below) (a “**Mandatory Conversion**”). The Company may exercise its right to require conversion under this Section 9(a) by delivering within not more than five Trading Days following the end of such Mandatory Conversion Measuring Period a written notice thereof by facsimile and overnight courier to all, but not less than all, of the holders of Notes and the Transfer Agent (the “**Mandatory Conversion Notice**”) and the date all of the holders received such notice is referred to as the “**Mandatory Conversion Notice Date**”). The Mandatory Conversion Notice shall be irrevocable.

(b) Pro Rata Conversion Requirement. If the Company elects to cause a conversion of all or any portion of the Conversion Amount of this Note pursuant to Section 9(a),

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then it must simultaneously take the same action with respect to the Other Notes (except that the Company is not required to take the same action with respect to the Other Notes to the extent limited by Section 3(d) in this Note or similar provisions under the Other Notes). If the Company elects to cause the conversion of this Note pursuant to Section 9(a) (or similar provisions under the Other Notes) with respect to less than all of the Conversion Amounts of the Notes then outstanding, then the Company shall require conversion of a Conversion Amount from each of the holders of the Notes equal to the product of (I) the aggregate Conversion Amount of Notes which the Company has elected to cause to be converted pursuant to Section 9(a), multiplied by (II) the fraction, the numerator of which is the sum of the aggregate principal amount of the Original Notes purchased by such holder pursuant to the Securities Purchase Agreement and the denominator of which is the sum of the aggregate principal amount of the Original Notes purchased by all holders pursuant to the Securities Purchase Agreement (except to the extent limited by Section 3(d) in this Note or similar provisions under the Other Notes) (such fraction with respect to each holder is referred to as its “**Allocation Percentage**,” and such amount with respect to each holder is referred to as its “**Pro Rata Conversion Amount**”). In the event that the initial holder of any Notes shall sell or otherwise transfer any of such holder’s Notes, the transferee shall be allocated a pro rata portion of such holder’s Allocation Percentage. The Mandatory Conversion Notice shall state (i) the Trading Day selected for the Mandatory Conversion in accordance with Section 9(a), which Trading Day shall be at least 10 Business Days but not more than 60 Business Days following the Mandatory Conversion Notice Date (the “**Mandatory Conversion Date**”), (ii) the aggregate Conversion Amount of the Notes which the Company has elected to be subject to mandatory conversion from all of the holders of the Notes pursuant to this Section 9 (and analogous provisions under the Other Notes), (iii) each holder’s Pro Rata Conversion Amount of the Conversion Amount of the Notes the Company has elected to cause to be converted pursuant to this Section 9 (and analogous provisions under the Other Notes) and (iv) the number of shares of Common Stock to be issued to such Holder as of the Mandatory Conversion Date. All Conversion Amounts converted by the Holder after the Mandatory Conversion Notice Date shall reduce the Conversion Amount of this Note required to be converted on the Mandatory Conversion Date. If the Company has elected a Mandatory Conversion, the mechanics of conversion set forth in Section 3(c) shall apply, to the extent applicable, as if the Company and the Transfer Agent had received from the Holder on the Mandatory Conversion Date a Conversion Notice with respect to the Conversion Amount being converted pursuant to the Mandatory Conversion.

(c) Conditions to Mandatory Conversion. For purposes of this Section 9, “**Conditions to Mandatory Conversion**” means the following conditions: (i) during the period beginning on the date that is six months prior to the Mandatory Conversion Date and ending on and including the Mandatory Conversion Date, the Company shall have delivered shares of Common Stock upon any conversion of Conversion Amounts as set forth in Section 3(c)(i); (ii) on each day during the period beginning on the first Trading Day of the Mandatory Conversion Measuring Period and ending on and including the Mandatory Conversion Date, the Common Stock shall be traded on the Principal Market, the NASDAQ Global Market or Global Select Market, the NASDAQ Capital Market, the New York Stock Exchange, or the American Stock Exchange; (iii) on the Mandatory Conversion Date either (x) the Registration Statement or

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Registration Statements contemplated by the Registration Rights Agreement shall be effective and available for the sale for all of the Registrable Securities in accordance with the terms of the Registration Rights Agreement or (y) all shares of Common Stock issuable upon conversion of the Notes shall be eligible for sale without restriction and without the need for registration under any applicable federal or state securities laws; (iv) on the Mandatory Conversion Date, an Authorized Share Failure shall not be in effect; and (v) any such payment of the Conversion Amount in Common Stock shall not consist of more than 20% of the total dollar volume traded in the Common Stock for the 20 Trading Days prior to the Mandatory Conversion Date.

(10) NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, and will at all times in good faith carry out all of the provisions of this Note and take all action as may be required to protect the rights of the Holder of this Note.

(11) RESERVATION OF AUTHORIZED SHARES.

(a) Reservation. The Company shall initially reserve out of its authorized and unissued Common Stock a number of shares of Common Stock for each of the Notes equal to 100% of the Conversion Rate with respect to the Conversion Amount of each such Note as of the Issuance Date. Thereafter, the Company, so long as any of the Notes are outstanding, shall use commercially reasonable efforts to reserve and keep available out of its authorized and unissued Common Stock, solely for the purpose of effecting the conversion of the Notes, 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the conversion of all of the Notes then outstanding (without regard to any limitations on conversions) (the “**Required Reserve Amount**”). The number of shares of Common Stock reserved for conversions of the Notes shall be allocated pro rata among the holders of the Notes based on the principal amount of the Notes held by each holder at the time of Issuance Date or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event that a holder shall sell or otherwise transfer any of such holder’s Notes, each transferee shall be allocated a pro rata portion of such holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any Notes shall be allocated to the remaining holders of Notes, pro rata based on the principal amount of the Notes then held by such holders.

(b) Insufficient Authorized Shares. If at any time while any of the Notes remain outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon conversion of the Notes at least a number of shares of Common Stock equal to the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall as soon as practicable use commercially reasonable efforts to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the Notes then outstanding.

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(12) HOLDER’S REDEMPTIONS.

(a) Mechanics. In the event that the Holder has sent an Event of Default Redemption Notice or a Change of Control Redemption Notice to the Company pursuant to Section 4(b) or Section 5(c), respectively (each, a “**Redemption Notice**”), the Holder shall promptly submit this Note to the Company. If the Holder has submitted an Event of Default Redemption Notice in accordance with Section 4(b), the Company shall deliver the applicable Event of Default Redemption Price to the Holder within five Business Days after the Company’s receipt of the Holder’s Event of Default Redemption Notice. If the Holder has submitted a Change of Control Redemption Notice in accordance with Section 5(c), the Company shall deliver the applicable Change of Control Redemption Price to the Holder concurrently with the consummation of such Change of Control if such notice is received prior to the consummation of such Change of Control and within five Business Days after the Company’s receipt of such notice if such notice is received after the consummation of such Change of Control. With respect to an Amortization Redemption, the Company shall deliver the applicable Amortization Redemption Amount to the Holder within five Business Days after the end of the applicable month for such Amortization Redemption. In the event of a redemption of less than all of the Conversion Amount of this Note, the Company shall promptly cause to be issued and delivered to the Holder, at the Holder’s request, a new Note (in accordance with Section 19(d)) representing the outstanding Principal which has not been redeemed. In the event that the Company does not pay the Event of Default Redemption Price, the Change of Control Redemption Price, or the Amortization Redemption Amount (each, the “**Redemption Price**”), as applicable, to the Holder (or deliver any Common Stock to be issued pursuant to a Redemption Notice) within the time period required, at any time thereafter and until the Company pays such unpaid Redemption Price (and issues any Common Stock required pursuant to a Redemption Notice) in full, the Holder shall have the option, in lieu of redemption, to require the Company to promptly return to the Holder all or any portion of this Note representing the Conversion Amount that was submitted for redemption and for which the applicable Redemption Price (or any Common Stock required to be issued pursuant to a Redemption Notice) has not been paid. Upon the Company’s receipt of such notice, (x) the Redemption Notice shall be null and void with respect to such Conversion Amount, (y) the Company shall immediately return this Note, or issue a new Note (in accordance with Section 19(d)) to the Holder representing such Conversion Amount and (z) the Conversion Price of this Note or such new Notes shall be adjusted to the lesser of (A) the Conversion Price as in effect on the date on which the Redemption Notice is voided and (B) the Closing Bid Price on the date on which the Redemption Notice is voided.

(b) Redemption by Other Holders. Upon the Company’s receipt of notice from any of the holders of the Other Notes for redemption or repayment as a result of an event or occurrence substantially similar to the events or occurrences described in Section 4(b) or Section 5(c) (each, an “**Other Redemption Notice**”), the Company shall immediately forward to the Holder by facsimile a copy of such notice. If the Company receives a Redemption Notice and one or more Other Redemption Notices during the seven Business Day period beginning on and including the date which is three Business Days prior to the Company’s receipt of the

Holder's Redemption Notice and ending on and including the date which is three Business Days after the Company's receipt of the Holder's Redemption Notice and the Company is unable to redeem all principal, interest and other amounts designated in such Redemption Notice and such Other Redemption Notices received during such seven Business Day period, then the Company shall redeem a pro rata amount from each holder of the Notes (including the Holder) based on the principal amount of the Notes submitted for redemption pursuant to such Redemption Notice and such Other Redemption Notices received by the Company during such seven Business Day period.

(13) SUBORDINATION TO SENIOR INDEBTEDNESS.

(a) General. The Company and the Holder covenant and agree that this Note shall be subject to the provisions of this Section 13 and to the extent and in the manner set forth in this Section 13, the indebtedness represented by this Note and the payment of Principal, Interest, the Redemption Price, and any redemption amount, liquidated damages, fees, expenses, or any other amounts in respect of this Note are hereby expressly made subordinate and junior in right of payment to the prior payment in full in cash of all Senior Indebtedness of the Company now outstanding or hereinafter incurred.

(b) No Payment if Default Under Senior Indebtedness.

(i) [Intentionally left blank]

(ii) No cash payment on account of Principal or Redemption Price of, or Interest on, this Note or any other payment payable with respect to this Note shall be made, and no portion of this Note shall be redeemed or purchased directly or indirectly by the Company, if at the time of such payment or purchase or immediately after giving effect thereto, (A) a default in the payment of principal, premium, if any, interest or other obligations in respect of any Senior Indebtedness having either an outstanding principal balance or a commitment to lend greater than \$500,000 ("**Designated Senior Debt**") occurs and is continuing (or, in the case of Senior Indebtedness for which there is a period of grace, in the event of such a default that continues beyond the period of grace, if any, specified in the instrument evidencing such Senior Indebtedness) (a "**Payment Default**"), unless and until such Payment Default shall have been cured or waived or shall have ceased to exist or (B) the Company shall have received notice (a "**Payment Blockage Notice**") from the holder or holders of Designated Senior Debt that there exists under such Designated Senior Debt a default, which shall not have been cured or waived, permitting the holder or holders thereof to declare such Designated Senior Debt due and payable, but only for the period (the "**Payment Blockage Period**") commencing on the date of receipt of the Payment Blockage Notice and ending on the earlier of (a) the date such default shall have been cured or waived, or (b) the 180th day immediately following the Company's receipt of such Payment Blockage Notice. The Company shall resume payments on and distributions in respect of this Note, including any past scheduled payments of the principal of (and premium, if any) and interest on this Note to which the

Holder would have been entitled but for the provisions of this Section 13(b)(ii) in the case of a Payment Default, within five (5) Business Days of the date upon which such Payment Default is cured or waived or ceases to exist (and if payment is made within such time period, any Event of Default with respect to such nonpayment shall be cured). In addition, notwithstanding clauses (A) and (B) of this subsection (ii), unless the holders of Designated Senior Debt shall have accelerated the maturity of such Designated Senior Debt or there is a Payment Default, the Company shall resume payments on this Note within (5) Business Days after the end of each Payment Blockage Period. In any consecutive 365-day period, there shall be (i) no more than three Payment Blockage Notices given in the aggregate on this Note and the Other Notes, irrespective of the number of defaults with respect to Designated Senior Debt during such period, and (ii) at least 90 days during which no Payment Blockage Period shall be in effect.

(c) Payment upon Dissolution, Etc. In the event of any bankruptcy, insolvency, reorganization, receivership, composition, assignment for benefit of creditors or other similar proceeding initiated by or against the Company or any dissolution or winding up or total or partial liquidation or reorganization of the Company (being hereinafter referred to as a "**Proceeding**"), the Holder agrees that such Holder shall, upon request of a holder of Senior Indebtedness, and at such holder of Senior Indebtedness' own expense, take all reasonable actions (including but not limited to the execution and filing of documents and the giving of testimony in any Proceeding, whether or not such testimony could have been compelled by process) necessary to prove the full amount of all its claims in any Proceeding, and the Holder shall not waive any claim in any Proceeding without the written consent of such holder. If the Holder does not file a proper proof of claim or proof of debt in the form required in any Proceeding at least thirty (30) days before the expiration of the time to file such claim, the holders of any Senior Indebtedness are hereby authorized to file an appropriate claim for and on behalf of the Holder.

The Holder shall retain the right to vote and otherwise act with respect to the claims under this Note (including, without limitation, the right to vote to accept or reject any plan of partial or complete liquidation, reorganization, arrangement, composition or extension); provided that the Holder shall not vote with respect to any such plan or take any other action in any way so as to (i) contest the validity of any Senior Indebtedness or any collateral therefor or guaranties thereof, (ii) contest the relative rights and duties of any of the lenders under the Senior Indebtedness established in any instruments or agreement creating or evidencing the Senior Indebtedness with respect to any of such collateral or guaranties, or (iii) contest the Holders' obligations and agreements set forth in this Section 13.

Upon payment or distribution to creditors in a Proceeding of assets of the Company of any kind or character, whether in cash, property or securities, all principal and interest due upon any Senior Indebtedness shall first be paid in full before the Holder shall be entitled to receive or, if received, to retain any payment or distribution on account of this Note, and upon any such Proceeding, any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities, to which the Holder would be entitled except for the



provisions of this Section 13 shall be paid by the Company or by any receiver, trustee in bankruptcy, liquidating trustee, agent or other Person making such payment or distribution, or by the Holder who shall have received such payment or distribution, directly to the holders of the Senior Indebtedness (pro rata to each such holder on the basis of the respective amounts of such Senior Indebtedness held by such holder) or their representatives to the extent necessary to pay all such Senior Indebtedness in full after giving effect to any concurrent payment or distribution to or for the holders of such Senior Indebtedness, before any payment or distribution is made to the Holder or any holders of the Notes.

(d) Payments on Notes. Subject to Sections 13(b) and 13(c), the Company may make regularly scheduled payments of the Principal of, or Interest on, this Note or any other payment payable with respect to this Note, if at the time of payment, and immediately after giving effect thereto, there exists no Payment Default or a Payment Blockage Period.

(e) Certain Rights. Nothing contained in this Section 13 or elsewhere in this Note is intended to or shall impair, as among the Company, its creditors including the holders of Senior Indebtedness and the Holder, the right, which is absolute and unconditional, of the Holder to convert this Note in accordance herewith.

(f) Subrogation. Subject to payment in full in cash of all Senior Indebtedness, the rights of the Holder shall be subrogated to the rights of the holders of Senior Indebtedness to receive payments or distributions of the assets of the Company made on such Senior Indebtedness until all principal and interest on this Note shall be paid in full in cash; and for purposes of such subrogation, no payments or distributions to the holders of Senior Indebtedness of any cash, property or securities to which the Holder would be entitled except for the subordination provisions of this Section 13 shall, as between the Holder and the Company and/or its creditors other than the holders of the Senior Indebtedness, be deemed to be a payment on account of the Senior Indebtedness.

