
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 4

to

Form S-1

**REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Liquidmetal Technologies

(Exact name of registrant as specified in its charter)

California
*(State or other jurisdiction of
incorporation or organization)*

3399
*(Primary Standard Industrial
Classification Code Number)*

33-0264467
*(I.R.S. Employer
Identification No.)*

Liquidmetal Technologies

**100 North Tampa St., Suite 3150
Tampa, Florida 33602
(813) 314-0280**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John Kang

**Chief Executive Officer
Liquidmetal Technologies
100 North Tampa St., Suite 3150
Tampa, Florida 33602
(813) 314-0280**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Martin A. Traber, Esq.
Steven W. Vazquez, Esq.
Foley & Lardner
100 North Tampa St., Suite 2700
Tampa, Florida 33602
(813) 229-2300**

**Michael L. Fitzgerald, Esq.
Sidley Austin Brown & Wood LLP
875 Third Avenue
New York, New York 10022
(212) 906-2000**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. _____.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the

registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

Subject to Completion

Preliminary Prospectus dated May 1, 2002

PROSPECTUS

5,000,000 Shares



Common Stock

This is Liquidmetal Technologies' initial public offering. Liquidmetal Technologies is selling all of the shares.

We expect the public offering price to be between \$15.00 and \$17.00 per share. Currently, no public market exists for the shares. We have applied to have the shares quoted on the Nasdaq National Market under the symbol "LQMT."

Investing in the common stock involves risks that are described in the "Risk Factors" section beginning on page 6 of this prospectus.

	Per Share	Total
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to Liquidmetal Technologies	\$	\$

The underwriters may also purchase up to an additional 750,000 shares from us at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus to cover overallocments.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares will be ready for delivery on or about _____, 2002.

Merrill Lynch & Co.

UBS Warburg

Robert W. Baird & Co.

The date of this prospectus is _____, 2002.



20th
Century



Plastics

The development of plastics in the early 1900s was a major advance in materials science. Plastic's ability to be shaped into a variety of forms at relatively low costs has led to its widespread use today. The processing and cost advantages of plastics have enabled plastics to supplant wood, glass, iron, and other materials in a wide variety of applications.



Titanium

The development of high-strength titanium alloys in the 1950s resulted in a variety of new commercially viable uses for titanium. Titanium alloy's strength and durability make it desirable in applications that require high performance and low failure rates.

21st
Century



Liquidmetal® Alloy

Liquidmetal® alloys combine the processing and cost advantages of plastics with performance and strength characteristics that exceed in many respects those of titanium alloys. Liquidmetal Technologies is developing, manufacturing, and marketing products made from these alloys.

LIQUIDMETAL
TECHNOLOGIES

TABLE OF CONTENTS

[PROSPECTUS SUMMARY](#)

[RISK FACTORS](#)

[CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS](#)

[USE OF PROCEEDS](#)

[DIVIDEND POLICY](#)

[CAPITALIZATION](#)

[DILUTION](#)

[SELECTED CONSOLIDATED FINANCIAL DATA](#)

[MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS](#)

[BUSINESS](#)

[MANAGEMENT](#)

[CERTAIN TRANSACTIONS](#)

[PRINCIPAL SHAREHOLDERS](#)

[DESCRIPTION OF CAPITAL STOCK](#)

[SHARES ELIGIBLE FOR FUTURE SALE](#)

[UNDERWRITING](#)

[LEGAL MATTERS](#)

[EXPERTS](#)

[WHERE YOU CAN FIND ADDITIONAL INFORMATION](#)

[INDEX TO CONSOLIDATED FINANCIAL STATEMENTS](#)

[Form of Underwriting Agreement](#)

[Deloitte & Touche Consent](#)

TABLE OF CONTENTS

	Page
Prospectus Summary	1
Risk Factors	6
Cautionary Statement Regarding Forward-Looking Statements	16
Use of Proceeds	17
Dividend Policy	17
Capitalization	18
Dilution	19
Selected Consolidated Financial Data	20
Management's Discussion and Analysis of Financial Condition and Results of Operations	21
Business	29
Management	45
Certain Transactions	57
Principal Shareholders	59
Description of Capital Stock	61
Shares Eligible for Future Sale	64
Underwriting	66
Legal Matters	70
Experts	70
Where You Can Find Additional Information	70
Index to Consolidated Financial Statements	F-1

(This page intentionally left blank)

PROSPECTUS SUMMARY

This summary highlights information that we present more fully in the rest of this prospectus. This summary does not contain all of the information you should consider before buying shares of our common stock in this offering. You should read the entire prospectus carefully, including the section entitled "Risk Factors" and our consolidated financial statements and the notes to those statements.

Liquidmetal Technologies

We develop, manufacture, and market products made from amorphous alloys, and we believe that we are the only company dedicated solely to the commercialization of bulk amorphous alloys. We have the exclusive right to develop, manufacture, and sell what we believe are the only commercially available bulk amorphous alloys. Our amorphous alloys, or Liquidmetal alloys, possess a combination of performance, processing, and cost advantages that we believe makes them preferable to other materials in a variety of applications. With respect to performance, our alloys are in many cases stronger, harder, more elastic, and more wear and corrosion resistant than commonly used high-performance alloys. With respect to processing, our bulk amorphous alloys possess advantages that are typically associated with plastics, such as the ability to be molded into highly finished products without costly post-finishing processes. We market and sell Liquidmetal alloy industrial coatings and make products and components from bulk Liquidmetal alloys that can be incorporated into the finished goods of our customers.

The unique atomic structure of Liquidmetal alloys differentiates them from other metals and alloys. An alloy is an engineered material consisting of two or more metals dissolved into each other in a molten state. In this molten state, the atomic particles of all metals and alloys are arranged in a completely random, or amorphous, structure. When cooled into a solid, the atomic particles of other metals and alloys become organized into regular and predictable patterns, similar to the manner in which ice forms when water freezes and crystallizes. These patterns contain naturally occurring structural defects that limit the potential strength of the material. In contrast, amorphous alloys retain their amorphous atomic structure when they solidify, allowing for an alloy with performance and processing characteristics that are superior in many ways to those of commonly used high-performance alloys. For example, bulk Liquidmetal alloys are about 250% stronger than commonly used titanium alloys, but can be molded in a manner similar to plastics.

Prior to 1993, amorphous alloys could only be created in thin forms, such as coatings and films. In 1993, researchers at the California Institute of Technology, or Caltech, developed the first commercially viable bulk amorphous alloy. Bulk amorphous alloys can have significant thickness, up to about one inch, which allows for their use in a wider variety of applications. Through a license agreement with Caltech, we have the exclusive right to commercialize Caltech's bulk amorphous alloy technology. In 1997, we began selling products made from bulk amorphous alloys, and we have since made significant advances in the composition and processing of our bulk amorphous alloys.

We believe that the development and commercialization of bulk amorphous alloys represent an important step forward in materials science. The development of plastics and the commercialization of titanium alloys are examples of major advances in materials science that have realized commercial success. Plastics can be molded into final shapes in many forms at relatively low costs using efficient processing methods. This cost advantage has allowed plastic to become one of the most prevalent materials used today, even though it is a relatively weak material. Titanium alloys are lighter and stronger than most metals and alloys, but are difficult to process and relatively expensive to produce.

Liquidmetal alloys combine processing and cost advantages similar to plastics with performance characteristics that exceed in many respects those of high-performance alloys, like titanium. Nevertheless, current bulk Liquidmetal alloys may not be able to replace plastics in applications in which high strength is not important or replace high-performance alloys in applications that are subject to high temperatures, such as internal engine components. However, we believe that the combination of performance, processing,

[Table of Contents](#)

and cost advantages of our alloys will result in them replacing other materials in a variety of applications. We also believe that these advantages will enable the creation of entirely new products that are not commercially viable with existing materials.

Our Strategy

Our goal is to use our leadership position in amorphous alloy technology to develop and commercialize a wide variety of product applications. The key elements of our strategy include:

- Identifying and developing new applications that will utilize the performance, processing, and cost advantages of our alloys.
- Focusing our commercialization efforts on applications for products with relatively high unit volumes that are sold in major industries.
- Developing internal manufacturing capabilities for substantially all of our products to facilitate quality control, generate efficiencies, improve our technology, and protect our intellectual property.
- Establishing the Liquidmetal brand as a high-performance alloy and superior substitute for materials currently used in various applications and as an enabling technology that facilitates the creation of commercially viable new products.
- Enhancing our competitive position by aggressively developing, exploiting, and protecting our existing technologies, as well as future advances in amorphous alloy technologies.
- Pursuing acquisitions, joint ventures, and other strategic transactions to gain access to new technologies, products, markets, and manufacturing capabilities.

Initial Applications

We have identified several initial market opportunities to allow us to execute our strategy. These include:

- *Casings for electronic products.* We produce casing components for cellular phones and other electronic products.
- *Sporting goods and leisure products.* We are developing and marketing various applications for Liquidmetal alloys in the sporting goods and leisure products industry. We make golf club components and watchcases and are currently marketing them to finished-goods manufacturers.
- *Medical devices.* We are developing various medical devices made from Liquidmetal alloys, including precision instruments used in eye surgeries, and we are producing prototypes of these products for testing by potential customers. In addition, recently completed initial test results lead us to believe that Liquidmetal alloys will be biologically compatible for other medical applications, such as orthopedic devices.
- *Industrial coatings.* We market and sell industrial coatings that reduce the wear and consequent failure of industrial machinery and equipment. We estimate that our coatings represented about 80% of worldwide sales of hard band coatings for oil drill pipe in 2001.
- *Defense applications.* We have been awarded a contract by the Defense Advanced Research Projects Agency, or DARPA, for funding of up to \$2 million to test Liquidmetal alloy rods in kinetic energy penetrators, which are armor piercing munitions.

[Table of Contents](#)

Liquidmetal Golf

Historically, we engaged in the retail marketing and sale of golf clubs through our majority owned subsidiary, Liquidmetal Golf. On September 29, 2001, our board of directors and the board of directors of Liquidmetal Golf voted to discontinue Liquidmetal Golf's retail golf business. We made this decision in order to conform our business operations to our strategy of manufacturing components and products that are incorporated into the finished goods of our customers. This retail golf club business is treated as a discontinued operation in our consolidated financial statements.

Historically, Liquidmetal Golf's retail golf club business consisted of the marketing and sale of golf clubs that were designed by Liquidmetal Golf and that carried the Liquidmetal Golf brand name. These golf clubs, which were manufactured by a third party, were marketed and sold by Liquidmetal Golf directly to retail outlets and consumers. Although the retail golf club business has been discontinued, Liquidmetal Golf will be engaged in the business of manufacturing and selling golf club components to golf original equipment manufacturers that will integrate these components into their own golf clubs and then sell them under their respective brand names. Liquidmetal Golf completed the discontinuation of its retail business as of April 30, 2002, and has liquidated substantially all of its inventory. Liquidmetal Technologies owns 79.19% of the outstanding equity interest in Liquidmetal Golf.

Corporate Information

We were incorporated in California in 1987. Our principal executive offices are located at 100 North Tampa St., Suite 3150, Tampa, Florida 33602, and our telephone number at that address is (813) 314-0280. Our principal research and development offices are located at 25800 Commercentre Dr., Suite 100, Lake Forest, California 92630, and our telephone number at that address is (949) 206-8000. Our Internet site address is www.liquidmetal.com. Any information that is included on or linked to our Internet site is not a part of this prospectus.

Liquidmetal® and the Liquidmetal logo are registered trademarks of Liquidmetal Technologies. Other trademarks and service marks appearing in this prospectus are the property of their respective holders.

The Offering

Shares offered by Liquidmetal Technologies	5,000,000 shares
Shares outstanding after the offering	40,764,245 shares
Use of proceeds	We estimate that our net proceeds from the offering, assuming no exercise of the underwriters' over-allotment option, will be approximately \$72.5 million. We intend to use approximately \$35.0 to \$45.0 million of the net proceeds for the construction and equipping of manufacturing facilities, and we also intend to use a portion of the net proceeds to repay approximately \$7.8 million in outstanding indebtedness. We intend to use the remaining net proceeds for general corporate purposes, including capital expenditures and working capital, and potential strategic transactions such as acquisitions and joint ventures.
Risk factors	See the section entitled "Risk Factors" and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock.
Proposed Nasdaq National Market symbol	LQMT

The number of shares of common stock outstanding after the offering is based upon the number of shares outstanding as of April 15, 2002 and:

- includes 456,857 shares that will be issued upon the conversion of our Series A convertible preferred stock upon the closing of this offering;
- excludes 5,260,254 shares issuable pursuant to options granted under our stock incentive plans at a weighted average exercise price of \$6.04 per share, of which 1,910,356 options were vested as of April 15, 2002, and also excludes an additional 10,850,000 shares reserved for issuance pursuant to future option grants under our stock incentive plans;
- excludes 2,909,680 shares that are issuable pursuant to non-qualified stock options granted outside of our stock incentive plans at a weighted average exercise price of \$3.19 per share, all of which were vested as of April 15, 2002; and
- excludes 645,162 shares that are issuable pursuant to warrants having an exercise price of \$4.65 per share that were outstanding as of April 15, 2002.

Unless otherwise specifically noted, all financial information and share data in this prospectus have been adjusted to reflect a one-for-3.1 reverse stock split of our outstanding common stock and preferred stock on April 4, 2002. In addition, except as otherwise noted, all information in this prospectus assumes no exercise of the underwriters' over-allotment option.

Summary Consolidated Financial Data

The following summary consolidated financial data should be read in conjunction with Liquidmetal Technologies' consolidated financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. The summary consolidated financial data for the years ended December 31, 2001, 2000, and 1999 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated financial data as of and for the three months ended March 31, 2002 and March 31, 2001 have been derived from our unaudited consolidated financial statements which, in the opinion of management, reflect all adjustments necessary to present fairly, in accordance with accounting principles generally accepted in the United States, the information for those periods. Results for the three months ended March 31, 2002 are not necessarily indicative of the results which may be expected for any other interim periods or for the year as a whole.