(g) Rights of Holders Unimpaired. The provisions of this Section 13 are and are intended solely for the purposes of defining the relative rights of the Holder and the holders of Senior Indebtedness and nothing in this Section 13 shall impair, as between the Company and the Holder, the obligation of the Company, which is unconditional and absolute, to pay to the Holder the principal thereof (and premium, if any) and interest thereon, in accordance with the terms of this Note.

(h) Holders of Senior Indebtedness. These provisions regarding subordination will constitute a continuing offer to all Persons who, in reliance upon such provisions, become holders of, or continue to hold, Senior Indebtedness; such provisions are made for the benefit of the holders of Senior Indebtedness, and such holders are hereby made obligees under such provisions to the same extent as if they were named therein, and they or any of them may proceed to enforce such subordination and no amendment or modification of the provisions contained herein shall diminish the rights of such holders unless such holders have

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agreed in writing thereto. The holders of Senior Indebtedness may, at any time and from time to time, without the consent of or notice to the Holder, without incurring responsibility to the Holder and without impairing or releasing the subordination provisions of this Section 13, (i) subject to the limitations set forth herein, increase the amount of, change the manner, terms or place of payment of, or renew or alter, any Senior Indebtedness, or otherwise amend, modify, restate or supplement the same (provided that any such modified indebtedness continues to be constitute Senior Indebtedness within the meaning of this Agreement), (ii) sell, exchange or release any collateral mortgaged, pledged or otherwise securing the Senior Indebtedness, (iii) release any Person liable in any manner for the Senior Indebtedness and (iv) exercise or refrain from exercising any rights against the Company or any other Person.

(i) Proceeds Held in Trust. In the event that notwithstanding the foregoing, any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities (including, without limitation, by way of setoff or otherwise) prohibited by the provisions hereof shall be received by the Holder before all Senior Indebtedness if paid in full in cash, such payment or distribution shall be held in trust for the benefit of and shall be paid over or delivered to the holders of Senior Indebtedness, as their respective interests may appear, as calculated by the Company, for application to, or to be held as collateral for, the payment of any Senior Indebtedness remaining unpaid to the extent necessary to pay all Senior Indebtedness in full in cash after giving effect to any concurrent payment or distribution to or for the holders of such Senior Indebtedness.

(j) Blockage of Remedies. During any Payment Default or any Payment Blockage Period, if an Event of Default has occurred and is continuing under this Note, the Holder will not commence or join with any creditor of the Company in asserting or commencing any proceedings to collect or enforce its rights hereunder or take any action to foreclose or realize upon the indebtedness hereunder for a period beginning on the date of such Event of Default and ending on the first to occur of (i) the date that is 180 days following the date that the holders of the Senior Indebtedness are notified of such Event of Default or (ii) the date such Payment Default is cured, waived or ceases to exist or the date such Payment Blockage Period ends, as the case may be; provided, however, that until all of the Senior Indebtedness shall have been paid in full in cash, any payments, distributions or proceeds received by the Holder resulting from the exercise of any action to collect or enforce any right or remedy available to the Holder shall be subject to the terms of this Note.

(k) Subsequent Senior Indebtedness Requested Modifications. In connection with the incurrence of any future Senior Indebtedness, the Holder agrees that it shall act reasonably and negotiate in good faith any modifications to the provisions of this Section 13 reasonably requested by the holder of such Senior Indebtedness; provided that nothing in this section shall restrict the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding from changing or amending this Section 13 pursuant to Section 17 hereof.

(l) Failure to Make Payment. In the event that the Company is

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prohibited or restricted from making any payment required under under this Note by reason of the provisions of this Section 13, such prohibition or restriction shall not preclude the failure to make such payment from being an Event of Default under Section 4(a) of this Note.

(14) VOTING RIGHTS. The Holder shall have no voting rights as the holder of this Note, except as required by law, including but not limited to the Delaware General Corporation Law, and as expressly provided in this Note.

(15) RANK; ADDITIONAL INDEBTEDNESS; LIENS.

(a) Rank. All payments due under this Note (a) shall rank *pari passu* with all Other Notes (“**Pari Passu Indebtedness**”), (b) shall be subordinate in right of payment to the prior payment of all existing and future Senior Indebtedness and (c) shall be senior to all other Indebtedness of the Company and its Subsidiaries, other than Senior Indebtedness and Pari Passu Indebtedness.

(b) Incurrence of Senior Indebtedness. So long as this Note is outstanding, the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, incur or guarantee, assume or suffer to exist any Indebtedness which shall rank senior to the Notes other than Senior Indebtedness.

(c) Existence of Liens. So long as this Note is outstanding, the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, allow or suffer to exist any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by the Company or any of its Subsidiaries (collectively, “**Liens**”) other than Permitted Liens. As used herein, “**Permitted Liens**” means (i) Liens incurred to secure Senior Indebtedness, (ii) Liens on fixed or capital assets acquired, constructed or improved by the Company or any Subsidiary, to the extent of Indebtedness incurred within thirty days for such acquisition, construction or improvement and incurred within thirty days of such acquisition, construction or improvement, (iii) purchase money Liens, or (iv) carriers’, warehousemen’s, mechanics’, materialmen’s, repairmen’s and other similar Liens imposed by law.

(d) Restricted Payments. The Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents (in whole or in part, whether by way of open market purchases, tender offers, private transactions or otherwise), all or any portion of any Indebtedness, other than Senior Indebtedness or Pari Passu Indebtedness, whether by way of payment in respect of principal of (or premium, if any) or interest on, such Indebtedness if at the time such payment is due or is otherwise made or, after giving effect to such payment, an event constituting an Event of Default has occurred and is continuing.

(16) PARTICIPATION. The Holder, as the holder of this Note, shall be

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entitled to such dividends paid and distributions made to the holders of Common Stock (each, a “**Distribution**”), in each such case to the extent of the Distribution as if the Holder had converted this Note into Common Stock (without regard to any limitations on conversion herein or elsewhere) and had held such shares of Common Stock on the record date for such dividends and distributions. Payments (if any) under the preceding sentence shall be made concurrently with the dividend or distribution to the holders of Common Stock.

(17) VOTE TO ISSUE, OR CHANGE THE TERMS OF, NOTES. The affirmative vote at a meeting duly called for such purpose or the written consent without a meeting, of the holders of Notes representing not less than a majority of the aggregate principal amount of the then outstanding Notes, shall be required for any change or amendment to this Note or the Other Notes provided such change or amendment is consented to by the Company, which such consent may be granted or withheld in the sole discretion of the Company.

(18) TRANSFER. This Note may be offered, sold, assigned or transferred by the Holder without the consent of the Company, subject only to the provisions of Section 2(f) of the Securities Purchase Agreement.

(19) REISSUANCE OF THIS NOTE.

(a) Transfer. If this Note is to be transferred, the Holder shall surrender this Note to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Note (in accordance with Section 19(d)), registered as the Holder may request, representing the outstanding Principal being transferred by the Holder and, if less than the entire outstanding Principal is being transferred, a new Note (in accordance with Section 19(d)) to the Holder representing the outstanding Principal not being transferred. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that, by reason of the provisions of Section 3(c)(iii) and this Section 19(a), following conversion or redemption of any portion of this Note, the outstanding Principal represented by this Note may be less than the Principal stated on the face of this Note.

(b) Lost, Stolen or Mutilated Note. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Note, the Company shall execute and deliver to the Holder a new Note (in accordance with Section 19(d)) representing the outstanding Principal.

(c) Note Exchangeable for Different Denominations. This Note is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Note or Notes (in accordance with Section 19(d) and in principal amounts of at least \$100,000) representing in the aggregate the outstanding Principal of this Note, and each such new Note will represent such portion of such outstanding Principal as is designated by the Holder at the time of such surrender.

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(d) Issuance of New Notes. Whenever the Company is required to issue a new Note pursuant to the terms of this Note, such new Note (i) shall be of like tenor with this Note, (ii) shall represent, as indicated on the face of such new Note, the Principal remaining outstanding (or in the case of a new Note being issued pursuant to Section 19(a) or Section 19(c), the Principal designated by the Holder which, when added to the principal represented by the other new Notes issued in connection with such issuance, does not exceed the Principal remaining outstanding under this Note immediately prior to such issuance of new Notes), (iii) shall have an issuance date, as indicated on the face of such new Note, which is the same as the Issuance Date of this Note, (iv) shall have the same rights and conditions as this Note, and (v) shall represent accrued Interest on the Principal and Interest of this Note, from the Issuance Date.

(20) REMEDIES, CHARACTERIZATIONS, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Note shall be cumulative and in addition to all other remedies available under this Note, the Securities Purchase Agreement and the

Registration Rights Agreement, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the Holder's right to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Note. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the Holder shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

(21) PAYMENT OF COLLECTION, ENFORCEMENT AND OTHER COSTS. If (a) this Note is placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or the Holder otherwise takes action to collect amounts due under this Note or to enforce the provisions of this Note or (b) there occurs any bankruptcy, reorganization, receivership of the Company or other proceedings affecting Company creditors' rights and involving a claim under this Note, then the Company shall pay the costs incurred by the Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, but not limited to, attorneys' fees and disbursements.

(22) CONSTRUCTION; HEADINGS. This Note shall be deemed to be jointly drafted by the Company and all the Purchasers and shall not be construed against any person as the drafter hereof. The headings of this Note are for convenience of reference and shall not form part of, or affect the interpretation of, this Note.

(23) FAILURE OR INDULGENCE NOT WAIVER. No failure or delay on

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the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

(24) DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Redemption Price or the arithmetic calculation of the Conversion Rate or the Redemption Price, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within one Business Day of receipt of the Conversion Notice or Redemption Notice or other event giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation within one Business Day of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within one Business Day submit via facsimile (a) the disputed determination of the Closing Bid Price or the Closing Sale Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Conversion Rate or the Redemption Price to the Company's independent, outside accountant. The Company, at the Company's expense, shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than five Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

(25) NOTICES; PAYMENTS.

(a) Notices. Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least twenty days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any pro rata subscription offer to holders of Common Stock or (C) for determining rights to vote with respect to any Change of Control, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder. Notwithstanding the foregoing, Section 4(i) of the Securities Purchase Agreement shall apply to all notices given pursuant to this Note.

(b) Payments. Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, such payment shall be made in lawful money of the United States of America by a check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company

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in writing (which address, in the case of each of the Purchasers, shall initially be as set forth on the Schedule of Buyers attached to the Securities Purchase Agreement); provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder's wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day and, in the case of any Interest Date which is not the date on which this Note is paid in full, the extension of the due date thereof shall not be taken into account for purposes of determining the amount of Interest due on such date.

(26) CANCELLATION. After all Principal, accrued Interest and other amounts at any time owed on this Note has been paid in full, this Note shall automatically be deemed canceled, shall be surrendered to the Company for cancellation and shall not be reissued.

(27) WAIVER OF NOTICE. To the extent permitted by law, the Company hereby waives demand, notice, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Securities Purchase Agreement.

(28) GOVERNING LAW. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.

(29) CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) **“Approved Stock Plan”** means any employee benefit, option or incentive plan which has been approved by the Board of Directors of the Company, pursuant to which the Company’s securities may be issued to any employee, consultant, officer or director for services provided to the Company.

(b) **“Bloomberg”** means Bloomberg Financial Markets.

(c) **“Business Day”** means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(d) **“Calendar Quarter”** means each of: the period beginning on and including January 1 and ending on and including March 31; the period beginning on and including April 1 and ending on and including June 30; the period beginning on and including July 1 and ending on and including September 30; and the period beginning on and including

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October 1 and ending on and including December 31.

(e) **“Closing Bid Price”** and **“Closing Sale Price”** means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or last trade price, respectively, of such security prior to 4:00 p.m., New York Time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 24. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(f) [Intentionally left blank]

(g) **“Contingent Obligation”** means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(h) **“Convertible Securities”** means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Stock.

(i) **“Excluded Securities”** means any shares of Common Stock issued or issuable: (i) in connection with any Approved Stock Plan; (ii) upon conversion of the Notes and the Other Notes; (iii) upon conversion of any Options or Convertible Securities which are outstanding on the Issuance Date, (iv) pursuant to or in connection with commercial credit arrangements, equipment lease financings, acquisitions of other assets or businesses, strategic

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transactions not primarily for financing purposes, or similar transactions into which the Company may enter with a non-affiliate.

(j) **“Indebtedness”** of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services (other than trade payables entered into in the ordinary course of business), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with generally accepted accounting principles, consistently applied for the periods covered thereby, is classified as a capital lease, (G) off-balance sheet liabilities retained in connection with asset securitization programs, synthetic leases, sale and leaseback transactions or other similar obligations arising with respect to any other transaction which is the functional equivalent of or takes the place of borrowing but which does not constitute a liability on the consolidated balance sheet of such Person and its subsidiaries, and (H) all indebtedness referred to in clauses (A) through (G) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (I) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (H) above.

(k) **“Issuance Date”** means October 1, 2007.

(l) **“Options”** means any rights, warrants or options to subscribe for or purchase Common Stock or Convertible Securities.

(m) **“Person”** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(n) **“Principal Market”** means the OTC Bulletin Board.

(o) **“Registration Rights Agreement”** means that certain Registration Rights Agreement, dated January 3, 2007, between the Company and the initial holders of the Interest Notes.

(p) **“SEC”** means the United States Securities and Exchange

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Commission.

(q) **“Securities Purchase Agreement”** means that certain Securities Purchase Agreement, dated January 3, 2007, between the Company and the initial holders of the Original Notes pursuant to which the Company issued the Original Notes.

(r) **“Senior Indebtedness”** means the principal of (and premium, if any), interest on, and all fees and other amounts (including, without limitation, any reasonable costs, enforcement expenses (including reasonable legal fees and disbursements, collateral protection expenses and other reimbursement or indemnity obligations relating thereto)), and all other obligations of the Company under (i) any of the agreements or instruments evidencing any Indebtedness of the Company and its Subsidiaries arising after the Original Date to an unaffiliated, third-party commercial lender (together with any renewals, refundings, refinancings or other extensions thereof) for purposes of purchasing equipment (which debt shall be secured only by the assets purchased with such financing), and (ii) Indebtedness secured by up to a maximum of eighty five percent (85%) of the Company’s accounts receivable and/or up to sixty percent (60%) of the value of the Company’s inventory. For the avoidance of doubt, Senior Indebtedness shall not include the debt which is required to be paid by the Company pursuant to Section 4(i) of the Securities Purchase Agreement.

(s) [Intentionally left blank]

(t) **“Trading Day”** means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded; provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York Time).

(u) [intentionally left blank]

(v) **“Weighted Average Price”** means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York Time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York Time (or such other time as the Principal Market publicly announces is the official close of trading) as reported by Bloomberg through its “Volume at Price” functions, or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York Time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York Time (or such other time as such market publicly

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announces is the official close of trading) as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 24. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

[Signature Page Follows]

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IN WITNESS WHEREOF, the Company has caused this Note to be duly executed as of the Issuance Date set out above.

LIQUIDMETAL TECHNOLOGIES, INC.

By: \_\_\_\_\_

Name: Gerald E. Morrow  
Title: Chief Financial Officer

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**EXHIBIT I**

**LIQUIDMETAL TECHNOLOGIES, INC.  
CONVERSION NOTICE**

Reference is made to the Convertible Subordinated Note (the "**Note**") issued to the undersigned by Liquidmetal Technologies, Inc. (the "**Company**"). In accordance with and pursuant to the Note, the undersigned hereby elects to convert the Conversion Amount (as defined in the Note) of the Note indicated below into shares of Common Stock, par value \$0.001 per share (the "**Common Stock**"), of the Company as of the date specified below.