	Three Months Ended March 31,		Year Ended December 31,		
	2002	2001	2001	2000	1999
(in thousands, except per share data)					
Consolidated Statements of Operation Data:					
Revenue	\$ 1,463	\$ 874	\$ 3,882	\$ 4,200	\$ 2,012
Cost of sales	681	442	1,924	1,983	805
Gross profit	782	432	1,958	2,217	1,207
Operating expenses:					
Selling, general, and administrative	2,272	415	3,970	1,449	847
Research and development	2,694	252	2,057	455	333
Total operating expenses	4,966	667	6,027	1,904	1,180
Interest expense, net	(312)	(188)	(1,095)	(188)	(190)
Income (loss) from continuing operations	(4,496)	(423)	(5,164)	125	(163)
Loss from operations of discontinued retail golf segment, net	—	(1,887)	(5,973)	(8,938)	(7,977)
Loss from disposal of discontinued retail golf segment, net	(530)	—	(11,949)	—	—
Net loss	\$ (5,026)	\$ (2,310)	\$ (23,086)	\$ (8,813)	\$ (8,140)
Income (loss) per share from continuing operations (basic)	\$ (0.13)	\$ (0.01)	\$ (0.15)	\$ 0.00	\$ (0.01)
Income (loss) per share from continuing operations (diluted)	\$ (0.13)	\$ (0.01)	\$ (0.15)	\$ 0.00	\$ (0.01)
Weighted average common shares used to compute income (loss) per share from continuing operations (basic)(1)	35,080	31,193	33,323	30,233	26,788
Weighted average common shares used to compute income (loss) per share from continuing operations (diluted)(1)	35,080	31,193	33,323	33,285	26,788

As of March 31, 2002

	As of March 31, 2002		
	Actual	Pro forma(2)	Pro Forma As Adjusted(3)
(in thousands)			
Consolidated Balance Sheet Data:			
Cash and cash equivalents	\$ 872	\$ 872	\$65,611
Working capital (deficiency)	(9,712)	(9,712)	55,027
Total assets	5,811	5,811	70,550
Long-term debt, including current portion	5,216	5,216	—
Shareholders' equity (deficiency)	(9,556)	(9,556)	62,944

(1) As adjusted to reflect a one-for-3.1 reverse stock split of our outstanding common stock and preferred stock on April 4, 2002.

(2) Pro forma to give effect to the conversion of all of our Series A convertible preferred stock into 456,857 shares of common stock upon the consummation of this offering.

(3) Pro forma as adjusted to give effect to the sale of 5,000,000 shares in this offering at an assumed initial public offering price of \$16.00 per share (the midpoint of the expected price range) after deducting the underwriting discount and commissions and estimated offering expenses and to give effect to the repayment of \$7.8 million in principal and accrued interest on several outstanding loans with the proceeds from this offering, of which \$1.5 million in principal amount was issued subsequent to March 31, 2002.

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below, together with all of the other information contained in this prospectus, before you decide to buy our common stock. If any of the following risks actually occur, our business, financial condition, or results of operations could be materially adversely affected. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial also may impair our business. Any adverse effect on our business, financial condition, or results of operations could result in a decline in the trading price of our common stock and the loss of all or part of your investment.

We have not sustained profitability and may incur losses in the future.

We had an accumulated deficit of approximately \$63.6 million at March 31, 2002. Of this accumulated deficit, \$44.8 million was attributable to losses generated by our discontinued retail golf business through March 31, 2002. We realized a net loss of \$4.5 million for the three months ended March 31, 2002 and \$5.2 million for the year ended December 31, 2001, excluding the results of our discontinued retail golf business. We may incur additional operating losses in the future. Moreover, we expect that our operating expenses will continue to increase significantly as we develop our own manufacturing capabilities, expand our management team and sales and marketing operations, and invest substantial resources for research and development activities. Consequently, it is possible that we may not achieve positive earnings and, if we do achieve positive earnings, we may not be able to achieve them on a sustainable basis.

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 coating industry since 1987. 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. We only recently began producing bulk amorphous alloy components and products for incorporation into our customers' finished goods. While we anticipate this business will generate substantially all of our revenue in the future, we have generated minimal revenue from this business to date and have only a limited number of purchase orders, some of which are cancellable without penalty. Moreover, many of our relationships with potential customers are at an early stage, and there can be no assurance that these customers will enter into purchase commitments with us. Therefore, we have limited financial, operational, and manufacturing data that you can use to evaluate our business and business prospects. Any evaluation of our business and business prospects must be considered in light of our limited history of developing, manufacturing, and selling bulk amorphous alloy components and products for incorporation into our customers' finished goods.

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

We only recently began producing bulk amorphous alloy components and products for incorporation into our customers' finished goods. We have generated minimal revenue from this marketing effort to date, and the extent of demand for bulk Liquidmetal alloys in the markets that we have identified is uncertain. We have made assumptions regarding the market size for, and the manufacturing requirements of, our products and components based in part on information we receive from third parties. If these assumptions prove to be incorrect, we may not be able to achieve profitability.

Our historical results of operations may not be indicative of our future results.

Although our discontinued retail golf business will not contribute to our revenues in 2002 or in the future, this business contributed approximately 46.2%, 61.5%, and 74.7% of our revenues for the years ended December 31, 2001, 2000, and 1999, respectively. As a result of our limited history of selling bulk amorphous alloy components and products that are incorporated into the finished goods of our customers, and because the revenues, costs and expenses, assets and liabilities, and cash flows in connection with our discontinued retail golf business have been segregated in our consolidated financial statements, our historical results of operations may not be indicative of our future results. In addition, we have estimated in our consolidated financial statements the losses expected to be incurred by our discontinued retail golf business. If the losses we actually incur increase materially from these estimates, our financial results could be harmed.

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 revenues and commercialize our products.

To increase our revenues, we must establish and maintain relationships with customers that incorporate our components and products into their finished goods. We expect to rely on the marketing, distribution, and, in some cases, the research and development abilities of our customers to assist us in developing, commercializing, and marketing our products in different markets. To date, we have formalized only a few of these relationships. 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 chosen to be incorporated into a customer's products, we may still not realize significant revenues 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 will be affected by the amount of time it takes for:

- us to identify a potential customer;
- our customers to test Liquidmetal alloys;
- prototypes to be designed;
- manufacturing facilities to be prepared for full-scale production upon the transition from prototype to final product; and
- with respect to some types of products, such as medical devices, obtaining 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. The sales cycle could extend 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 products into which our alloys are integrated. Our inexperience in this area could delay our ability to generate additional revenue.

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.

We believe that many of our customers will perform numerous tests and extensively evaluate our components and products before incorporating them into their finished products. The time required for

[Table of Contents](#)

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 revenues, 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 revenues will be concentrated in a limited number of customers. For example, for the year ended December 31, 2001, revenues from three customers of our industrial coatings represented approximately 52% of total revenues from continuing operations. A reduction, delay, or cancellation of orders from one or more of our customers or the loss of one or more customer relationships could significantly reduce our revenues. 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 revenues 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 likely 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 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 bulk Liquidmetal alloys. If we are unable to identify and develop new applications, we may be unable to develop new products or generate additional revenues. 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.

Our future growth and success will depend in part on our ability to establish and retain a technological advantage over other materials for applications that we identify for bulk Liquidmetal alloys. For many of our targeted applications, we will compete with manufacturers of similar products that use different materials. For example, we have targeted the cellular phone casing market as an application for bulk Liquidmetal alloys. In this market, we believe we will compete with other manufacturers of cellular phone casings who use plastics or metal to construct their casings. In other markets, we will compete

[Table of Contents](#)

directly with suppliers of the incumbent material. For example, we have targeted the orthopedic device market as an application for bulk Liquidmetal alloys. Because we have targeted medical device manufacturers that internally manufacture orthopedic devices, we believe that we will compete in this market with the suppliers of titanium alloy, stainless steel, and other materials currently used to make orthopedic devices. Manufacturers of competing products or suppliers of incumbent materials may have significantly greater financial resources than us.

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.

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 future growth and success will depend in part on our ability to retain key members of our management and scientific staff, particularly John Kang, our President and Chief Executive Officer, and Professor William Johnson, Vice Chairman of our board of directors. We do not have “key man” or similar insurance on either of these individuals. If we lose either of 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 new scientific, 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 effectively manage our anticipated growth.

If we fail to effectively manage our internal growth in a manner that minimizes strains on our resources, we could experience disruption in our operations and ultimately be unable to achieve or sustain profitability. Furthermore, we anticipate that we will need to significantly expand our operations to successfully implement our business strategy. Managing our anticipated growth may be difficult because:

- our management team has worked together for a relatively short period of time;
- we have a limited history of manufacturing our own products, and we intend to rapidly develop and equip additional manufacturing facilities in South Korea upon the completion of this offering;
- we have a limited history of developing, manufacturing, and marketing products made from bulk Liquidmetal alloys, and we expect that our bulk alloy business will generate the majority of our revenue in the near future;
- we intend to rapidly expand our research and development programs; and
- we intend to pursue acquisitions, joint ventures, and other strategic transactions that will enhance or expand our technology and manufacturing base.

[Table of Contents](#)

We will need to add manufacturing, scientific, managerial, marketing, sales, and other personnel, both domestically and internationally. We will also need to rapidly institute additional operational, financial, and management controls to accommodate our expansion, as well as additional reporting systems and procedures. If we fail to effectively manage this growth, we may not be able to effectively implement our strategy, and our financial results and business prospects could be harmed.

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

We intend to pursue strategic transactions that provide access to new technologies, products, markets, and manufacturing capabilities. These transactions could include acquisitions, partnerships, joint ventures, business combinations, and investments. For example, 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. In particular, upon the completion of this offering, we intend to focus our acquisition efforts on companies that will expand or enhance our manufacturing capabilities. We may not be able to successfully identify any potential strategic transactions. Even if we do identify one or more potentially beneficial strategic transactions, we may not be able to consummate these transactions on favorable terms or obtain the benefits we anticipate from such a transaction. If we are able to consummate any strategic transactions, the transactions could pose significant integration challenges or management and business disruptions, especially while we are in the early stages of our growth.

We do not have direct experience in manufacturing our products, and we may encounter manufacturing problems or delays or may be unable to produce high-quality products at acceptable costs.

We intend to internally manufacture substantially all of our bulk Liquidmetal alloy products, including products that we develop in conjunction with our customers. To date, all of our products have been outsourced for manufacture by third parties, except for prototypes and sample quantities of various bulk Liquidmetal alloy products. The development and operation of our manufacturing facilities will require significant investment of capital and managerial attention and require various permits and approvals from regulatory agencies. We have 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. We cannot assure you that we will be able to accomplish our manufacturing plans or that we will be able to obtain all regulatory permits or approvals necessary to construct and operate our manufacturing facilities.

We currently own and operate a small manufacturing facility in South Korea and are establishing additional manufacturing facilities in South Korea. Additionally, we have recently leased space in a facility in Pinellas County, Florida that we may use for prototype manufacturing. We may also establish additional manufacturing facilities in the United States or abroad. We cannot assure you that these facilities will be completed on a timely basis or within the currently contemplated budgets. We also cannot assure you that these facilities will be able to produce their intended products with the production yields, quality controls, and production costs that we currently assume. We may be required to incur additional capital expenditures if it is necessary to increase our manufacturing capability, and we may not be able to finance any future capital expenditures on commercially reasonable terms or at all.

The loss of manufacturing services for our industrial coating products could harm our business.

We intend to continue to outsource the manufacturing of our industrial coatings, the sales of which currently constitute substantially all of our operating revenues. If any of these subcontractors terminates or fails to perform their respective obligations under a manufacturing agreement, we may be unable to manufacture our industrial coating products in a timely manner and our business may be harmed. Establishing our own manufacturing capabilities for our coatings or identifying substitute manufacturers could be expensive and time-consuming and result in a reduction of our revenues.

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

We are in the process of constructing additional manufacturing facilities in South Korea. We expect that we will manufacture substantially all of our initial bulk Liquidmetal alloy products in our South Korean facilities. As a result, our manufacturing operations are subject to risks of political instability, including the risk of conflict between North Korea and South Korea. In addition, we anticipate that sales to customers located outside of the United States will account for a significant portion of our revenues in future periods and that the trend of foreign customers accounting for an increasing portion of our total sales may continue. Specifically, we expect to derive a significant amount of revenue from sales to customers located in South Korea and throughout Asia. A significant downturn in the economies of Asian countries where our products will be sold, particularly South Korea's economy, would materially harm our business.

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

- difficulties in staffing and managing our manufacturing facilities 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 facilities and the United States;
- political and economic instability;
- potentially adverse tax consequences;
- burden of complying with complex foreign laws and treaties; and
- trade protection laws, policies, and measures and other regulatory requirements affecting trade and investment, 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.

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 revenues 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 and could result in exchange losses.

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 Caltech to several patents and patent applications relating to amorphous alloy technology, and we have obtained several of our own patents. We also have the exclusive right to Caltech's inventions, proprietary information, know-how, and other technology relating to bulk

[Table of Contents](#)

amorphous alloys existing as of September 1, 2001. 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 license agreement with Caltech and our own patents and intellectual property;
- exploit our license of the patented technology under our license agreement with Caltech as well as our own patents; and
- operate our business without infringing on the intellectual property rights of third parties.

Caltech owns 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 expire on various dates between 2004 and 2017, and those relating to our bulk amorphous alloys between 2013 and 2017. 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 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.

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

[Table of Contents](#)

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 medical device products that incorporate our alloys. 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, one of the constituent elements of some of our alloys, may 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 may be 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.

You will suffer immediate and substantial dilution as a result of this offering.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our outstanding common stock. As a result, investors purchasing common stock in this offering will incur immediate and substantial dilution in net tangible book value per share of our common stock from the initial public offering price in the amount of \$14.47 per share, based on an assumed initial public offering price of \$16.00 per share (the midpoint of the expected price range). Additional dilution may be incurred to investors in this offering if stock options or warrants, whether currently outstanding or subsequently granted, are exercised.

Our executive officers and directors and entities affiliated with them will continue to hold a significant percentage of our common stock after this offering, and these shareholders may take actions that may be adverse to your interests.

Our executive officers and directors and entities affiliated with them will, in the aggregate, beneficially own approximately 65.1% of our common stock following this offering. As a result, these shareholders, acting together, will be able to significantly influence all matters requiring shareholder approval, including the election and removal of directors and approval of significant corporate transactions such as mergers, consolidations and sales of assets. They also could dictate the management of our business and affairs. This concentration of ownership could have the effect of delaying, deferring or preventing a change in control or impeding a merger or consolidation, takeover or other business combination, which could cause the market price of our common stock to fall or prevent you from receiving a premium in such a transaction.

The price of our common stock may be highly volatile, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for our common stock. An active trading market for our common stock may not develop or be sustained following this offering. The initial public offering price for the shares was determined by negotiations between us and Merrill Lynch and may not be indicative of prices that will prevail in the trading market. You may not be able to sell your shares quickly or above the initial public offering price if trading in our common stock is not active. Furthermore, the market price of our common stock may decline below the price you paid for your shares.

The trading price of our common stock is likely to be highly volatile and could be subject to wide fluctuations in price in response to various factors, many of which are beyond our control, including:

- the degree to which we successfully implement our business strategy;
- actual or anticipated variations in quarterly or annual operating results;
- changes in recommendations by the investment community or in their estimates of our revenues or operating results;
- speculation in the press or investment community;
- strategic actions by our competitors;
- announcements of technological innovations or new products by us or our competitors; and
- changes in business conditions affecting us and our customers.

The market prices of securities of companies without consistent product revenues and earnings have been highly volatile and are likely to remain highly volatile in the future. This volatility has often been unrelated to the operating performance of these companies. In the past, following periods of volatility in the market price of a company's securities, class action litigation has often been brought against the company. If a securities class action suit is filed against us, whether or not meritorious, we would incur substantial legal fees and our management's attention and resources would be diverted from operating our business in order to respond to the litigation.

Future sales of our common stock could depress our stock price.