Date of Conversion:

Aggregate Conversion Amount to be converted:

The undersigned hereby certifies to the Company that the undersigned's conversion of the amount set forth above in accordance with Section 3(a) of the Note will not directly result in the undersigned (together with the undersigned's affiliates) beneficially owning in excess of 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion, calculated in accordance with Section 3(d)(i) of the Note; provided that if the undersigned has previously waived the 4.99% beneficial ownership limitation upon no less than sixty one (61) days prior written notice, the undersigned certifies to the Company that the undersigned's conversion of the amount set forth above will not directly result in the undersigned (together with the undersigned's affiliates) beneficially owning in excess of 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion, calculated in accordance with Section 3(d)(i) of the Note.

Please confirm the following information:

Conversion Price:

Number of shares of Common Stock to be issued:

Please issue the Common Stock into which the Note is being converted in the following name and to the following address:

Issue to:

Facsimile Number:

Authorization:

By: \_\_\_\_\_ Title: \_\_\_\_\_

Dated: \_\_\_\_\_

Account Number:  
(if electronic book entry transfer)

Transaction Code Number:  
(if electronic book entry transfer)

**ACKNOWLEDGMENT**

The Company hereby acknowledges this Conversion Notice and hereby directs American Stock Transfer & Trust Co. to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated January 3, 2007 from the Company.

**LIQUIDMETAL TECHNOLOGIES, INC.**

By: \_\_\_\_\_  
Name:  
Title:



NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT. ANY TRANSFEREE OF THIS NOTE SHOULD CAREFULLY REVIEW THE TERMS OF THIS NOTE, INCLUDING SECTIONS 3(c)(iii) AND 19(a) HEREOF. THE PRINCIPAL AMOUNT REPRESENTED BY THIS NOTE AND, ACCORDINGLY, THE SECURITIES ISSUABLE UPON CONVERSION HEREOF MAY BE LESS THAN THE AMOUNTS SET FORTH ON THE FACE HEREOF PURSUANT TO SECTION 3(c)(iii) OF THIS NOTE.

#### CONVERTIBLE SUBORDINATED NOTE

Issuance Date: January 1, 2009

Principal: U.S. \$ [ ]

**FOR VALUE RECEIVED**, LIQUIDMETAL TECHNOLOGIES, INC., a Delaware corporation (the “**Company**”), hereby promises to pay to the order of [INSERT HOLDER] or registered assigns (“**Holder**”) the amount set out above as the Principal (as reduced pursuant to the terms hereof pursuant to redemption, conversion or otherwise, the “**Principal**”) when due, whether upon the Maturity Date (as defined below), acceleration, redemption or otherwise (in each case in accordance with the terms hereof) and to pay interest (“**Interest**”) on any outstanding Principal at the rate of interest as determined pursuant to Section 2, from the date set out above as the Issuance Date (the “**Issuance Date**”) until the same becomes due and payable, whether upon an Interest Date (as defined below), the Maturity Date, acceleration, conversion, redemption or otherwise (in each case in accordance with the terms hereof). This Convertible Subordinated Note (including all Convertible Subordinated Notes issued in exchange, transfer or replacement hereof, this “**Note**”) is one of an issue of Convertible Subordinated Notes issued on January 3, 2007 (the “**Original Date**”) pursuant to the Securities Purchase Agreement (the “**Original Notes**”) or issued after January 3, 2007 in satisfaction of interest and/or other amounts owing by the Company to the holders of the Original Notes (the “**Interest Notes**”) (the Original Notes and Interest Notes are collectively referred to as the “**Notes**” herein, and any Notes other than this Note are collectively referred to as the “**Other Notes**”). This Note is deemed to be issued pursuant to Section 2 of the Holder’s Original Note and is subject to the terms and provisions of the Securities Purchase Agreement. Certain capitalized terms are defined in Section 29.

(1) MATURITY AND AMORTIZATION PAYMENTS.

(a) Payment on Maturity. On January 3, 2010 (the “**Maturity Date**”), the Holder shall surrender this Note to the Company and the Company shall pay to the Holder an amount in cash representing all outstanding Principal and accrued and unpaid Interest, and following receipt of such payment, the Holder shall mark this Note as “Cancelled” and shall surrender such cancelled Note to the Company by courier, registered mail, or other traceable means. Beginning on the first day of the eighteenth (18<sup>th</sup>) calendar month following the calendar month in which the Original Date occurs, the Company may, upon thirty (30) calendar days prior written notice to Holder and at the sole election of the Company, prepay this Note in whole or in part for a cash redemption price equal to One Hundred Five Percent (105%) of the the portion of the principal amount being redeemed plus all accrued and unpaid interest on the portion of the principal amount being redeemed, provided that following such notice the Holder may convert all or any part of the portion of the Note to be redeemed so long as the Company receives a duly executed Conversion Notice pursuant to Section 3 of this Note prior to the date on which prepayment is actually made. Notwithstanding the foregoing, in the event that prior to the Maturity Date the Company completes a public or private equity or debt offering or an Asset Sale pursuant to which the Company receives aggregate cash proceeds (net of placement agent fees, underwriter’s discounts, and other similar fees or commissions, and net of transaction fees) in excess of Five Million Dollars (\$5,000,000), but excluding financings for the purpose of purchasing capital assets, then any net proceeds from such transaction after payment in full of transaction expenses and the full payment of the Company’s 8% Unsecured Subordinated Notes Due 2007 shall, within five (5) Business Days of the Company’s receipt of such net proceeds, be paid to reduce the Principal and accrued but unpaid interest under this Note and the other Interest Notes (and if such net proceeds are insufficient to pay the Interest Notes in full, then such net proceeds will be paid to the holders of the Interest Notes on a pro rata basis in accordance with the then-outstanding Principal under the Interest Notes held by them). For this purpose, an “Asset Sale” means any sale of assets by the Company in a single transaction or series of related transactions, other than (i) sales of inventory or other assets in the ordinary course of the Company’s business, (ii) sale of obsolete equipment.

(b) Amortization Payments. Beginning on January 31, 2009 and at the end of each month thereafter (each, an “**Amortization Date**”) until there is no outstanding Principal of this Note, the Company shall redeem \$[ ] [1/36th of the original Principal amount of this Note] of this Note (each, an “**Amortization Redemption Amount**”). If the Company is unable to redeem all Principal and Interest with respect to all Amortization Redemption Amounts on this Note and the Other Notes, then the Company shall redeem a pro rata amount from each holder of the Notes (including the Holder) based on the principal amount of the Notes subject to payment of an Amortization Redemption Amount on such Amortization Date pursuant to this Note and the Other Notes.

(c) Payment of Amortization Redemption Amount. The Company shall pay the Amortization Redemption Amount in cash in accordance with the provisions of Section 12; provided, however, that if the Conditions to Amortization Conversion (as defined

below) are satisfied or waived in writing by the Holder and the Company provides the Amortization Conversion Notice (as defined below), then the Company shall have the right to require the Holder to convert all or any such portion of the Amortization Redemption Amount designated in the Amortization Conversion Notice into fully paid, validly issued and nonassessable shares of Common Stock in accordance with the applicable provisions of Section 3(c)(i). The Company may exercise its right to require conversion under this Section 1(c) by delivering at least 20 Trading Days prior to such Amortization Date a written notice thereof by facsimile and overnight courier to all, but not less than all, of the holders of Notes and the Transfer Agent that specifically describes the portion of the Amortization Redemption Amount for this Note and the Other Notes that will be paid in Common Stock (the “**Amortization Conversion Notice**” and the date all of the holders received such notice is referred to as the “**Amortization Conversion Notice Date**”). The Amortization Conversion Notice shall be irrevocable; provided, that if any of the Conditions to Amortization Conversion is not satisfied on the applicable Amortization Date or waived by the Holder, the Company will notwithstanding delivery of the Amortization Conversion Notice be required to pay the Amortization Redemption Amount in cash. The conversion price applicable to an Amortization Conversion (the “**Amortization Price**”) that is being paid in Common Stock pursuant to this

Section 1(c) shall be 90% of the Weighted Average Price of the Common Stock for the 20 consecutive Trading Days immediately preceding the Amortization Date. For purposes of this Section 1(c), “**Conditions to Amortization Conversion**” means the following conditions: (i) the Common Stock shall be traded on the Principal Market, the NASDAQ Global Market or NASDAQ Capital Market, or the American Stock Exchange on the applicable Amortization Date, (ii) on the Amortization Date, either (x) the Registration Statement or Registration Statements contemplated by the Registration Rights Agreement shall be effective and available for the sale for all of the Registrable Securities (as defined in the Registration Rights Agreement) then outstanding, together with the Common Stock to be issued on such Amortization Date, in accordance with the terms of the Registration Rights Agreement or (y) all shares of Common Stock issuable upon conversion of the Notes shall be eligible for sale without restriction and without the need for registration under any applicable federal or state securities laws, (iii) an Authorized Share Failure shall not be in effect on the Amortization Date; and (iv) any such payment of the Amortization Redemption Amount in Common Stock shall not consist of more than 20% of the total dollar volume traded in the Common Stock for the 20 Trading Days prior to the Amortization Date.

(d) Special Redemption Right. Within two (2) trading days after the closing of one or more Qualified Transactions resulting in \$25,000,000 (Twenty Five Million Dollars) in aggregate proceeds after transaction expenses and placement agent or broker commissions or fees, the Company will notify the Holder of said closing (a “**Transaction Notice**”). Upon the closing of the Qualified Transaction, the Holder may elect to have all or part of the outstanding principal amount of this Note and all accrued but unpaid interest thereunder redeemed within five (5) Trading Days of the Company’s receipt of written notice of the Holder’s election to effect such redemption. In order to elect such redemption, the Holder must deliver written notice of redemption to the Company within twenty (20) Trading Days after its receipt of the Transaction Notice, and such written notice must be accompanied by the surrender of the originally executed Note, which must be marked “cancelled” (provided that in lieu of

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surrendering the Notes (if not fully redeemed), the Holder may deliver a certification to the Company affirming that the requisite principal amount of Notes is being forfeited as a result of such redemption, in which case the change in the Notes will be noted by book entry by the Company). For purposes hereof, the term “**Qualified Transactions**” means (A) the sale of Liquidmetal Korea’s manufacturing facility in Pyong-Taek, Republic of Korea and that the appropriate authorities or banks in the Republic of Korea approve the transfer of such proceeds from Liquidmetal Korea to the Company and/or (B) the raising of capital in a debt or equity offering after the date hereof (subject to any restrictions or limitations thereon set forth in the Purchase Agreement or the Notes).

(2) INTEREST; INTEREST RATE. Interest on this Note shall commence accruing on the Issuance Date and shall be computed on the basis of a 365-day year and actual days elapsed and shall be payable in arrears on the first day of each Calendar Quarter and on the Maturity Date during the period beginning on the Issuance Date and ending on, and including, the Maturity Date (each, an “**Interest Date**”) with the first Interest Date being April 1, 2009. Interest shall be payable on each Interest Date in cash at the rate of 8.00% per annum (the “**Interest Rate**”). Prior to the payment of Interest on an Interest Date, Interest on this Note shall accrue at the Interest Rate and be payable by way of inclusion of the Interest in the Conversion Amount in accordance with Section 3(b)(i). From and after the occurrence of an Event of Default, the Interest Rate shall be increased so that the Interest Rate shall be twelve percent (12.00%) per annum. In the event that such Event of Default is subsequently cured, the adjustment referred to in the preceding sentence shall cease to be effective as of the date of such cure; provided that the Interest as calculated at such increased rate during the continuance of such Event of Default shall continue to apply to the extent relating to the days after the occurrence of such Event of Default through and including the date of cure of such Event of Default.

(3) CONVERSION OF NOTES. This Note shall be convertible into shares of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”), on the terms and conditions set forth in this Section 3.

(a) Conversion Right. Subject to the provisions of Section 3(d), at any time or times on or after the Issuance Date, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount (as defined below) in increments of at least \$50,000 of Principal (or such lesser amount if such amount represents the remaining Principal amount) into fully paid and nonassessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all taxes that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) Conversion Rate. The number of shares of Common Stock

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issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (as defined below) (the “**Conversion Rate**”).

(i) “**Conversion Amount**” means the sum of (A) the portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made, plus (B) accrued and unpaid Interest with respect to such Principal.

(ii) “**Conversion Price**” means, as of any Conversion Date (as defined below) or other date of determination, and subject to adjustment as provided herein, \$1.10.

(c) Mechanics of Conversion.

(i) Optional Conversion. To convert any Conversion Amount into shares of Common Stock on any date (a “**Conversion Date**”), the Holder shall (A) transmit by facsimile (or otherwise deliver), for receipt on or prior to 5:00 p.m., New York Time, on such date, a copy of an executed notice of conversion in the form attached hereto as Exhibit I (the “**Conversion Notice**”) to the Company and (B) if required by Section 3(c)(iii), surrender this Note to a common carrier for delivery to the Company as soon as practicable on or following such date (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first Business Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile a confirmation of receipt of such Conversion Notice to the Holder and the Company’s transfer agent (the “**Transfer Agent**”). On or before the second Business Day following the date of receipt of a Conversion Notice (the “**Share Delivery Date**”), the Company shall (X) credit such aggregate number of shares of Common Stock to which the Holder shall be entitled to the Holder’s or its

designee's balance account with Depository Trust Company ("DTC") through its Deposit Withdrawal At Custodian system or (Y) if the Transfer Agent is not participating in DTC Fast Automated Securities Transfer Program, issue and deliver to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled. If this Note is physically surrendered for conversion as required by Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than five Business Days after receipt of this Note and at its own expense, issue and deliver to the holder a new Note (in accordance with Section 19(d)) representing the outstanding Principal not converted. The Person or Persons entitled to receive the shares of Common Stock issuable upon a conversion of this Note shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the Conversion Date.

(ii) Company's Failure to Timely Convert. If the Company shall fail to issue a certificate to the Holder or credit the Holder's balance account with DTC for the number of shares of Common Stock to which the Holder is entitled upon conversion of any

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Conversion Amount on or prior to the date which is five Business Days after the Conversion Date (a "**Conversion Failure**"), then (A) the Company shall pay liquidated damages to the Holder for each day of such Conversion Failure in an amount equal to 1.0% of the product of (I) the sum of the number of shares of Common Stock not issued to the Holder on or prior to the Share Delivery Date and to which the Holder is entitled, and (II) the Closing Sale Price of the Common Stock on the Share Delivery Date and (B) the Holder, upon written notice to the Company, may void its Conversion Notice with respect to, and retain or have returned, as the case may be, any portion of this Note that has not been converted pursuant to such Conversion Notice; provided that the voiding of a Conversion Notice shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 3(c)(ii) or otherwise. In addition to the foregoing, if within three (3) Trading Days after the Company's receipt of the facsimile copy of a Conversion Notice the Company shall fail to issue and deliver a certificate to the Holder or credit the Holder's balance account with DTC for the number of shares of Common Stock to which the Holder is entitled upon such holder's conversion of any Conversion Amount, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) Common Stock to deliver in satisfaction of a sale by the Holder of Common Stock issuable upon such conversion that the Holder anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within five (5) Business Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to issue such Common Stock) shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Common Stock and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the Conversion Date.

(iii) Book-Entry. Notwithstanding anything to the contrary set forth herein, upon conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting physical surrender and reissue of this Note. The Holder and the Company shall maintain records showing the Principal and Interest converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion.

(iv) Pro Rata Conversion; Disputes. In the event that the Company receives a Conversion Notice from more than one holder of Notes for the same Conversion Date and the Company can convert some, but not all, of such portions of the Notes submitted

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for conversion, the Company, subject to Section 3(d), shall convert from each holder of Notes electing to have Notes converted on such date a pro rata amount of such holder's portion of its Notes submitted for conversion based on the principal amount of Notes submitted for conversion on such date by such holder relative to the aggregate principal amount of all Notes submitted for conversion on such date. In the event of a dispute as to the number of shares of Common Stock issuable to the Holder in connection with a conversion of this Note, the Company shall issue to the Holder the number of shares of Common Stock not in dispute and resolve such dispute in accordance with Section 24.