Sales of a large number of shares of our common stock, or the availability of a large number of shares for sale, could adversely affect the market price of our common stock and could impair our ability to raise funds in additional stock offerings. Based on shares outstanding as of April 15, 2002, upon completion of this offering, we will have 40,764,245 shares of common stock outstanding, assuming no exercise of options or warrants after April 15, 2002. Approximately 96.7% of our common stock outstanding as of April 15, 2002 (assuming conversion of all of our outstanding Series A convertible preferred stock) is subject to agreements with the underwriters that restrict their ability to transfer their stock for 180 days after the date of this prospectus. Merrill Lynch, on behalf of the underwriters, may in its sole discretion and at any time waive the restrictions on transfer in these agreements during this period. After these agreements expire, approximately 34,038,603 shares held by existing shareholders will be eligible for sale in the public market assuming no exercise of stock options or warrants. In addition, following this offering, three shareholders have piggyback registration rights with respect to up to 1.2 million shares of our common stock currently owned by them or issuable to them pursuant to options. In the event that we propose to register additional shares of common stock under the Securities Act of 1933 for our own account, these shareholders are entitled to receive notice of that registration and to include their shares in the registration, subject to limitations described in the agreements granting these rights.

We will have broad discretion in how we use the net proceeds from this offering.

We intend to use the net proceeds from this offering primarily for the repayment of existing indebtedness, for capital expenditures relating to the construction and equipping of manufacturing facilities, and for general corporate purposes, including working capital and capital expenditures. We may also use a portion of the net proceeds to pursue strategic transactions such as acquisitions and joint ventures. However, our management has not designated a specific use for a substantial portion of the net proceeds and will have broad discretion over their use. Our management may allocate the net proceeds differently than investors in this offering would have preferred, or we may not maximize our return on the net proceeds.

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. We may need additional funds in the future to support our working capital requirements, the expansion of manufacturing capabilities, and for other purposes, and we may seek to raise additional funds through public or private equity financing, bank debt financing or from other sources. Adequate funds may not be available when needed or may not be available on favorable terms. If we raise additional funds by issuing equity securities, existing stockholders may be diluted. If funding is insufficient at any time in the future, we may not be able to develop or enhance our products or services, take advantage of business opportunities or respond to competitive pressures, any of which could harm our business.

Antitakeover provisions of our articles of incorporation and bylaws and provisions of California law could delay or prevent a change of control that you may favor.

Our articles of incorporation, our bylaws, and California law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to you. 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 shareholder 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 call a special meeting of our shareholders;
- 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 shareholders at shareholder meetings.

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

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve risks and uncertainties, such as statements about our plans, objectives, expectations, assumptions, or future events. In some cases, you can identify forward-looking statements by terminology such as “anticipate,” “estimate,” “plan,” “project,” “continuing,” “ongoing,” “expect,” “believe,” “intend,” “may,” “will,” “should,” “could,” and similar expressions. These statements involve estimates, assumptions, known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from any future results, performances, or achievements expressed or implied by the forward-looking statements. Consequently, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail under the section entitled “Risk Factors” above.

The forward-looking statements speak only as of the date on which they are made, and, except as required by law, we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

You should rely only on the information contained in this prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus or other date stated in this prospectus. Our business, financial condition, results of operations, and prospects may have changed by then.

USE OF PROCEEDS

We expect to receive approximately \$72.5 million in net proceeds from the sale by us of shares of common stock in this offering (approximately \$83.7 million if the underwriters' over-allotment option is exercised in full), based on an assumed initial public offering price of \$16.00 per share (the midpoint of the expected price range), and after deducting underwriting discounts, commissions and estimated offering expenses. We currently intend to use the net proceeds as follows:

- approximately \$35.0 to \$45.0 million for the construction and equipping of our manufacturing facilities;
- approximately \$7.8 million to repay in full the principal and accrued interest on several outstanding loans from some of our officers and directors, as follows:
 - approximately \$1.5 million of the net proceeds will be paid to John Kang and Ricardo Salas jointly in full payment of a \$1.4 million loan bearing interest at 8.5% per year with a maturity date of December 31, 2002;
 - approximately \$1.7 million of the net proceeds will be paid to Tjoa Thian Song in full payment of a \$1.5 million loan bearing interest at 8.5% per year with a maturity date of December 31, 2002;
 - approximately \$1.0 million will be paid to Tjoa Thian Song in full payment of a \$1.0 million loan bearing interest at 8.0% per year with a maturity date of the earlier of December 31, 2002 or the closing of an initial public offering or other significant funding transaction;
 - approximately \$2.0 million will be paid to John Kang in full payment of a \$2.0 million loan bearing interest at 8.0% per year with a maturity date of the earlier of May 1, 2003 or the closing of an initial public offering;
 - approximately \$0.8 million will be paid to each of John Kang and Tjoa Thian Song in full payment of loans made by them in the principal amount of \$0.8 million each, both of which loans bear interest at 8.0% per year with a maturity date of the earlier of July 1, 2003 or the closing of an initial public offering; and
- the remaining proceeds for general corporate purposes, including working capital and capital expenditures.

We may also use a portion of the net proceeds to pursue acquisitions, joint ventures, and other strategic transactions to gain access to new technologies, products, markets, and manufacturing capabilities. However, we have no specific plans, agreements, or commitments to do so and are not currently engaged in any negotiations for any acquisition or investment.

The amounts and timing of our use of proceeds will vary depending on a number of factors, including the amount of cash generated or used by our operations, competitive and technological developments, and the rate of growth, if any, of our business. As a result, we will retain broad discretion in the allocation of, and have no specific plans for, a significant portion of the net proceeds of this offering. Pending the uses described above, we will invest the net proceeds of this offering in cash, cash-equivalents, money market funds, or short-term interest-bearing, investment-grade securities.

DIVIDEND POLICY

Liquidmetal Technologies has never declared or paid any cash dividends on its common stock. We anticipate that any earnings will be retained for development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Our board of directors has sole discretion to pay cash dividends based on our financial condition, results of operations, capital requirements, contractual obligations and other relevant factors. In the future, we may also obtain loans or other credit facilities that may restrict our ability to declare or pay dividends.

CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2002:

- on an actual basis;
- on a pro forma basis to reflect the conversion of all of our shares of Series A convertible preferred stock into 456,857 shares of common stock upon the consummation of this offering; and
- on a pro forma as adjusted basis to reflect the sale of 5,000,000 shares of common stock in this offering at an assumed initial offering price of \$16.00 per share (the midpoint of the expected price range), after deducting estimated underwriting discounts and commissions and estimated offering expenses and to reflect to the repayment of \$7.8 million in principal and accrued interest on several outstanding loans (of which \$1.5 million in principal amount was issued subsequent to March 31, 2002) with the proceeds from this offering.

	March 31, 2002		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands, except share data)		
Long-term debt, including current portion	\$ 5,216	\$ 5,216	\$ —
Shareholders (deficiencies) equity			
Preferred stock, no par value: 10,000,000 shares authorized; 456,857 issued and outstanding actual; none issued and outstanding pro forma; and none issued and outstanding pro forma as adjusted	5,577	—	—
Common stock, no par value: 200,000,000 shares authorized; 35,275,129 shares issued and outstanding actual; 35,731,986 shares issued and outstanding pro forma; and 40,731,986 shares issued and outstanding pro forma as adjusted	30,187	35,764	108,264
Paid-in capital	22,526	22,526	22,526
Unamortized stock-based compensation	(4,180)	(4,180)	(4,180)
Accumulated deficit	(63,614)	(63,614)	(63,614)
Accumulated foreign exchange translation gain	(52)	(52)	(52)
Total shareholders' (deficiency) equity	(9,556)	(9,556)	62,944
Total capitalization	\$ (4,340)	\$ (4,340)	\$ 62,944

The table does not include 8,815,096 shares issuable upon the exercise of options and warrants that are outstanding as of April 15, 2002, and does not include an additional 10,850,000 shares reserved for issuance for future award grants under our stock incentive plans. Additionally, the table above does not include 32,259 shares issued upon the exercise of vested stock options subsequent to March 31, 2002.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock after this offering. We calculate net tangible book value per share by calculating the total assets less intangible assets and total liabilities, and dividing it by the number of outstanding shares of common stock.

After giving effect to the sale of shares of common stock at an assumed initial public offering price of \$16.00 per share (the midpoint of the expected price range), after deducting the estimated underwriting discounts, commissions and estimated offering expenses, our pro forma as adjusted net tangible book value as of March 31, 2002, would have been \$62.2 million, or \$1.53 per share. This represents an immediate increase in the pro forma as adjusted net tangible book value of \$1.82 per share to existing shareholders and an immediate dilution of \$14.47 per share to you, as illustrated in the following table:

Assumed initial public offering price per share		\$16.00
Pro forma net tangible book value per share at March 31, 2002	\$(0.29)	
Increase per share attributable to new investors	\$ 1.82	
	<hr/>	
Pro forma net tangible book value per share after this offering		\$ 1.53
		<hr/>
Dilution per share to new investors		\$14.47
		<hr/>

The following table shows on a pro forma as adjusted basis at March 31, 2002, the total number of shares of common stock purchased, the total consideration paid to us, and the average price per share paid by existing shareholders.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
	(in thousands, except percentage and per share data)				
Existing shareholders(1)	35,732	87.7	\$ 35,764	30.9	\$ 1.00
New investors	5,000	12.3	80,000	69.1	\$16.00
	<hr/>	<hr/>	<hr/>	<hr/>	
Totals	40,732	100%	\$115,764	100%	\$ 2.84
	<hr/>	<hr/>	<hr/>	<hr/>	

(1) Includes 456,857 shares that will be issued upon the conversion of our Series A convertible preferred stock upon the closing of this offering.

You will experience additional dilution upon the exercise of outstanding options and warrants, and to the extent that we issue new options or rights under our stock incentive plans or issue additional shares of capital stock in the future, you may experience further dilution.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with Liquidmetal Technologies' consolidated financial statements and the related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. The selected consolidated financial data for the years ended December 31, 2001, 2000 and 1999 and as of December 31, 2001 and 2000, have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The selected consolidated financial data for the year ended December 31, 1998 and as of December 31, 1999 and 1998 have been derived from our audited consolidated financial statements not included in this prospectus. The selected consolidated financial data as of and for the three months ended March 31, 2002 and March 31, 2001 have been derived from our unaudited consolidated financial statements which, in the opinion of management, reflect all adjustments necessary to present fairly, in accordance with accounting principles generally accepted in the United States, the information for those periods. Results for the three months ended March 31, 2002 are not necessarily indicative of the results to be expected for any other interim periods or for the year as a whole. The selected consolidated financial data as of and for the year ended December 31, 1997 has been derived from unaudited internal financial records.

	Three Months Ended March 31,		Year Ended December 31,				
	2002	2001	2001	2000	1999	1998	1997
(in thousands, except per share data)							
Consolidated Statements of Operations Data:							
Revenue	\$ 1,463	\$ 874	\$ 3,882	\$ 4,200	\$ 2,012	\$ 3,143	\$ 3,216
Cost of sales	681	442	1,924	1,983	805	1,388	1,460
Gross profit	782	432	1,958	2,217	1,207	1,755	1,756
Operating expenses:							
Selling, general, and administrative	2,272	415	3,970	1,449	847	2,123	1,750
Research and development	2,694	252	2,057	455	333	278	1,057
Total operating expenses	4,966	667	6,027	1,904	1,180	2,401	2,807
Other (expense) income, net	(312)	(188)	(1,095)	(188)	(190)	452	18
Income (loss) from continuing operations	(4,496)	(423)	(5,164)	125	(163)	(194)	(1,033)
Loss from operations of discontinued retail golf segment, net	—	(1,887)	(5,973)	(8,938)	(7,977)	(7,052)	(2,403)
Loss from disposal of discontinued retail golf segment, net	(530)	—	(11,949)	—	—	—	—
Net loss	\$ (5,026)	\$ (2,310)	\$ (23,086)	\$ (8,813)	\$ (8,140)	\$ (7,246)	\$ (3,436)
Income (loss) per share from continuing operations — basic(1)	\$ (0.13)	\$ (0.01)	\$ (0.15)	\$ 0.00	\$ (0.01)	\$ (0.01)	\$ (0.05)
Income (loss) per share from continuing operations — diluted(1)	\$ (0.13)	\$ (0.01)	\$ (0.15)	\$ 0.00	\$ (0.01)	\$ (0.01)	\$ (0.05)
Weighted average common shares used to compute income (loss) per share from continuing operations — basic(1)	35,080	31,193	33,323	30,233	26,788	21,505	20,499
Weighted average common shares used to compute income (loss) per share from continuing operations — diluted(1)	35,080	31,193	33,323	33,285	26,788	25,650	20,499
(in thousands, except per share data)							
	As of March 31,		As of December 31,				
	2002	2001	2001	2000	1999	1998	1997
Consolidated Balance Sheet Data:							
Cash and cash equivalents	\$ 872	\$ 257	\$ 2,230	\$ 124	\$ 314	\$ 33	\$ 312
Working capital (deficiency)	(9,712)	(1,726)	(9,572)	(3,967)	117	2,928	1,478
Total assets	5,811	4,173	6,680	1,945	2,043	5,557	3,552
Long-term debt, including current portion	5,216	1,804	2,988	2,506	2,106	1,596	—
Shareholders' equity (deficiency)	(9,556)	750	(7,503)	(3,680)	(1,461)	2,033	1,966

(1) As adjusted to reflect a one-for-3.1 reverse stock split of our outstanding common stock and preferred stock on April 4, 2002.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

When you read this section of this prospectus, it is important that you also read our consolidated financial statements and related notes included elsewhere in this prospectus. This section of this prospectus contains forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations, and intentions. We use words such as "anticipate," "estimate," "plan," "project," "continuing," "ongoing," "expect," "believe," "intend," "may," "will," "should," "could," and similar expressions to identify forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the factors described below and in the section entitled "Risk Factors."

Overview

We are in the business of developing, manufacturing, and marketing products made from amorphous alloys. We market and sell Liquidmetal alloy industrial coatings and make products from bulk Liquidmetal alloys that can be incorporated into the finished goods of our customers. Since our inception in 1987, we have marketed and sold industrial coatings made from our proprietary amorphous alloys. In 1993, we acquired an exclusive license to commercialize what we believe is the world's first commercially viable bulk amorphous alloy, and we began selling products made from this alloy in 1997.

The historical operating information contained in this section is based substantially on our coatings business, which we believe will constitute a diminishing percentage of our business in the near future. We only recently began producing bulk amorphous alloy components and products for incorporation into our customers' finished goods. While we anticipate this business will generate substantially all of our revenue in the near future, we have generated minimal revenue from this marketing effort to date. Accordingly, you should not rely on the following discussion or on our historical financial information contained in this discussion and elsewhere in this prospectus as being indicative of our future results or financial condition.

Historically, we have derived revenues primarily from the sale of Liquidmetal alloy coatings to a number of different industries. Prospectively, we expect that a significant portion of our revenues will be derived from new applications that utilize our bulk amorphous alloys. We will be focusing our initial commercialization efforts primarily on applications for products with high unit volumes that are sold in major industries. We expect that these new sources of revenues will significantly change the current size and character of our revenue mix.