(d) Limitations on Conversions.

(i) Beneficial Ownership. Unless waived by the Holder upon no less than sixty one (61) days prior written notice to the Company, the Company shall not effect any conversion of this Note pursuant to Section 3(a) to the extent that after giving effect to such conversion the Holder (together with the Holder's affiliates) would beneficially own in excess of 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. Even if the Holder waives the limitation set forth in the preceding sentence, the Company shall in no event effect any conversion of this Note, and the Holder of this Note shall not have the right to convert any portion of this Note pursuant to Section 3(a), to the extent that after giving effect to such conversion, the Holder (together with the Holder's affiliates) would beneficially own in excess of 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentences, the number of shares of Common Stock beneficially owned by the Holder and its affiliates shall include the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of its affiliates and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any Other Notes or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its affiliates. Except as set forth in the preceding sentence, for purposes of this Section 3(d)(i), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. For purposes of this Section 3(d)(i), in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Form 10-Q or Form 10-K, (y) a more recent public announcement by the Company or (z) any other notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written or oral request of the Holder, the Company shall within two Business Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder

or its affiliates since the date as of which such number of outstanding shares of Common Stock was reported.

(ii) Principal Market Regulation. The Company shall not be obligated to issue any shares of Common Stock upon conversion of this Note if the issuance of such shares of Common Stock would exceed that number of shares of Common Stock that the Company may issue upon conversion of the Notes without breaching the Company's obligations under the rules or regulations of the Principal Market (the "**Exchange Cap**"), except that such limitation shall not apply in the event that the Company (A) obtains the approval of its stockholders as required by the applicable rules of the Principal Market for issuances of Common Stock in excess of such amount or (B) obtains a written opinion from outside counsel to the Company that such approval is not required, which opinion shall be reasonably satisfactory to the holders of the Notes representing at least a majority of the principal amounts of the Notes then outstanding. Until such approval or written opinion is obtained, no holders of Notes (the "**Purchasers**") shall be issued, upon conversion of Notes, shares of Common Stock in an amount greater than the product of the Exchange Cap multiplied by a fraction, the numerator of which is the principal amount of Original Notes issued to such Purchaser pursuant to the Securities Purchase Agreement on the Issuance Date and the denominator of which is the aggregate principal amount of all Original Notes issued to the Purchasers pursuant to the Securities Purchase Agreement on the Issuance Date (with respect to each Purchaser, the "**Exchange Cap Allocation**"). In the event that any Purchaser shall sell or otherwise transfer any of such Purchaser's Notes, the transferee shall be allocated a pro rata portion of such Purchaser's Exchange Cap Allocation, and the restrictions of the prior sentence shall apply to such transferee with respect to the portion of the Exchange Cap Allocation allocated to such transferee. In the event that any holder of Notes shall convert all of such holder's Notes into a number of shares of Common Stock which, in the aggregate, is less than such holder's Exchange Cap Allocation, then the difference between such holder's Exchange Cap Allocation and the number of shares of Common Stock actually issued to such holder shall be allocated to the respective Exchange Cap Allocations of the remaining holders of Notes on a pro rata basis in proportion to the aggregate principal amount of the Notes then held by each such holder.

(4) RIGHTS UPON EVENT OF DEFAULT.

(a) Event of Default. Each of the following events shall constitute an "**Event of Default**":

(i) the Company's failure to pay to the Holder any amount of Principal or Interest when and as due under this Note if such failure continues for a period of at least five Business Days;

(ii) the Company's failure to pay to the Holder any amounts other than Principal or Interest when and as due under this Note, the Securities Purchase Agreement, or the

Registration Rights Agreement, which failure is not cured within five Business Days after notice of such default sent by the Holder to the Company;

(iii) any default under, redemption of or acceleration prior to maturity of any Indebtedness (as defined below) of the Company or any of its Subsidiaries (as defined in the Securities Purchase Agreement) other than with respect to any Other Notes and the Senior Indebtedness; provided that in the case of a payment default of such Indebtedness, such default is not cured within applicable cure periods; further provided that in the case of a non-payment default of such Indebtedness that has not resulted in an acceleration or redemption of such Indebtedness prior to its maturity, only upon acceleration or redemption of such Indebtedness;

(iv) the Company shall fail to observe or perform any other material covenant or agreement contained in the Securities Purchase Agreement, which failure is not cured within ten Business Days after notice of such default sent by the Holder to the Company;

(v) the Company or any of its Subsidiaries, pursuant to or within the meaning of Title 11, U.S. Code, or any similar Federal or state law for the relief of debtors (collectively, "**Bankruptcy Law**"), (A) commences a voluntary case, (B) consents to the entry of an order for relief against it in an involuntary case, (C) consents to the appointment of a receiver, trustee, assignee, liquidator or similar official (a "**Custodian**"), or (D) makes a general assignment for the benefit of its creditors;

(vi) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (A) is for relief against the Company or any of its Subsidiaries in an involuntary case that remains undismissed for a period of 90 days, (B) appoints a Custodian of the Company or any of its Subsidiaries that remains undischarged or unstayed for a period of 90 days, or (C) orders the liquidation of the Company or any of its Subsidiaries;

(vii) a final judgment or judgments for the payment of money aggregating in excess of \$500,000 are rendered against the Company or any of its Subsidiaries and which judgments are not, within 60 days after the entry thereof, bonded, discharged or stayed pending appeal, or are not discharged within 60 days after the expiration of such stay; provided, however, that any judgment which is covered by insurance or an indemnity from a credit worthy party shall not be included in calculating the \$500,000 amount set forth above;

(viii) any breach or failure to comply with Section 15 of this Note; or

(ix) any Event of Default (as defined in the Other Notes) occurs with respect to any Other Notes.

(b) Redemption Right. Promptly after the occurrence of an Event of Default with respect to this Note or any Other Note, the Company shall deliver written notice

thereof via facsimile and overnight courier (an “**Event of Default Notice**”) to the Holder. At any time after the earlier of the Holder’s receipt of an Event of Default Notice and the Holder becoming aware of an Event of Default, the Holder may require the Company to redeem all or any portion of this Note by delivering written notice thereof (the “**Event of Default Redemption Notice**”) to the Company, which Event of Default Redemption Notice shall indicate the portion of this Note the Holder is electing to redeem. Each portion of this Note subject to redemption by the Company pursuant to this Section 4(b) shall be redeemed by the Company at a price equal to the greater of (i) the Conversion Amount to be redeemed and (ii) the product of (A) the Conversion Rate with respect to such Conversion Amount in effect at such time as the Holder delivers an Event of Default Redemption Notice and (B) the Closing Sale Price of the Common Stock on the date immediately preceding such Event of Default (the “**Event of Default Redemption Price**”). Redemptions required by this Section 4(b) shall be made in accordance with the provisions of Section 12.

(5) **RIGHTS UPON CHANGE OF CONTROL.**

(a) **Change of Control.** Each of the following events shall constitute a “**Change of Control**”:

- (i) the consolidation, merger or other business combination (including, without limitation, a reorganization or recapitalization) of the Company with or into another Person (other than (A) a consolidation, merger or other business combination (including, without limitation, reorganization or recapitalization) in which holders of the Company’s voting power immediately prior to the transaction continue after the transaction to hold, directly or indirectly, the voting power of the surviving entity or entities necessary to elect a majority of the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities, or (B) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company);
- (ii) the sale or transfer of all or substantially all of the Company’s assets; or
- (iii) a purchase, tender or exchange offer made to and accepted by the holders of more than the 50% of the outstanding shares of Common Stock.

No sooner than 15 days nor later than 10 days prior to the consummation of a Change of Control, but not prior to the public announcement of such Change of Control, the Company shall deliver written notice thereof via facsimile and overnight courier to the Holder (a “**Change of Control Notice**”).

(b) **Assumption.** Prior to the consummation of any Change of Control, the Company will secure from any Person purchasing the Company’s assets or Common Stock or any successor resulting from such Change of Control (in each case, an “**Acquiring Entity**”) a written agreement (in form and substance satisfactory to the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding) to deliver to

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each holder of Notes in exchange for such Notes, a security of the Acquiring Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the principal amounts and the interest rates of the Notes held by such holder, and satisfactory to the holders of Notes representing at least a majority of the principal amount of the Notes then outstanding. In the event that an Acquiring Entity is directly or indirectly controlled by a company or entity whose common stock or similar equity interest is listed, designated or quoted on a securities exchange or trading market, the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding may elect to treat such Person as the Acquiring Entity for purposes of this Section 5(b).

(c) **Redemption Right.** At any time during the period beginning after the Holder’s receipt of a Change of Control Notice and ending on the date of the consummation of such Change of Control (or, in the event a Change of Control Notice is not delivered at least 10 days prior to a Change of Control, at any time on or after the date which is 10 days prior to a Change of Control and ending ten days after the consummation of such Change of Control), the Holder may require the Company to redeem all or any portion of this Note by delivering written notice thereof (“**Change of Control Redemption Notice**”) to the Company, which Change of Control Redemption Notice shall indicate the Conversion Amount the Holder is electing to redeem; provided, however, that the Company shall not be under any obligation to redeem all or any portion of this Note or to deliver the applicable Change of Control Redemption Price unless and until the applicable Change of Control is consummated. The portion of this Note subject to redemption pursuant to this Section 5 shall be redeemed by the Company in cash at a price equal to the greater of (i) the sum of (x) the product of (A) the Applicable Percentage (as defined below) and (B) the Conversion Amount being redeemed and (y) the amount of any accrued but unpaid Interest on such Conversion Amount being redeemed through the date of such redemption payment and (ii) the product of (x) the Applicable Percentage and (y) the sum of (1) the product of (A) the Conversion Amount being redeemed multiplied by (B) the quotient determined by dividing (I) the aggregate cash consideration and the aggregate cash value of any non-cash consideration per Common Share to be paid to the holders of the Common Shares upon consummation of the Change of Control (any such non-cash consideration in the form of securities to be valued at the higher of the Closing Sale Price of such securities as of the Trading Day immediately prior to the consummation of such Change of Control, the Closing Sale Price on the Trading Day immediately following the public announcement of such proposed Change of Control and the Closing Sale Price on the Trading Day immediately prior to the public announcement of such proposed Change of Control) by (II) the Conversion Price plus (2) the amount of any accrued but unpaid Interest on such Conversion Amount being redeemed through the date of such redemption payment, (the “**Change of Control Redemption Price**”). Redemptions required by this Section 5(c) shall be made in accordance with the provisions of Section 12 and shall have priority to payments to stockholders in connection with a Change of Control. For purposes of this Note, the term “**Applicable Percentage**” means 120% if the Change of Control is consummated on or before the first (1<sup>st</sup>) anniversary of the Original Date, 115% if the Change of Control is consummated after the first (1<sup>st</sup>) anniversary of the Original Date but on or before the second (2<sup>nd</sup>) anniversary of the Original Date, and 110% if the Change

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of Control is consummated at any time after the second (2<sup>nd</sup>) anniversary of the Original Date.

(6) **RIGHTS UPON ISSUANCE OF PURCHASE RIGHTS AND OTHER CORPORATE EVENTS.**

(a) Purchase Rights. If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without taking into account any limitations or restrictions on the convertibility of this Note) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

(b) Other Corporate Events. Prior to the consummation of any recapitalization, reorganization, consolidation, merger, spin-off or other business combination (other than a Change of Control) pursuant to which holders of Common Stock are entitled to receive securities or other assets with respect to or in exchange for Common Stock (a “**Corporate Event**”), the Company shall make appropriate provision to insure that the Holder will thereafter have the right to receive upon a conversion of this Note, (i) in addition to the shares of Common Stock receivable upon such conversion, such securities or other assets to which the Holder would have been entitled with respect to such shares of Common Stock had such shares of Common Stock been held by the Holder upon the consummation of such Corporate Event or (ii) in lieu of the shares of Common Stock otherwise receivable upon such conversion, such securities or other assets received by the holders of Common Stock in connection with the consummation of such Corporate Event in such amounts as the Holder would have been entitled to receive had this Note initially been issued with conversion rights for the form of such consideration (as opposed to shares of Common Stock) at a conversion rate for such consideration commensurate with the Conversion Rate. Provision made pursuant to the preceding sentence shall be in a form and substance satisfactory to the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding.

(7) RIGHTS UPON ISSUANCE OF OTHER SECURITIES.

(a) Adjustment of Conversion Price upon Issuance of Common Stock. If and whenever on or after the Issuance Date, the Company issues or sells, or in accordance with this Section 7(a) is deemed to have issued or sold, any shares of Common Stock (including the issuance or sale of shares of Common Stock owned or held by or for the account of the Company, but excluding shares of Common Stock deemed to have been issued or sold by the Company in connection with any Excluded Security) for a consideration per share (the “**New Securities Issuance Price**”) less than a price (the “**Applicable Price**”) equal to the Conversion Price in effect immediately prior to such issue or sale (the foregoing a “**Dilutive Issuance**”),

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then immediately after such Dilutive Issuance, the Conversion Price then in effect shall be reduced to an amount (rounded to the nearest cent) equal to the New Securities Issuance Price. For purposes of determining the adjusted Conversion Price under this Section 7(a), the following shall be applicable:

(i) Issuance of Options. If the Company in any manner grants or sells any Options and the lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion or exchange or exercise of any Convertible Securities issuable upon exercise of such Option is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting or sale of such Option for such price per share. For purposes of this Section 7(a)(i), the “lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion or exchange or exercise of any Convertible Securities issuable upon exercise of such Option” shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon granting or sale of the Option, upon exercise of the Option and upon conversion or exchange or exercise of any Convertible Security issuable upon exercise of such Option. No further adjustment of the Conversion Price shall be made upon the actual issuance of such Common Stock or of such Convertible Securities upon the exercise of such Options or upon the actual issuance of such Common Stock upon conversion or exchange or exercise of such Convertible Securities.

(ii) Issuance of Convertible Securities. If the Company in any manner issues or sells any Convertible Securities and the lowest price per share for which one share of Common Stock is issuable upon such conversion or exchange or exercise thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this Section 7(a)(ii), the “price per share for which one share of Common Stock is issuable upon such conversion or exchange or exercise” shall be equal to the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the issuance or sale of the Convertible Security and upon the conversion or exchange or exercise of such Convertible Security. No further adjustment of the Conversion Price shall be made upon the actual issuance of such Common Stock upon conversion or exchange or exercise of such Convertible Securities, and if any such issue or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of the Conversion Price had been or are to be made pursuant to other provisions of this Section 7(a), no further adjustment of the Conversion Price shall be made by reason of such issue or sale. Notwithstanding anything in this Note to the contrary, in the event that the Company agrees to decrease the conversion price of any of its 7% Convertible Secured Promissory Notes due August 2007 in connection with an agreement by the holder of any such notes to convert the same, such decrease in the conversion price will not result in any adjustment to the Conversion Price

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pursuant to this Section 7(a) of this Note.

(iii) Change in Option Price or Rate of Conversion. If the purchase price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exchange or exercise of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exchangeable or exercisable for Common Stock changes at any time, the Conversion Price in effect at the time of such change shall be adjusted to the Conversion Price which would have been in effect at such time had such Options or Convertible Securities provided for such changed purchase price, additional consideration or changed conversion rate, as the case may be, at the time initially granted, issued or sold.