The cost of sales for our Liquidmetal coatings consists primarily of the costs incurred in outsourcing our manufacturing to a third party. We expect that our cost of sales will change significantly from historical results as we further develop our bulk amorphous alloy business. Although we plan to continue outsourcing the manufacturing of our coatings, we intend to internally manufacture applications derived from our bulk amorphous alloys. By manufacturing our products in our own facilities with our own equipment, we expect to reduce costs, protect know-how, and achieve efficiencies. However, we expect to incur substantial capital expenses as we establish our manufacturing capabilities.

Selling, general, and administrative expenses currently consist primarily of marketing and advertising, salaries and related benefits, stock-based compensation, professional fees, administrative expenses, and other expenses related to our operations. While many of these same expenses will continue, we expect that the amounts incurred of these expenses will increase significantly in support of the expanding operations, facilities, and applications offered. For example, we intend to hire additional personnel to manage our manufacturing activities and the sales and marketing of new applications.

Research and development expenses represent salaries, related benefits expense, stock-based compensation, expenses incurred for the design and testing of new processing methods, and other expenses related to 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. We expect these research and development efforts to increase significantly, as will our expenses relating to these efforts.

Our historical operations included our coatings business and our retail golf operation conducted through our majority owned Liquidmetal Golf subsidiary. On September 29, 2001, our board of directors and the board of directors of Liquidmetal Golf voted to discontinue the retail golf operations of Liquidmetal Golf in order to conform our operations to our business strategy. Pursuant to Accounting Principles Board Opinion No. 30, *Reporting the Results of Operations — Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions*, we have reclassified our consolidated financial statements to reflect the discontinuation of Liquidmetal Golf's retail golf operations. The revenues, costs and expenses, assets and liabilities, and cash flows of the retail golf business have been segregated in our Consolidated Balance Sheets, Consolidated Statements of Operations and Comprehensive Loss, and Consolidated Statements of Cash Flows. The net operating results, net assets, and net cash flows of the retail golf business have been reported as discontinued operations in our consolidated financial statements.

The following discussion and analysis of our financial condition and results of operations focuses on the historical results of our continuing operations.

Results of Operations

Comparison of the three months ended March 31, 2002 and 2001

Revenues. Revenues increased to \$1.5 million in the three months ended March 31, 2002 from \$0.9 million in the three months ended March 31, 2001. This increase was primarily due to increased sales of Liquidmetal alloy coatings to the oil drill pipe coating industry resulting from increased oil drilling activities. Revenues from research and development contracts increased to \$0.1 million in the three months ended March 31, 2002 from \$0.0 million in the three months ended March 31, 2001 as a result of new contracts entered into during the three months ended March 31, 2002.

Cost of Sales. Cost of sales increased to \$0.7 million, or 47% of revenue, in the three months ended March 21, 2002 from \$0.4 million, or 51% of revenue, in the three months ended March 31, 2001. This increase was primarily a result of increased costs to support sales of our Liquidmetal alloy coatings. The decrease in cost of sales as a percentage of revenue was the result of increased revenues from research and development contracts which carry a significantly lower cost of sales than sales to the coatings industry.

Selling, General, and Administrative Expenses. Selling, general, and administrative expenses increased to \$2.3 million, or 155% of revenue, in the three months ended March 31, 2002, from \$0.4 million, or 48% of revenue, in the three months ended March 31, 2001. This increase was primarily a result of increased wages, stock-based compensation, professional fees, and travel expenses of \$0.9, \$0.1, \$0.3, and \$0.2 million, respectively. These expenses represented the continued additions to our corporate infrastructure required to prepare for and support the anticipated growth of our bulk Liquidmetal alloy business.

Research and Development Expenses. Research and development expenses increased to \$2.7 million, or 184% of revenue, in the three months ended March 31, 2002 from \$0.3 million, or 29% of revenue, in the three months ended March 31, 2001. This increase was partially a result of expenses related to the continued research and development of new Liquidmetal alloys and related processing capabilities, including the hiring of additional research employees, developing new manufacturing techniques, and contracting with consultants to advance the development of Liquidmetal alloys. The increase in research and development expenses in the three months ended March 31, 2002 also included \$0.2 million in accelerated depreciation attributable to the acceleration of the estimated useful lives of certain capitalized research and development equipment and \$1.4 million of stock-based compensation

[Table of Contents](#)

expense that was primarily triggered by modifications made to accelerate the remaining vesting periods of stock options in connection with the hiring of certain consultants as employees in March 2002. There was no stock-based compensation included in research and development expenses in the three months ended March 31, 2001.

Other (Expense) Income, Net. Interest expense, net, increased to \$0.3 million, or 21% of revenue, in the three months ended March 31, 2002 from \$0.2 million, or 22% of revenue, in the three months ended March 31, 2001. This increase was primarily due to the amortization of the fair value of warrants granted in connection with subordinated promissory notes issued in February 2001.

Comparison of the years ended December 31, 2001 and 2000

Revenues. Revenues decreased to \$3.9 million in 2001 from \$4.2 million in 2000. This decrease was primarily due to the absence in 2001 of some non-recurring sales that occurred in 2000. These non-recurring sales were the result of a recall of defective drill pipe that was manufactured overseas by third parties, and as a result of this recall, there was a need to coat the replacement pipe. This decrease in revenue was partially offset by a \$0.2 million increase in revenue during 2001 primarily resulting from increased drilling activities as a result of higher crude oil prices.

Cost of Sales. Cost of sales decreased to \$1.9 million, or 50% of revenue, in 2001 from \$2.0 million, or 47% of revenue, in 2000. The decrease in cost of sales reflects the corresponding decline in sales volume over the same period. The increase in cost of sales as a percentage of revenue was the result of a change in our sales mix that included greater sales to the oil drilling industry which carries a slightly lower gross profit margin than sales to other industries.

Selling, General, and Administrative Expenses. Selling, general, and administrative expenses increased to \$4.0 million, or 102% of revenue, in 2001 from \$1.4 million, or 35% of revenue, in 2000. This increase was primarily a result of increases in wages, stock-based compensation, professional fees, and travel expenses of \$1.2, \$0.1, \$0.6, and \$0.4 million, respectively. These expenses represented the continued additions to our corporate infrastructure required to prepare for and support the anticipated growth of our bulk Liquidmetal alloy business.

Research and Development Expenses. Research and development expenses increased to \$2.1 million, or 53% of revenue, in 2001 from \$0.5 million, or 11% of revenue, in 2000. This increase was partially a result of expenses related to the continued research and development of new Liquidmetal alloys and related processing capabilities. This included the hiring of additional research employees, developing new manufacturing techniques, and contracting with consultants to advance the development of our alloys. The increase in research and development expenses in the year ended December 31, 2001 also included \$0.3 million of stock-based compensation related to options granted to consultants who performed services for us during 2001.

Other (Expense) Income, Net. Other expense, net increased to \$1.1 million, or 28% of revenue, in 2001 from \$0.2 million, or 4% of revenue, in 2000. This increase was primarily due to the amortization of the fair value of warrants granted in connection with subordinated promissory notes we issued in February 2001.

Comparison of the years ended December 31, 2000 and 1999

Revenues. Revenues increased to \$4.2 million in 2000 from \$2.0 million in 1999. This increase was primarily a result of increased sales of our amorphous alloy coatings generated both from new clients and increased sales to existing clients due to increased drilling activities resulting from higher crude oil prices. By contrast, our sales decreased in 1999 as a result of the decline in oil drilling activities related to a decline in crude oil prices. Contributing to the revenue increase in 2000 were non-recurring sales of coatings for replacement drill pipe in connection with the recall of defective foreign drill pipe. This increase was partially offset by a decrease in revenue from one-time licensing fees and royalties under a

[Table of Contents](#)

now terminated license we granted to a third party to manufacture and sell our coatings for specific applications.