(iv) Calculation of Consideration Received. In case any Option is issued in connection with the issue or sale of other securities of the Company, together comprising one integrated transaction in which no specific consideration is allocated to such Options by the parties thereto, the Options will be deemed to have been issued for a consideration of \$.01. If any Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount received by the Company therefor. If any



Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Company will be the fair value of such consideration, except where such consideration consists of securities, in which case the amount of consideration received by the Company will be the Closing Sale Price of such securities on the date of receipt. If any Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such Common Stock, Options or Convertible Securities, as the case may be. The fair value of any consideration other than cash or securities will be determined jointly by the Company and the holders of Notes representing at least a majority of the principal amounts of the Notes then outstanding. If such parties are unable to reach agreement within ten days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five Business Days after the tenth day following the Valuation Event by an independent, reputable appraiser jointly selected by the Company and the holders of Notes representing at least a majority of the principal amounts of the Notes then outstanding. The determination of such appraiser shall be deemed binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne equally by the Company, on the hand, and the holders of the Notes, on the other hand.

(v) **Record Date.** If the Company takes a record of the holders of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase

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Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(b) **Adjustment of Conversion Price upon Subdivision or Combination of Common Stock.** If the Company at any time subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased.

(c) **Other Events.** If any event occurs of the type contemplated by the provisions of this Section 7 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company’s Board of Directors will make an appropriate adjustment in the Conversion Price so as to protect the rights of the Holder under this Note; provided that no such adjustment will increase the Conversion Price as otherwise determined pursuant to this Section 7.

(9) **COMPANY’S RIGHT OF MANDATORY CONVERSION.** (a) **Mandatory Conversion.** If at any time from and after the Issuance Date, the Weighted Average Price of the Common Stock exceeds 250% of the conversion price of the Original Notes as of the Original Date (subject to appropriate adjustments for stock splits, stock dividends, stock combinations and other similar transactions after the Original Date) for each of any 20 consecutive Trading Days (the “**Mandatory Conversion Measuring Period**”) and the Conditions to Mandatory Conversion (as set forth in Section 9(c)) are satisfied or waived in writing by the Holder, the Company shall have the right to require the Holder to convert all or any such portion of the Conversion Amount of this Note designated in the Mandatory Conversion Notice into fully paid, validly issued and nonassessable shares of Common Stock in accordance with Section 3(c) hereof at the Conversion Rate as of the Mandatory Conversion Date (as defined below) (a “**Mandatory Conversion**”). The Company may exercise its right to require conversion under this Section 9(a) by delivering within not more than five Trading Days following the end of such Mandatory Conversion Measuring Period a written notice thereof by facsimile and overnight courier to all, but not less than all, of the holders of Notes and the Transfer Agent (the “**Mandatory Conversion Notice**”) and the date all of the holders received such notice is referred to as the “**Mandatory Conversion Notice Date**”). The Mandatory Conversion Notice shall be irrevocable.

(b) **Pro Rata Conversion Requirement.** If the Company elects to cause a conversion of all or any portion of the Conversion Amount of this Note pursuant to Section 9(a),

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then it must simultaneously take the same action with respect to the Other Notes (except that the Company is not required to take the same action with respect to the Other Notes to the extent limited by Section 3(d) in this Note or similar provisions under the Other Notes). If the Company elects to cause the conversion of this Note pursuant to Section 9(a) (or similar provisions under the Other Notes) with respect to less than all of the Conversion Amounts of the Notes then outstanding, then the Company shall require conversion of a Conversion Amount from each of the holders of the Notes equal to the product of (I) the aggregate Conversion Amount of Notes which the Company has elected to cause to be converted pursuant to Section 9(a), multiplied by (II) the fraction, the numerator of which is the sum of the aggregate principal amount of the Original Notes purchased by such holder pursuant to the Securities Purchase Agreement and the denominator of which is the sum of the aggregate principal amount of the Original Notes purchased by all holders pursuant to the Securities Purchase Agreement (except to the extent limited by Section 3(d) in this Note or similar provisions under the Other Notes) (such fraction with respect to each holder is referred to as its “**Allocation Percentage**,” and such amount with respect to each holder is referred to as its “**Pro Rata Conversion Amount**”). In the event that the initial holder of any Notes shall sell or otherwise transfer any of such holder’s Notes, the transferee shall be allocated a pro rata portion of such holder’s Allocation Percentage. The Mandatory Conversion Notice shall state (i) the Trading Day selected for the Mandatory Conversion in accordance with Section 9(a), which Trading Day shall be at least 10 Business Days but not more than 60 Business Days following the Mandatory Conversion Notice Date (the “**Mandatory Conversion Date**”), (ii) the aggregate Conversion Amount of the Notes which the Company has elected to be subject to mandatory conversion from all of the holders of the Notes pursuant to this Section 9 (and analogous provisions under the Other Notes), (iii) each holder’s Pro Rata Conversion Amount of the Conversion Amount of the Notes the Company has elected to cause to be converted pursuant to this Section 9 (and analogous provisions under the Other Notes) and (iv) the number of shares of Common Stock to be issued to such Holder as of the Mandatory Conversion Date. All Conversion Amounts converted by the Holder after the Mandatory Conversion Notice Date shall reduce the Conversion Amount of this Note required to be converted on the Mandatory Conversion Date. If the Company has elected a Mandatory Conversion, the mechanics of conversion set forth in Section 3(c) shall apply, to the extent applicable, as if the Company and the Transfer Agent had received from the Holder on the Mandatory Conversion Date a Conversion Notice with respect to the Conversion Amount being converted pursuant to the Mandatory Conversion.

(c) Conditions to Mandatory Conversion. For purposes of this Section 9, “**Conditions to Mandatory Conversion**” means the following conditions: (i) during the period beginning on the date that is six months prior to the Mandatory Conversion Date and ending on and including the Mandatory Conversion Date, the Company shall have delivered shares of Common Stock upon any conversion of Conversion Amounts as set forth in Section 3(c)(i); (ii) on each day during the period beginning on the first Trading Day of the Mandatory Conversion Measuring Period and ending on and including the Mandatory Conversion Date, the Common Stock shall be traded on the Principal Market, the NASDAQ Global Market or Global Select Market, the NASDAQ Capital Market, the New York Stock Exchange, or the American Stock Exchange; (iii) on the Mandatory Conversion Date either (x) the Registration Statement or

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Registration Statements contemplated by the Registration Rights Agreement shall be effective and available for the sale for all of the Registrable Securities in accordance with the terms of the Registration Rights Agreement or (y) all shares of Common Stock issuable upon conversion of the Notes shall be eligible for sale without restriction and without the need for registration under any applicable federal or state securities laws; (iv) on the Mandatory Conversion Date, an Authorized Share Failure shall not be in effect; and (v) any such payment of the Conversion Amount in Common Stock shall not consist of more than 20% of the total dollar volume traded in the Common Stock for the 20 Trading Days prior to the Mandatory Conversion Date.

(10) NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, and will at all times in good faith carry out all of the provisions of this Note and take all action as may be required to protect the rights of the Holder of this Note.

(11) RESERVATION OF AUTHORIZED SHARES.

(a) Reservation. The Company shall initially reserve out of its authorized and unissued Common Stock a number of shares of Common Stock for each of the Notes equal to 100% of the Conversion Rate with respect to the Conversion Amount of each such Note as of the Issuance Date. Thereafter, the Company, so long as any of the Notes are outstanding, shall use commercially reasonable efforts to reserve and keep available out of its authorized and unissued Common Stock, solely for the purpose of effecting the conversion of the Notes, 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the conversion of all of the Notes then outstanding (without regard to any limitations on conversions) (the “**Required Reserve Amount**”). The number of shares of Common Stock reserved for conversions of the Notes shall be allocated pro rata among the holders of the Notes based on the principal amount of the Notes held by each holder at the time of Issuance Date or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event that a holder shall sell or otherwise transfer any of such holder’s Notes, each transferee shall be allocated a pro rata portion of such holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any Notes shall be allocated to the remaining holders of Notes, pro rata based on the principal amount of the Notes then held by such holders.

(b) Insufficient Authorized Shares. If at any time while any of the Notes remain outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon conversion of the Notes at least a number of shares of Common Stock equal to the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall as soon as practicable use commercially reasonable efforts to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the Notes then outstanding.

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(12) HOLDER’S REDEMPTIONS.

(a) Mechanics. In the event that the Holder has sent an Event of Default Redemption Notice or a Change of Control Redemption Notice to the Company pursuant to Section 4(b) or Section 5(c), respectively (each, a “**Redemption Notice**”), the Holder shall promptly submit this Note to the Company. If the Holder has submitted an Event of Default Redemption Notice in accordance with Section 4(b), the Company shall deliver the applicable Event of Default Redemption Price to the Holder within five Business Days after the Company’s receipt of the Holder’s Event of Default Redemption Notice. If the Holder has submitted a Change of Control Redemption Notice in accordance with Section 5(c), the Company shall deliver the applicable Change of Control Redemption Price to the Holder concurrently with the consummation of such Change of Control if such notice is received prior to the consummation of such Change of Control and within five Business Days after the Company’s receipt of such notice if such notice is received after the consummation of such Change of Control. With respect to an Amortization Redemption, the Company shall deliver the applicable Amortization Redemption Amount to the Holder within five Business Days after the end of the applicable month for such Amortization Redemption. In the event of a redemption of less than all of the Conversion Amount of this Note, the Company shall promptly cause to be issued and delivered to the Holder, at the Holder’s request, a new Note (in accordance with Section 19(d)) representing the outstanding Principal which has not been redeemed. In the event that the Company does not pay the Event of Default Redemption Price, the Change of Control Redemption Price, or the Amortization Redemption Amount (each, the “**Redemption Price**”), as applicable, to the Holder (or deliver any Common Stock to be issued pursuant to a Redemption Notice) within the time period required, at any time thereafter and until the Company pays such unpaid Redemption Price (and issues any Common Stock required pursuant to a Redemption Notice) in full, the Holder shall have the option, in lieu of redemption, to require the Company to promptly return to the Holder all or any portion of this Note representing the Conversion Amount that was submitted for redemption and for which the applicable Redemption Price (or any Common Stock required to be issued pursuant to a Redemption Notice) has not been paid. Upon the Company’s receipt of such notice, (x) the Redemption Notice shall be null and void with respect to such Conversion Amount, (y) the Company shall immediately return this Note, or issue a new Note (in accordance with Section 19(d)) to the Holder representing such Conversion Amount and (z) the Conversion Price of this Note or such new Notes shall be adjusted to the lesser of (A) the Conversion Price as in effect on the date on which the Redemption Notice is voided and (B) the Closing Bid Price on the date on which the Redemption Notice is voided.

(b) Redemption by Other Holders. Upon the Company’s receipt of notice from any of the holders of the Other Notes for redemption or repayment as a result of an event or occurrence substantially similar to the events or occurrences described in Section 4(b) or Section 5(c) (each, an “**Other Redemption Notice**”), the Company shall immediately forward to the Holder by facsimile a copy of such notice. If the Company receives a Redemption Notice and one or more Other Redemption Notices during the seven Business Day period beginning on and including the date which is three Business Days prior to the Company’s receipt of the

Holder's Redemption Notice and ending on and including the date which is three Business Days after the Company's receipt of the Holder's Redemption Notice and the Company is unable to redeem all principal, interest and other amounts designated in such Redemption Notice and such Other Redemption Notices received during such seven Business Day period, then the Company shall redeem a pro rata amount from each holder of the Notes (including the Holder) based on the principal amount of the Notes submitted for redemption pursuant to such Redemption Notice and such Other Redemption Notices received by the Company during such seven Business Day period.

(13) SUBORDINATION TO SENIOR INDEBTEDNESS.

(a) General. The Company and the Holder covenant and agree that this Note shall be subject to the provisions of this Section 13 and to the extent and in the manner set forth in this Section 13, the indebtedness represented by this Note and the payment of Principal, Interest, the Redemption Price, and any redemption amount, liquidated damages, fees, expenses, or any other amounts in respect of this Note are hereby expressly made subordinate and junior in right of payment to the prior payment in full in cash of all Senior Indebtedness of the Company now outstanding or hereinafter incurred.

(b) No Payment if Default Under Senior Indebtedness.

(i) [Intentionally left blank]

(ii) No cash payment on account of Principal or Redemption Price of, or Interest on, this Note or any other payment payable with respect to this Note shall be made, and no portion of this Note shall be redeemed or purchased directly or indirectly by the Company, if at the time of such payment or purchase or immediately after giving effect thereto, (A) a default in the payment of principal, premium, if any, interest or other obligations in respect of any Senior Indebtedness having either an outstanding principal balance or a commitment to lend greater than \$500,000 ("**Designated Senior Debt**") occurs and is continuing (or, in the case of Senior Indebtedness for which there is a period of grace, in the event of such a default that continues beyond the period of grace, if any, specified in the instrument evidencing such Senior Indebtedness) (a "**Payment Default**"), unless and until such Payment Default shall have been cured or waived or shall have ceased to exist or (B) the Company shall have received notice (a "**Payment Blockage Notice**") from the holder or holders of Designated Senior Debt that there exists under such Designated Senior Debt a default, which shall not have been cured or waived, permitting the holder or holders thereof to declare such Designated Senior Debt due and payable, but only for the period (the "**Payment Blockage Period**") commencing on the date of receipt of the Payment Blockage Notice and ending on the earlier of (a) the date such default shall have been cured or waived, or (b) the 180th day immediately following the Company's receipt of such Payment Blockage Notice. The Company shall resume payments on and distributions in respect of this Note, including any past scheduled payments of the principal of (and premium, if any) and interest on this Note to which the

Holder would have been entitled but for the provisions of this Section 13(b)(ii) in the case of a Payment Default, within five (5) Business Days of the date upon which such Payment Default is cured or waived or ceases to exist (and if payment is made within such time period, any Event of Default with respect to such nonpayment shall be cured). In addition, notwithstanding clauses (A) and (B) of this subsection (ii), unless the holders of Designated Senior Debt shall have accelerated the maturity of such Designated Senior Debt or there is a Payment Default, the Company shall resume payments on this Note within (5) Business Days after the end of each Payment Blockage Period. In any consecutive 365-day period, there shall be (i) no more than three Payment Blockage Notices given in the aggregate on this Note and the Other Notes, irrespective of the number of defaults with respect to Designated Senior Debt during such period, and (ii) at least 90 days during which no Payment Blockage Period shall be in effect.

(c) Payment upon Dissolution, Etc. In the event of any bankruptcy, insolvency, reorganization, receivership, composition, assignment for benefit of creditors or other similar proceeding initiated by or against the Company or any dissolution or winding up or total or partial liquidation or reorganization of the Company (being hereinafter referred to as a "**Proceeding**"), the Holder agrees that such Holder shall, upon request of a holder of Senior Indebtedness, and at such holder of Senior Indebtedness' own expense, take all reasonable actions (including but not limited to the execution and filing of documents and the giving of testimony in any Proceeding, whether or not such testimony could have been compelled by process) necessary to prove the full amount of all its claims in any Proceeding, and the Holder shall not waive any claim in any Proceeding without the written consent of such holder. If the Holder does not file a proper proof of claim or proof of debt in the form required in any Proceeding at least thirty (30) days before the expiration of the time to file such claim, the holders of any Senior Indebtedness are hereby authorized to file an appropriate claim for and on behalf of the Holder.

The Holder shall retain the right to vote and otherwise act with respect to the claims under this Note (including, without limitation, the right to vote to accept or reject any plan of partial or complete liquidation, reorganization, arrangement, composition or extension); provided that the Holder shall not vote with respect to any such plan or take any other action in any way so as to (i) contest the validity of any Senior Indebtedness or any collateral therefor or guaranties thereof, (ii) contest the relative rights and duties of any of the lenders under the Senior Indebtedness established in any instruments or agreement creating or evidencing the Senior Indebtedness with respect to any of such collateral or guaranties, or (iii) contest the Holders' obligations and agreements set forth in this Section 13.

Upon payment or distribution to creditors in a Proceeding of assets of the Company of any kind or character, whether in cash, property or securities, all principal and interest due upon any Senior Indebtedness shall first be paid in full before the Holder shall be entitled to receive or, if received, to retain any payment or distribution on account of this Note, and upon any such Proceeding, any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities, to which the Holder would be entitled except for the

provisions of this Section 13 shall be paid by the Company or by any receiver, trustee in bankruptcy, liquidating trustee, agent or other Person making such payment or distribution, or by the Holder who shall have received such payment or distribution, directly to the holders of the Senior Indebtedness (pro rata to each such holder on the basis of the respective amounts of such Senior Indebtedness held by such holder) or their representatives to the extent necessary to pay all such Senior Indebtedness in full after giving effect to any concurrent payment or distribution to or for the holders of such Senior Indebtedness, before any payment or distribution is made to the Holder or any holders of the Notes.

(d) Payments on Notes. Subject to Sections 13(b) and 13(c), the Company may make regularly scheduled payments of the Principal of, or Interest on, this Note or any other payment payable with respect to this Note, if at the time of payment, and immediately after giving effect thereto, there exists no Payment Default or a Payment Blockage Period.

(e) Certain Rights. Nothing contained in this Section 13 or elsewhere in this Note is intended to or shall impair, as among the Company, its creditors including the holders of Senior Indebtedness and the Holder, the right, which is absolute and unconditional, of the Holder to convert this Note in accordance herewith.

(f) Subrogation. Subject to payment in full in cash of all Senior Indebtedness, the rights of the Holder shall be subrogated to the rights of the holders of Senior Indebtedness to receive payments or distributions of the assets of the Company made on such Senior Indebtedness until all principal and interest on this Note shall be paid in full in cash; and for purposes of such subrogation, no payments or distributions to the holders of Senior Indebtedness of any cash, property or securities to which the Holder would be entitled except for the subordination provisions of this Section 13 shall, as between the Holder and the Company and/or its creditors other than the holders of the Senior Indebtedness, be deemed to be a payment on account of the Senior Indebtedness.

(g) Rights of Holders Unimpaired. The provisions of this Section 13 are and are intended solely for the purposes of defining the relative rights of the Holder and the holders of Senior Indebtedness and nothing in this Section 13 shall impair, as between the Company and the Holder, the obligation of the Company, which is unconditional and absolute, to pay to the Holder the principal thereof (and premium, if any) and interest thereon, in accordance with the terms of this Note.

(h) Holders of Senior Indebtedness. These provisions regarding subordination will constitute a continuing offer to all Persons who, in reliance upon such provisions, become holders of, or continue to hold, Senior Indebtedness; such provisions are made for the benefit of the holders of Senior Indebtedness, and such holders are hereby made obligees under such provisions to the same extent as if they were named therein, and they or any of them may proceed to enforce such subordination and no amendment or modification of the provisions contained herein shall diminish the rights of such holders unless such holders have

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agreed in writing thereto. The holders of Senior Indebtedness may, at any time and from time to time, without the consent of or notice to the Holder, without incurring responsibility to the Holder and without impairing or releasing the subordination provisions of this Section 13, (i) subject to the limitations set forth herein, increase the amount of, change the manner, terms or place of payment of, or renew or alter, any Senior Indebtedness, or otherwise amend, modify, restate or supplement the same (provided that any such modified indebtedness continues to be constitute Senior Indebtedness within the meaning of this Agreement), (ii) sell, exchange or release any collateral mortgaged, pledged or otherwise securing the Senior Indebtedness, (iii) release any Person liable in any manner for the Senior Indebtedness and (iv) exercise or refrain from exercising any rights against the Company or any other Person.

(i) Proceeds Held in Trust. In the event that notwithstanding the foregoing, any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities (including, without limitation, by way of setoff or otherwise) prohibited by the provisions hereof shall be received by the Holder before all Senior Indebtedness if paid in full in cash, such payment or distribution shall be held in trust for the benefit of and shall be paid over or delivered to the holders of Senior Indebtedness, as their respective interests may appear, as calculated by the Company, for application to, or to be held as collateral for, the payment of any Senior Indebtedness remaining unpaid to the extent necessary to pay all Senior Indebtedness in full in cash after giving effect to any concurrent payment or distribution to or for the holders of such Senior Indebtedness.

(j) Blockage of Remedies. During any Payment Default or any Payment Blockage Period, if an Event of Default has occurred and is continuing under this Note, the Holder will not commence or join with any creditor of the Company in asserting or commencing any proceedings to collect or enforce its rights hereunder or take any action to foreclose or realize upon the indebtedness hereunder for a period beginning on the date of such Event of Default and ending on the first to occur of (i) the date that is 180 days following the date that the holders of the Senior Indebtedness are notified of such Event of Default or (ii) the date such Payment Default is cured, waived or ceases to exist or the date such Payment Blockage Period ends, as the case may be; provided, however, that until all of the Senior Indebtedness shall have been paid in full in cash, any payments, distributions or proceeds received by the Holder resulting from the exercise of any action to collect or enforce any right or remedy available to the Holder shall be subject to the terms of this Note.

(k) Subsequent Senior Indebtedness Requested Modifications. In connection with the incurrence of any future Senior Indebtedness, the Holder agrees that it shall act reasonably and negotiate in good faith any modifications to the provisions of this Section 13 reasonably requested by the holder of such Senior Indebtedness; provided that nothing in this section shall restrict the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding from changing or amending this Section 13 pursuant to Section 17 hereof.

(l) Failure to Make Payment. In the event that the Company is

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prohibited or restricted from making any payment required under under this Note by reason of the provisions of this Section 13, such prohibition or restriction shall not preclude the failure to make such payment from being an Event of Default under Section 4(a) of this Note.

(14) VOTING RIGHTS. The Holder shall have no voting rights as the holder of this Note, except as required by law, including but not limited to the Delaware General Corporation Law, and as expressly provided in this Note.

(15) RANK; ADDITIONAL INDEBTEDNESS; LIENS.

(a) Rank. All payments due under this Note (a) shall rank *pari passu* with all Other Notes (“**Pari Passu Indebtedness**”), (b) shall be subordinate in right of payment to the prior payment of all existing and future Senior Indebtedness and (c) shall be senior to all other Indebtedness of the Company and its Subsidiaries, other than Senior Indebtedness and Pari Passu Indebtedness.

(b) Incurrence of Senior Indebtedness. So long as this Note is outstanding, the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, incur or guarantee, assume or suffer to exist any Indebtedness which shall rank senior to the Notes other than Senior Indebtedness.

(c) Existence of Liens. So long as this Note is outstanding, the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, allow or suffer to exist any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by the Company or any of its Subsidiaries (collectively, “**Liens**”) other than Permitted Liens. As used herein, “**Permitted Liens**” means (i) Liens incurred to secure Senior Indebtedness, (ii) Liens on fixed or capital assets acquired, constructed or improved by the Company or any Subsidiary, to the extent of Indebtedness incurred within thirty days for such acquisition, construction or improvement and incurred within thirty days of such acquisition, construction or improvement, (iii) purchase money Liens, or (iv) carriers’, warehousemen’s, mechanics’, materialmen’s, repairmen’s and other similar Liens imposed by law.

(d) Restricted Payments. The Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents (in whole or in part, whether by way of open market purchases, tender offers, private transactions or otherwise), all or any portion of any Indebtedness, other than Senior Indebtedness or Pari Passu Indebtedness, whether by way of payment in respect of principal of (or premium, if any) or interest on, such Indebtedness if at the time such payment is due or is otherwise made or, after giving effect to such payment, an event constituting an Event of Default has occurred and is continuing.

(16) PARTICIPATION. The Holder, as the holder of this Note, shall be

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entitled to such dividends paid and distributions made to the holders of Common Stock (each, a “**Distribution**”), in each such case to the extent of the Distribution as if the Holder had converted this Note into Common Stock (without regard to any limitations on conversion herein or elsewhere) and had held such shares of Common Stock on the record date for such dividends and distributions. Payments (if any) under the preceding sentence shall be made concurrently with the dividend or distribution to the holders of Common Stock.

(17) VOTE TO ISSUE, OR CHANGE THE TERMS OF, NOTES. The affirmative vote at a meeting duly called for such purpose or the written consent without a meeting, of the holders of Notes representing not less than a majority of the aggregate principal amount of the then outstanding Notes, shall be required for any change or amendment to this Note or the Other Notes provided such change or amendment is consented to by the Company, which such consent may be granted or withheld in the sole discretion of the Company.

(18) TRANSFER. This Note may be offered, sold, assigned or transferred by the Holder without the consent of the Company, subject only to the provisions of Section 2(f) of the Securities Purchase Agreement.

(19) REISSUANCE OF THIS NOTE.

(a) Transfer. If this Note is to be transferred, the Holder shall surrender this Note to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Note (in accordance with Section 19(d)), registered as the Holder may request, representing the outstanding Principal being transferred by the Holder and, if less than the entire outstanding Principal is being transferred, a new Note (in accordance with Section 19(d)) to the Holder representing the outstanding Principal not being transferred. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that, by reason of the provisions of Section 3(c)(iii) and this Section 19(a), following conversion or redemption of any portion of this Note, the outstanding Principal represented by this Note may be less than the Principal stated on the face of this Note.

(b) Lost, Stolen or Mutilated Note. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Note, the Company shall execute and deliver to the Holder a new Note (in accordance with Section 19(d)) representing the outstanding Principal.

(c) Note Exchangeable for Different Denominations. This Note is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Note or Notes (in accordance with Section 19(d) and in principal amounts of at least \$100,000) representing in the aggregate the outstanding Principal of this Note, and each such new Note will represent such portion of such outstanding Principal as is designated by the Holder at the time of such surrender.

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(d) Issuance of New Notes. Whenever the Company is required to issue a new Note pursuant to the terms of this Note, such new Note (i) shall be of like tenor with this Note, (ii) shall represent, as indicated on the face of such new Note, the Principal remaining outstanding (or in the case of a new Note being issued pursuant to Section 19(a) or Section 19(c), the Principal designated by the Holder which, when added to the principal represented by the other new Notes issued in connection with such issuance, does not exceed the Principal remaining outstanding under this Note immediately prior to such issuance of new Notes), (iii) shall have an issuance date, as indicated on the face of such new Note, which is the same as the Issuance Date of this Note, (iv) shall have the same rights and conditions as this Note, and (v) shall represent accrued Interest on the Principal and Interest of this Note, from the Issuance Date.

(20) REMEDIES, CHARACTERIZATIONS, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Note shall be cumulative and in addition to all other remedies available under this Note, the Securities Purchase Agreement and the

Registration Rights Agreement, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the Holder's right to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Note. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the Holder shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

(21) PAYMENT OF COLLECTION, ENFORCEMENT AND OTHER COSTS. If (a) this Note is placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or the Holder otherwise takes action to collect amounts due under this Note or to enforce the provisions of this Note or (b) there occurs any bankruptcy, reorganization, receivership of the Company or other proceedings affecting Company creditors' rights and involving a claim under this Note, then the Company shall pay the costs incurred by the Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, but not limited to, attorneys' fees and disbursements.

(22) CONSTRUCTION; HEADINGS. This Note shall be deemed to be jointly drafted by the Company and all the Purchasers and shall not be construed against any person as the drafter hereof. The headings of this Note are for convenience of reference and shall not form part of, or affect the interpretation of, this Note.

(23) FAILURE OR INDULGENCE NOT WAIVER. No failure or delay on

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the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

(24) DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Redemption Price or the arithmetic calculation of the Conversion Rate or the Redemption Price, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within one Business Day of receipt of the Conversion Notice or Redemption Notice or other event giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation within one Business Day of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within one Business Day submit via facsimile (a) the disputed determination of the Closing Bid Price or the Closing Sale Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Conversion Rate or the Redemption Price to the Company's independent, outside accountant. The Company, at the Company's expense, shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than five Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

(25) NOTICES; PAYMENTS.

(a) Notices. Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least twenty days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any pro rata subscription offer to holders of Common Stock or (C) for determining rights to vote with respect to any Change of Control, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder. Notwithstanding the foregoing, Section 4(i) of the Securities Purchase Agreement shall apply to all notices given pursuant to this Note.

(b) Payments. Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, such payment shall be made in lawful money of the United States of America by a check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company

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in writing (which address, in the case of each of the Purchasers, shall initially be as set forth on the Schedule of Buyers attached to the Securities Purchase Agreement); provided that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder's wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day and, in the case of any Interest Date which is not the date on which this Note is paid in full, the extension of the due date thereof shall not be taken into account for purposes of determining the amount of Interest due on such date.

(26) CANCELLATION. After all Principal, accrued Interest and other amounts at any time owed on this Note has been paid in full, this Note shall automatically be deemed canceled, shall be surrendered to the Company for cancellation and shall not be reissued.

(27) WAIVER OF NOTICE. To the extent permitted by law, the Company hereby waives demand, notice, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Securities Purchase Agreement.

(28) GOVERNING LAW. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.



(29) CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) **“Approved Stock Plan”** means any employee benefit, option or incentive plan which has been approved by the Board of Directors of the Company, pursuant to which the Company’s securities may be issued to any employee, consultant, officer or director for services provided to the Company.

(b) **“Bloomberg”** means Bloomberg Financial Markets.

(c) **“Business Day”** means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(d) **“Calendar Quarter”** means each of: the period beginning on and including January 1 and ending on and including March 31; the period beginning on and including April 1 and ending on and including June 30; the period beginning on and including July 1 and ending on and including September 30; and the period beginning on and including

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October 1 and ending on and including December 31.

(e) **“Closing Bid Price”** and **“Closing Sale Price”** means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or last trade price, respectively, of such security prior to 4:00 p.m., New York Time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 24. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(f) [Intentionally left blank]

(g) **“Contingent Obligation”** means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(h) **“Convertible Securities”** means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Stock.

(i) **“Excluded Securities”** means any shares of Common Stock issued or issuable: (i) in connection with any Approved Stock Plan; (ii) upon conversion of the Notes and the Other Notes; (iii) upon conversion of any Options or Convertible Securities which are outstanding on the Issuance Date, (iv) pursuant to or in connection with commercial credit arrangements, equipment lease financings, acquisitions of other assets or businesses, strategic

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transactions not primarily for financing purposes, or similar transactions into which the Company may enter with a non-affiliate.

(j) **“Indebtedness”** of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services (other than trade payables entered into in the ordinary course of business), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with generally accepted accounting principles, consistently applied for the periods covered thereby, is classified as a capital lease, (G) off-balance sheet liabilities retained in connection with asset securitization programs, synthetic leases, sale and leaseback transactions or other similar obligations arising with respect to any other transaction which is the functional equivalent of or takes the place of borrowing but which does not constitute a liability on the consolidated balance sheet of such Person and its subsidiaries, and (H) all indebtedness referred to in clauses (A) through (G) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (I) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (H) above.

(k) **“Issuance Date”** means January 1, 2009.

(l) **“Options”** means any rights, warrants or options to subscribe for or purchase Common Stock or Convertible Securities.

(m) **“Person”** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(n) **“Principal Market”** means the OTC Bulletin Board.

(o) **“Registration Rights Agreement”** means that certain Registration Rights Agreement, dated January 3, 2007, between the Company and the initial holders of the Interest Notes.

(p) **“SEC”** means the United States Securities and Exchange

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Commission.

(q) **“Securities Purchase Agreement”** means that certain Securities Purchase Agreement, dated January 3, 2007, between the Company and the initial holders of the Original Notes pursuant to which the Company issued the Original Notes.

(r) **“Senior Indebtedness”** means the principal of (and premium, if any), interest on, and all fees and other amounts (including, without limitation, any reasonable costs, enforcement expenses (including reasonable legal fees and disbursements, collateral protection expenses and other reimbursement or indemnity obligations relating thereto)), and all other obligations of the Company under (i) any of the agreements or instruments evidencing any Indebtedness of the Company and its Subsidiaries arising after the Original Date to an unaffiliated, third-party commercial lender (together with any renewals, refundings, refinancings or other extensions thereof) for purposes of purchasing equipment (which debt shall be secured only by the assets purchased with such financing), and (ii) Indebtedness secured by up to a maximum of eighty five percent (85%) of the Company’s accounts receivable and/or up to sixty percent (60%) of the value of the Company’s inventory. For the avoidance of doubt, Senior Indebtedness shall not include the debt which is required to be paid by the Company pursuant to Section 4(i) of the Securities Purchase Agreement.

(s) [Intentionally left blank]

(t) **“Trading Day”** means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded; provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York Time).

(u) [intentionally left blank]

(v) **“Weighted Average Price”** means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York Time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York Time (or such other time as the Principal Market publicly announces is the official close of trading) as reported by Bloomberg through its “Volume at Price” functions, or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York Time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York Time (or such other time as such market publicly

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announces is the official close of trading) as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.). If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 24. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

[Signature Page Follows]

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IN WITNESS WHEREOF, the Company has caused this Note to be duly executed as of the Issuance Date set out above.

LIQUIDMETAL TECHNOLOGIES, INC.

By: \_\_\_\_\_

Name: Tony Chung  
Title: Chief Financial Officer

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EXHIBIT I

LIQUIDMETAL TECHNOLOGIES, INC.  
CONVERSION NOTICE

Reference is made to the Convertible Subordinated Note (the "Note") issued to the undersigned by Liquidmetal Technologies, Inc. (the "Company"). In accordance with and pursuant to the Note, the undersigned hereby elects to convert the Conversion Amount (as defined in the Note) of the Note indicated below into shares of Common Stock, par value \$0.001 per share (the "Common Stock"), of the Company as of the date specified below.

Date of Conversion:

Aggregate Conversion Amount to be converted:

The undersigned hereby certifies to the Company that the undersigned's conversion of the amount set forth above in accordance with Section 3(a) of the Note will not directly result in the undersigned (together with the undersigned's affiliates) beneficially owning in excess of 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion, calculated in accordance with Section 3(d)(i) of the Note; provided that if the undersigned has previously waived the 4.99% beneficial ownership limitation upon no less than sixty one (61) days prior written notice, the undersigned certifies to the Company that the undersigned's conversion of the amount set forth above will not directly result in the undersigned (together with the undersigned's affiliates) beneficially owning in excess of 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion, calculated in accordance with Section 3(d)(i) of the Note.

Please confirm the following information:

Conversion Price:

Number of shares of Common Stock to be issued:

Please issue the Common Stock into which the Note is being converted in the following name and to the following address:

Issue to:

Facsimile Number:

Authorization:

By: \_\_\_\_\_ Title: \_\_\_\_\_

Dated: \_\_\_\_\_

Account Number:  
(if electronic book entry transfer)

Transaction Code Number:  
(if electronic book entry transfer)

ACKNOWLEDGMENT

The Company hereby acknowledges this Conversion Notice and hereby directs American Stock Transfer & Trust Co. to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated January 3, 2007 from the Company.

LIQUIDMETAL TECHNOLOGIES, INC.

By: \_\_\_\_\_  
Name:  
Title:

CONTINUING GUARANTEE

THIS GUARANTEE is executed by the undersigned (hereinafter called "Guarantor") in favor of Hana Financial, Inc. (hereinafter called "Hana"), with offices at 1000 Wilshire Blvd., Suite 2000, Los Angeles, CA 90017, with respect to the Indebtedness of Liquidmetal Technologies, Inc., a Delaware corporation whose address is 30452 Esperanza, Rancho Santa Margarita, CA 92688 (referred to herein as the "Client").

**1. Continuing Guarantee.** For valuable consideration which is hereby acknowledged, Guarantor hereby unconditionally guarantees and promises to pay on demand to Hana, at the address indicated above, or at such other address as Hana may direct, in lawful money of the United States, and to perform for the benefit of Hana, when due, whether by acceleration or otherwise, all of the following: All loans, advances, indebtedness, liabilities, debit balances, covenants and duties and all other Indebtedness of whatever kind or nature at any time or from time to time owing by Client(s), whether individually or collectively, to Hana or any of Hana's affiliates, whether fixed or contingent, known or unknown, liquidated or unliquidated, present or future, no matter how or when arising and whether under the Loan and Security Agreement executed by Hana and Client and made effective as of April 21, 2005 and any amendments executed thereto from time to time (the "Loan and Security Agreement") or any other present or future agreement or otherwise, and including without limitation, all Indebtedness for purchases made by the Client from any other concern factored by Hana and any Promissory Note, Inventory Finance Agreement or a Factor Guarantee presently existing or to be prepared in the future (collectively, the "Indebtedness"). In addition, the Guarantor agrees to fully indemnify Hana against any claim, harm, loss, damage, liability, costs or expense (including all costs, attorneys' fees, accounting fees and investigation fees incurred in connection with any action, suit, claim or proceeding relating thereto) resulting from or in any way relating to any violation, non-performance or breach by Client of a Loan and Security Agreement, any said Promissory Note, Inventory Finance Agreement or a Factor Guarantee whether presently existing or to exist in the future, or any breach of or failure to perform any representation, promise, agreement or warranty of Client, or any wrongful acts, conduct or omission or fraud of Client. As used herein, the term "Client" shall include any successor to the business and assets of Client, and shall also include Client in its capacity as a debtor or debtor in possession under the federal Bankruptcy Code, and any trustee, custodian or receiver for Client or any of their assets, should Client hereafter become the subject of any bankruptcy or insolvency proceeding, voluntary or involuntary; and all indebtedness, liabilities and Indebtedness incurred by any such entity shall be included in the Indebtedness guaranteed hereby. Guarantor hereby acknowledges and agrees that acceptance by Hana of this guaranty shall not constitute a commitment of any kind by Hana to permit Client to incur Indebtedness to Hana. All sums due under this Guarantee shall bear interest from the date due until the date paid at the highest rate charged with respect to any of the Indebtedness. Notwithstanding any of the foregoing, the outstanding Indebtedness due and owing to Hana as of the date of this Guarantee is \$593,848 ("Guarantor's Obligation") subject to applicable commission, fees and interest as described under the Loan and Security Agreement and said Guarantor's Obligation to Hana under this Guarantee shall also be limited to the said amount. Hana further agrees to release this Guarantee upon its receipt of the Guarantor's Obligation. In addition, Hana shall not exercise its rights under this Guarantee and waives its rights as described under "Section 9. Events of Default" under the Loan and Security Agreement as long as Guarantor's Obligation is received by Hana on or prior to March 31, 2009. The timely payment of the Guarantor's Obligation shall in effect cure the Events of Default relating to the non-payment of Client Obligations only under the Loan and Security Agreement occurring up to the time of such cure.

**2. Waivers.** Guarantor hereby waives: (a) presentment for payment, notice of dishonor, demand, protest, and notice thereof as to any instrument, and all other notices and demands to which Guarantor might be entitled, including without limitation notice of all of the following: the acceptance hereof; the creation, existence, or acquisition of any Indebtedness; the amount of the Indebtedness from time to time outstanding; any foreclosure sale or other disposition of any property which secures any or all of the Indebtedness or which secures the

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obligations of any other guarantor of any or all of the Indebtedness; any adverse change in Client(s)' financial position; any other fact that might increase Guarantor's risk; any default, partial payment or non-payment of all or any part of the Indebtedness; the occurrence of any other Event of Default (as hereinafter defined); any and all agreements and arrangements between Hana and Client and any changes, modifications, or extensions thereof, and any revocation, modification or release of any guaranty of any or all of the Indebtedness by any person; (b) any right to require Hana to institute suit against, or to exhaust its rights and remedies against, Client or any other person, or to proceed against any property of any kind that secures all or any part of the Indebtedness, or to exercise any right of offset or other right with respect to any reserves, credits or deposit accounts held by or maintained with Hana or any indebtedness of Hana to Client, or to exercise any other right or power, or pursue any other remedy Hana may have; (c) any defense arising by reason of any disability or other defense of Client or any other guarantor or any endorser, co-maker or other person, or by reason of the cessation from any cause whatsoever of any liability of Client or any other guarantor or any endorser, co-maker or other person, with respect to all or any part of the Indebtedness, or by reason of any act or omission of Hana or others that directly or indirectly results in the discharge or release of Client or any other Guarantor or any other person or any Indebtedness or any security therefore, whether by operation of law or otherwise, (d) all rights of subrogation, reimbursement, and indemnity whatsoever, and all rights of recourse to or with respect to any assets or property of Client or any collateral or security for any or all of the Indebtedness; (e) any defense arising by reason of any failure of Hana to obtain, perfect, maintain or keep in force any security interest in, or lien or encumbrance upon, any property of Client or any other person, (f) any defense based upon failure of Hana to give Guarantor notice of any sale or other disposition of any property securing any or all of the Indebtedness, or any defects in any such notice that may be given, or failure of Hana to comply with any provision of applicable law in enforcing any security interest in or lien upon any property securing any or all of the Indebtedness including, but not limited to, any failure by Hana to dispose of any property securing any or all of the Indebtedness in a commercially reasonable manner; and (g) any defense based upon arising out of any bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, liquidation or dissolution proceeding commenced by or against Client or any other guarantor or any endorser, co-maker or other person, including without limitation any discharge of, or bar against collecting, any of the Indebtedness (including without limitation any interest thereon), in or as a result of any such proceeding. Until all of the Indebtedness has been paid, performed, and discharged in full, nothing shall discharge or satisfy the liability of Guarantor hereunder except the full performance and payment of all of the Indebtedness. In the event any payment with respect to any or all of the Indebtedness by any person is repaid or returned by Hana because of any claim that such payment constituted a preferential transfer or fraudulent conveyance or for any other reason whatsoever, the liability of Guarantor hereunder shall not be discharged or reduced by reason of such payment and Guarantor shall be and remain fully liable therefore. Hana shall have full authority in its sole discretion to compromise or settle any such claim, and any amounts received by Hana that are paid, repaid or returned as a part of such compromise or settlement shall not discharge or reduce the liability of Guarantor hereunder and Guarantor shall be and remain fully liable therefore.

**3. Consents.** Guarantor hereby consents and agrees that, without notice to or by Guarantor and without affecting or impairing in any way the obligations or liability of Guarantor hereunder, Hana may, from time to time before or after revocation of this Guarantee, do any one or more of the following in Hana's sole and absolute discretion: (a) accelerate, accept partial payments of, compromise or settle, renew, extend the time for the payment, discharge, or

performance of, refuse to enforce, and release all or any parties to, any or all of the Indebtedness; (b) grant any other indulgence to Client or any other person in respect of any or all of the Indebtedness or any other matter; (c) accept, release, waive, surrender, enforce, exchange, modify, impair, or extend the time for the performance, discharge, or payment of, any and all property of any kind securing any or all of the Indebtedness or any guaranty of any or all of the Indebtedness, or on which Hana at any time may have a lien, or refuse to enforce its rights or make any compromise or settlement or agreement therefore in respect of any or all of such property; (d) substitute or add, or take any action or omit to take any action that results in the release of, any one or more endorsers or guarantor of all or part of the Indebtedness, including without limitation one or

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more parties to this Guarantee, regardless of any destruction or impairment of any right of contribution or other right of Guarantor; (e) amend, alter or change in any respect whatsoever any term or provision relating to any or all of the Indebtedness, including the rate of interest thereon, (f) apply any sums received from Client(s), any other guarantor, endorser, or cosigner, or from the disposition of any collateral or security, to any indebtedness whatsoever owing from such person or secured by such collateral or security, in such manner and order as Hana determines in its sole discretion, and regardless of whether such indebtedness is part of the Indebtedness, is secured, or is due and payable; (g) apply any sums received from Guarantor or from the disposition of any collateral or security securing the obligations of Guarantor, to any of the Indebtedness in such manner and order as Hana determines in its sole discretion, regardless of whether or not such Indebtedness is secured or is due and payable. Guarantor consents and agrees that Hana shall be under no obligation to marshal any assets in favor of Guarantor, or against or in payment of any or all of the Indebtedness. Guarantor further consents and agrees that Hana shall have no duties or responsibilities whatsoever with respect to any property securing any or all of the Indebtedness. Without limiting the generality of the foregoing, Hana shall have no obligation to monitor, verify audit, examine, or obtain or maintain any insurance with respect to, any property securing any or all of the Indebtedness.

**4. Acceleration.** Notwithstanding the terms of all or any part of the Indebtedness, the obligations of the Guarantor hereunder to pay and perform all of the Indebtedness shall, at the option of Hana, immediately become due and payable, without notice, and without regard to the expressed maturity of any of the Indebtedness, in the event: (a) any warranty, representation, statement, report, or certificate made or delivered to Hana by Client or Guarantor, or any of their respective officers, partners, employees, or agents, is incorrect, false, untrue, or misleading when given in any material respect; or (b) Client or Guarantor shall fail to pay or perform when due all or any part of the Indebtedness; or (c) Guarantor shall fail to pay or perform when due any indebtedness or obligation of Guarantor to Hana, whether under this Guarantee or any other instrument, document, or agreement heretofore or hereafter entered into; or (d) any event shall occur which results in the acceleration of the maturity of any indebtedness of Client or Guarantor to others; or (e) Client or Guarantor shall fail promptly to perform or comply with any term or condition of any agreement with any third party which does or may result in a material adverse effect on the business of Client or Guarantor; or (f) there shall be made or exist any levy, assessment, attachment, seizure, lien, or encumbrance for any cause or reason whatsoever upon all or any part of the property of Client or Guarantor (unless discharged by payment, release or bond not more than twenty (20) days after such event has occurred); or (g) there shall occur the liquidation, dissolution, termination of existence, insolvency, or business failure of Client or Guarantor, or the appointment of a receiver, trustee or custodian for Client(s), Guarantor or all or any part of the property of either of them, or the assignment for the benefit of creditors by Client or Guarantor, or the commencement of any proceeding by or against Client or Guarantor under any reorganization, insolvency, arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction, now or hereafter in effect; or (h) Client or Guarantor shall be deceased or declared incompetent by any court or a guardian or conservator shall be appointed for either of them or for the property of either of them; or (i) Client or Guarantor shall conceal, remove or permit to be concealed or removed any part of its property, with intent to hinder, delay or defraud its creditors, or make or suffer any transfer of any of its property which may be fraudulent under any bankruptcy, fraudulent conveyance or similar law, or shall make any transfer of its property to or for the benefit of any creditor at a time when other creditors similarly situated have not been paid; or (j) Guarantor shall revoke this Guarantee. All of the foregoing is hereinafter referred to as "Events of Default".

**5. Exercise of Rights and Remedies.** Guarantor consents and agrees that, without notice to or by Guarantor and without affecting or impairing in any way the obligations or liability of Guarantor hereunder, Hana may, from time to time before or after revocation of this Guarantee, exercise any right or remedy it may have with respect to any or all of the Indebtedness or any property securing any or all of the Indebtedness or any guaranty therefore, including without limitation judicial foreclosure, non judicial foreclosure, exercise of a power of sale, and taking a deed, assignment or transfer in lieu of foreclosure as to any such property, and Guarantor expressly

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waives any defense based upon the exercise of any such right or remedy, notwithstanding the effect thereof upon any of Guarantor's rights, including without limitation, any destruction of Guarantor's right of subrogation against Client and any destruction of Guarantor's right of contribution or other right against any other guarantor of any or all of the Indebtedness or against any other person, whether by operation of Sections 580d or 726 of the California Code of Civil Procedure, or any similar or comparable provisions of the laws of any other jurisdiction, or any other statutes or rules of law now or hereafter in effect, or otherwise. Without limiting the generality of the foregoing, Guarantor understands and agrees that, in the event Hana in its sole discretion forecloses any trust deed now or hereafter securing any or all of the Indebtedness, by non judicial foreclosure, Guarantor will remain liable to Hana for any deficiency, even though Guarantor will lose his right of subrogation against Client(s), and even though Guarantor will be unable to recover from Client the amount of the deficiency for which Guarantor is liable, and even though Guarantor would have retained his right of subrogation against Client if Hana had foreclosed said trust deed by judicial foreclosure as opposed to non judicial foreclosure.

**6. Right to Attachment Remedy.** Guarantor agrees that, notwithstanding the existence of any property securing any or all of the Indebtedness, Hana shall have all of the rights of an unsecured creditor of Guarantor, including without limitation the right to obtain a temporary protective order and writ of attachment against Guarantor with respect to any sums due under this Guarantee. Guarantor further agrees that in the event any property secures the obligations of Guarantor under this Guarantee, to the extent that Hana, in its sole and absolute discretion, determines prior to the disposition of such property that the amount to be realized by Hana therefrom may be less than the indebtedness of Guarantor under this Guarantee, Hana shall have all the rights of an unsecured creditor against Guarantor, including without limitation the right of Hana, prior to the disposition of said property, to obtain a temporary protective order and writ of attachment against Guarantor. Guarantor waives the benefit of Section 483.010(b) of the California Code of Civil procedure and of any and all other statutes and rules of law now or hereafter in effect requiring Hana to first resort to or exhaust all such collateral before seeking or obtaining any

attachment remedy against Guarantor. Hana shall have no liability to Guarantor as a result thereof, whether or not the actual deficiency realized by Hana is less than the anticipated deficiency on the basis, which Hana obtains a temporary protective order or writ of attachment.

7. **Subordination.** Any and all rights of Guarantor under any and all debts, liabilities and obligations owing from Client to Guarantor, including any security for and guaranties of any such obligations, whether now existing or hereafter arising, are hereby subordinated in right of payment to the prior payment in full of all of the Indebtedness. No payment in respect of any such subordinated obligations shall at any time be made to or accepted by Guarantor if at any time such payment any Indebtedness is outstanding. If any Event of Default has occurred, Client and any assignee, trustee in bankruptcy, receiver, or any other person having custody or control over any or all of Client(s)' property are hereby authorized and directed to pay to Hana the entire balance of the Indebtedness before making any payments whatsoever to Guarantor, whether as a creditor, shareholder, or otherwise; and insofar as may be necessary for that purpose, Guarantor hereby assigns and transfers to Hana all rights to any and all debts, liabilities and obligations owing from Client to Guarantor, including any security for any guaranties of any such obligations, whether now existing or hereafter arising, including without limitation any payments, dividends or distributions out of the business or assets of Client(s). Any amounts received by Guarantor in violation of the foregoing provisions shall be received and held in trust for the benefit of Hana and shall forthwith be paid over to Hana to be applied to the Indebtedness in such order and sequence as Hana shall in its sole discretion determine. Guarantor hereby expressly waives any right to set-off or assert against Hana any counterclaim that Guarantor may have against Client(s).

8. **Revocation.** This is a continuing guaranty relating to all of the Indebtedness, including Indebtedness arising under successive transactions that from time to time continue the Indebtedness or renew it after it has been satisfied and shall continue in full force and effect until all Indebtedness has been fully performed to Hana's satisfaction. This Guarantee and all consents, waivers and other provision hereof shall continue in full

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force and effect as to any and all Indebtedness that is outstanding on the effective date of revocation and all extensions, renewals and modifications of said Indebtedness including without limitation amendments, extensions, renewals and modifications that are evidenced by new or additional instruments, documents or agreements executed after revocation.

9. **Independent Liability.** Guarantor hereby agrees that one or more successive or concurrent actions may be brought hereon against Guarantor, in the same action in which Client may be sued or in separate actions, as often as deemed advisable by Hana. The liability of Guarantor hereunder is exclusive and independent of any other guaranty of any or all of the Indebtedness whether executed by Guarantor or by any other guarantor. The liability of Guarantor hereunder shall not be affected, revoked, impaired, or reduced by any one or more of the following: (a) the fact that the Indebtedness exceeds the maximum amount of Guarantor's liability, if any, specified herein or elsewhere (and no agreement specifying a maximum amount of Guarantor's liability shall be enforceable unless set forth in a writing signed by Hana or set forth in this Guarantee); or (b) any direction as to the application of payment by Client or by any other party; or (c) any other continuing or restrictive guaranty or undertaking or any limitation on the liability of any other guarantor (whether under this Guarantee or under any other agreement); or (d) any payment on or reduction of any such other guaranty or undertaking; or (e) any revocation, amendment, modification or release of any such other guaranty or undertaking; or (f) any dissolution or termination of, or increase, decrease, or change in membership or stock ownership of Guarantor. Guarantor hereby expressly represents that he was not induced to give this Guarantee by the fact that there are or may be other guarantors either under this Guarantee or otherwise, and Guarantor agrees that any release of any one or more of such other guarantors shall not release Guarantor from his obligations hereunder either in full or to any lesser extent. If Guarantor is a married person, Guarantor hereby expressly agrees that recourse may be had against his or her separate property for all of his or her obligations hereunder.

10. **Remedies Cumulative; No Waiver.** Hana shall have the right to seek recourse against Guarantor to the full extent provided for herein or in any other instrument or agreement evidencing obligations of Guarantor to Hana. No election in one form of action or proceeding, or against any party, or on any obligation, shall constitute a waiver of Hana's right to proceed in any other form of action or proceeding or against any other party. The failure of Hana to enforce any of the provisions of this Guarantee at any time or for any period of time shall not be construed to be a waiver of any such provision or the right thereafter to enforce the same. All remedies hereunder shall be cumulative and shall be in addition to all rights, powers and remedies given to Hana by law or under other instrument or agreement.

11. **Financial Condition of Client(s).** Guarantor is fully aware of the financial condition of Client and is executing and delivering this Guarantee at Clients' request and based solely upon his own independent investigation of all matters pertinent hereto and is not relying in any manner upon any representation or statement of Hana with respect thereto. Guarantor represents and warrants that he is in a position to obtain, and Guarantor hereby assumes full responsibility for obtaining, any additional information concerning Clients' financial condition and any other matter pertinent hereto as Guarantor may desire, and Guarantor is not relying upon or expecting Hana to furnish to him any information now or hereafter in Hana's possession concerning the same or any other matter. By executing this Guarantee, Guarantor knowingly accepts the full range of risks encompassed within a contract of continuing guaranty, which risks Guarantor acknowledges include without limitation the possibility that Client will incur additional Indebtedness for which Guarantor will be liable hereunder after Clients' financial condition or ability to pay such Indebtedness has deteriorated and/or after bankruptcy or insolvency proceedings have been commenced by or against Client(s).

12. **Reports and Financial Statements of Guarantor.** Guarantor shall, at his sole cost and expense, at any time and from time to time, prepare or cause to be prepared, and provide to Hana upon Hana's request: (a) such financial statements and reports concerning Guarantor for such periods of time as Hana may designate

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(which financial statements shall, if requested by Hana, be audited by certified public accountants acceptable to Hana); (b) any other information concerning Guarantor's business, financial condition or affairs as Hana may request; and (c) copies of any and all foreign, federal, state and local tax returns and reports of or relating to Guarantor as Hana may from time to time request. Guarantor hereby intentionally and knowingly waives any and all rights and privileged he may have not to divulge or deliver said tax returns, reports and other information that are requested by Hana hereunder or in any litigation in which Hana may

be involved relating directly or indirectly to Client or to Guarantor. Guarantor further agrees immediately to give written notice to Hana of any adverse change in Guarantor's financial condition and of any condition or event that constitutes an Event of Default under this Guarantee.

**13. Representations and Warranties.** Guarantor hereby represents and warrants that: (a) it is in Guarantor's direct interest to assist Client in procuring credit, because Client are an affiliate of Guarantor, furnishes goods or services to Guarantor, purchases or acquires goods or services from Guarantor, and/or otherwise has a direct or indirect corporate or business relationship with Guarantor; (b) this Guarantee has been duly and validly authorized, executed and delivered and constitutes the binding obligation of Guarantor, enforceable in accordance with its terms; and (c) the execution and delivery of this Guarantee does not violate or constitute a default under any order, judgment, decree, instrument or agreement to which Guarantor is a party or by which he or his property are affected or bound.

**14. Integration.** This Guarantee is the entire and only agreement between Guarantor and Hana with respect to the guaranty of the Indebtedness of Client by Guarantor, and all representations, warranties, agreements, or undertakings heretofore or contemporaneously made, which are not set forth herein, are superseded hereby.

**15. Amendment.** The terms and provisions hereof may not be waived, altered, modified, or amended except in a writing executed by Guarantor and a duly authorized officer of Hana.

**16. Costs.** Whether or not suit be instituted, Guarantor agrees to reimburse Hana on demand for all attorneys' fees and all other costs and expenses incurred by Hana in enforcing this Guarantee, or arising out of or relating in any way to this Guarantee, or in enforcing any of the Indebtedness against Client, Guarantor, or any other person, or in connection with any property of any kind securing all or any part of the Indebtedness. Without limiting the generality of the foregoing, and in addition thereto, Guarantor shall reimburse Hana on demand for all attorneys' fees and costs Hana incurs in any way relating to Guarantor, Client or the Indebtedness, in order to: obtain legal advice; enforce or seek to enforce any of its rights; commence, intervene in, respond to, or defend any action or proceeding; file, prosecute or defend any claim or cause of action in any action or proceeding (including without limitation any probate claim, bankruptcy claim, third-party claim, secured creditor claim, reclamation complaint, and complaint for relief from any stay under the Bankruptcy Code or otherwise); protect, obtain possession of, sell, lease, dispose of or otherwise enforce any security interest in or lien on any property of any kind securing any or all of the Indebtedness; or represent Hana in any litigation with respect to Clients' or Guarantor's affairs. In the event either Hana or Guarantor files any lawsuit against the other predicated on a breach of this Guarantee, the prevailing party in such action shall be entitled to recover its attorneys' fees and costs of suit from the non-prevailing party.

**17. Successors and Assigns.** All rights, benefits and privileges hereunder shall inure to the benefit of and be enforceable by Hana and its successors and assigns and shall be binding upon Guarantor and his heirs, executors, administrators, personal representatives, successors and assigns. Neither the death of Guarantor nor notice thereof to Hana shall terminate this Guarantee as to his estate, and notwithstanding the death of Guarantor or notice thereof to Hana, this Guarantee shall continue in full force and effect with respect to all Indebtedness, including without limitation, Indebtedness incurred or created after the death of Guarantor and notice thereof to

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Hana.

**18. Notices.** Any notice that a party shall be required or shall desire to give to the other hereunder shall be given by personal delivery or by depositing the same in the United States mail, first class postage pre-paid, addressed to Hana at its addresses set forth in the heading of this Guarantee and to Guarantor at his address set forth next to his signature hereon, and such notices shall be deemed duly given on the date of personal delivery or three days after the date of mailing as aforesaid. Hana and Guarantor may change their address for purposes of receiving notices hereunder by giving written notice thereof to the other party in accordance herewith. Guarantor shall give Hana immediate written notice of any change in his address.

**19. Construction; Severability.** If more than one person has executed this Guarantee, the term "Guarantor" as used herein shall be deemed to refer to all and any one or more of such persons and their obligations hereunder shall be joint and several. As used in this Guarantee, the term "property" is used in its most comprehensive sense and shall mean all property of every kind and nature whatsoever, including without limitation real property, personal property, mixed property, tangible property and intangible property. If any provisions of this Guarantee or the application thereof to any party or circumstance are held invalid, void, inoperative or unenforceable, the remainder of this Guarantee and the application of such provision to other parties or circumstances shall not be affected thereby, the provisions of this Guarantee being severable in any such instance.

**20. Governing Law and Jurisdiction.** This instrument and all acts and transactions pursuant or relating hereto and all rights and obligations of the parties hereto be governed, construed, and interpreted in accordance with the internal laws of the State of California. In order to induce Hana to accept this Guarantee, and as a material part of the consideration therefore: (i) Guarantor agrees that all actions or proceedings relating directly or indirectly hereto shall, at the option of Hana, be litigated in courts located within Los Angeles County, California; (ii) Guarantor consents to the jurisdiction of any such court and consents to the service of process in any such action or proceeding by personal delivery or any other method permitted by law; and (iii) Guarantor waives any and all rights Guarantor may have to transfer or change venue of any such action or proceeding.

**21. Waiver of Jury Trial.** GUARANTOR INTENTIONALLY AND KNOWINGLY, FOLLOWING CONSULTATION WITH LEGAL COUNSEL, WAIVES HIS RIGHT TO TRIAL BY JURY IN ANY CLAIM, CAUSE OF ACTION OR PROCEEDING BASED UPON, ARISING OUT OF OR RELATING TO THIS GUARANTY OR ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS GUARANTY. GUARANTOR ACKNOWLEDGES THAT THIS WAIVER IS A MATERIAL INDUCEMENT TO HANA TO ENTER INTO A BUSINESS RELATIONSHIP WITH CLIENT AND THAT HANA HAS RELIED AND WILL CONTINUE TO RELY ON THIS WAIVER.

IN WITNESS WHEREOF, the undersigned has executed this Guarantee on January 5, 2009.

**GUARANTOR:**

Name: John Kang  
Address: \_\_\_\_\_  
\_\_\_\_\_



SSN: \_\_\_\_\_

Signature: /s/ John Kang

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**CONSENT OF REGISTERED INDEPENDENT PUBLIC ACCOUNTING FIRM**

Board of Directors  
Liquidmetal Technologies, Inc.

We consent to the incorporation by reference of our report of Independent Registered Public Accounting Firm dated April 13, 2009 on the consolidated balance sheets as of December 31, 2008 and 2007, and the related consolidated statements of operations and comprehensive loss, shareholders' equity (deficiency), and cash flows for the three year period ended December 31, 2008 included in this Form 10-K, into the Company's previously filed S-8 Registration Statement (File No. 333-101447).

/s/ Choi, Kim, Park, LLP  
Los Angeles, California  
April 15, 2009

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## CERTIFICATION

I, Larry Buffington, certify that:

1. I have reviewed this annual report on Form 10-K of Liquidmetal Technologies, Inc. for the year ended December 31, 2008;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) and internal control over financial reporting (as defined in Exchange Act Rules 13a-1f(f) and 15d-1f(f)) for the registrant and we have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal year (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonable likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

Date: April 15, 2009

/s/ Larry E. Buffington  
Larry E. Buffington  
President and Chief Executive Officer  
(Principal Executive Officer)

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## CERTIFICATION

I, Tony Chung, certify that:

1. I have reviewed this annual report on Form 10-K of Liquidmetal Technologies, Inc. for the year ended December 31, 2008;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) and internal control over financial reporting (as defined in Exchange Act Rules 13a-1f(f) and 15d-1f(f)) for the registrant and we have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal year (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonable likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

Date: April 15, 2009

/s/ Tony Chung  
Tony Chung  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

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**CERTIFICATION PURSUANT TO 18 U.S.C.  
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906  
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Liquidmetal Technologies, Inc. (the "company") on Form 10-K for the year ending December 31, 2008, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Larry Buffington, President / Chief Executive Officer, and Tony Chung, Chief Financial Officer, of the company, certify, pursuant to and for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: April 15, 2009

By: /s/ Larry E. Buffington  
Larry E. Buffington  
President and CEO

Date: April 15, 2009

By: /s/ Tony Chung  
Tony Chung  
CFO

A signed original of this written statement required by Section 906 has been provided to Liquidmetal Technologies, Inc. and will be retained by Liquidmetal Technologies, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

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