Cost of Sales. Cost of sales increased to \$2.0 million, or 47% of revenue, in 2000 from \$0.8 million, or 40% of revenue, in 1999. This increase was primarily a result of increased costs to support sales of our amorphous alloy coatings. The increase in cost of sales as a percentage of revenues was primarily a result of decreased licensing fees and royalties fees in 2000. These licensing fees and royalties had no cost of sales associated with them.

Selling, General, and Administrative Expenses. Selling, general, and administrative expenses increased to \$1.5 million, or 35% of revenue, in 2000 from \$0.8 million, or 42% of revenue, in 1999. This increase was primarily a result of additions to our corporate infrastructure required to prepare for and support the anticipated growth of our bulk amorphous alloy business. In 2000, increases in wages, professional fees, and other general corporate expenses of \$0.2, \$0.2, and \$0.1 million, respectively, were the primary sources of this increase.

Research and Development Expenses. Research and development expenses increased to \$0.5 million, or 11% of revenue, in 2000 from \$0.3 million, or 17% of revenue, in 1999. This increase was primarily a result of expenses related to the hiring of additional research employees to advance the development of new amorphous alloys and their processing. This increase in personnel added \$0.1 million in additional wage expense.

Other (Expense) Income, Net. Other expense, net was \$0.2 million, or 5% of revenue, in 2000, and was \$0.2 million, or 9% of revenue, in 1999. This expense was primarily attributable to interest on notes payable outstanding during both years.

Liquidity and Capital Resources

We have used cash principally to fund our working capital and capital investment requirements. Since 1997, we have financed our operations primarily through private sales of our equity securities (including through the exercise of options) and through the issuance of our subordinated promissory notes, resulting in net proceeds of approximately \$29.2 million through March 31, 2002. As of March 31, 2002 and December 31, 2001, we had cash and cash equivalents of \$0.9 million and \$2.2 million, respectively.

Our operating activities, including our discontinued retail golf operations, used cash of \$3.4 million for the three months ended March 31, 2002 and used cash of \$12.1 million for the year ended December 31, 2001. Cash used in operating activities for the three months ended March 31, 2002 resulted primarily from net cash used by continuing operations of \$2.1 million and net cash used by discontinued operations of \$1.2 million that included an increase in current liabilities of \$0.6 million for that period as well as changes in other operating assets and liabilities. Cash used in operating activities for the year ended December 31, 2001, resulted primarily from net cash used of \$3.2 million and net cash used by discontinued operations of \$8.9 million that included an increase in current liabilities of \$1.3 million for that period and changes in operating assets and liabilities. While we had negative working capital of \$10.0 million and \$9.6 million as of March 31, 2002 and December 31, 2001, respectively, management believes that it has taken sufficient steps to decrease future cash needs by discontinuing our retail golf business and raising additional debt and equity financing, including this offering.

Our investing activities used cash of \$0.4 million for the three months ended March 31, 2002 primarily for the acquisition of machinery and equipment in connection with the development of our South Korean manufacturing facility. These investing activities used cash of \$1.2 million for the year ended December 31, 2001. We used cash of \$0.8 million primarily for the acquisition of machinery and equipment in connection with the development of our South Korean manufacturing facility, and \$0.3 million for our corporate offices, for computer equipment, office equipment, leasehold improvements and patents. This amount also includes \$0.1 million of investments in patents and other intellectual property related to our Liquidmetal alloys.

[Table of Contents](#)

Our financing activities provided \$2.4 million in cash for the three months ended March 31, 2002 and included \$2.0 million in cash borrowed through the issuance of debt and \$0.4 million from the exercise of stock options. Financing activities provided \$15.3 million in cash for the year ended December 31, 2001. This amount includes \$3.5 million from the sale of shares of our common stock, \$2.4 million from exercises of options to purchase shares of our common stock, and \$5.6 million from the sale of our Series A convertible preferred stock. This amount also includes \$4.0 million from the sale of subordinated promissory notes, of which \$0.1 million was repaid in the same period.

As of March 31, 2002, our outstanding debt was \$5.2 million, net of debt discount of \$0.7 million. As of March 31, 2001, aggregate principal payments required under outstanding subordinated promissory notes totaled \$5.9 million, of which \$2.0 million bear interest at 8.0% per annum and are due on the earlier of May 1, 2003 or the closing of an initial public offering, \$2.9 million bear interest at 8.5% per annum and are due on December 31, 2002, and \$1.0 million bear interest at 8.0% per annum and are due on December 31, 2002, or, if earlier, upon the closing of an initial public offering or significant funding transaction. On April 3, 2002, we issued additional subordinated promissory notes in consideration of \$1.5 million in loans that bear interest at 8.0% per annum and that are due on the earlier of July 1, 2003 or the closing of an initial public offering. The subordinated notes may be prepaid only with the consent of the noteholders, which has been obtained. The holders of these notes are John Kang, Ricardo Salas, and Tjoa Thian Song, each of whom are directors and shareholders of our company. John Kang is also our president and chief executive officer, and Ricardo Salas is our corporate secretary. We believe that the terms and conditions of these notes, including their interest rates, are more favorable to us than the terms and conditions that we could have obtained from clearly independent third parties. These notes and all accrued interest thereon will be paid in full with the proceeds from this offering.

We currently anticipate significant capital expenditures for at least the next 12 months, primarily for the construction and development of manufacturing facilities. In addition to our existing manufacturing facility in Incheon, South Korea, we commenced construction in the first quarter of 2002 of a new manufacturing facility consisting of at least 10,000 square feet on a parcel of land that we lease in Pyoung-taek, South Korea. Upon the completion of this offering, we intend to commence construction of an additional manufacturing facility consisting of approximately 100,000 square feet on this same parcel. We also currently intend to build-out our leased facility in Pinellas County, Florida to provide research, development, and testing capabilities, as well as possible prototype manufacturing capabilities. We anticipate that our capital expenditures will be approximately \$25 to \$30 million over the next 12 months, and approximately \$35 to \$45 million through the end of 2003, for the construction and equipping of our manufacturing facilities. This amount is subject to change, however, depending upon the nature and amount of the orders that we actually receive from customers.

Our capital requirements during the next 12 months will depend on numerous factors, including the success of our existing products, the development of new applications for Liquidmetal alloys, and the resources we devote to develop and support our amorphous alloy products. During the next 12 months, we expect to devote substantial capital to expand our sales and marketing capabilities, to expand our research and development activities, to develop or acquire additional manufacturing facilities, and for working capital and other general corporate purposes. These additional expenses and capital expenditures will consume a material amount of our cash resources, including a portion of the net proceeds of this offering. We believe that the net proceeds from this offering, together with our existing cash balances, will be sufficient to fund these liquidity requirements for at least the next twelve months. We may, however, need to raise additional capital, which may not be available on terms acceptable to us, if at all. Any future financing may be dilutive in ownership, preferences, rights, or privileges to our shareholders. Our liquidity is not dependent upon the use of off-balance sheet financing arrangements, such as securitization of receivables or obtaining access to assets through special purpose entities.

In the period after the next 12 months, we intend to continue to develop our manufacturing resources and capabilities. Additionally, we anticipate significant growth in our working capital requirements from our expanding bulk amorphous alloy business. However, the amount of these requirements will depend on the nature and amount of orders we receive for the purchase of our bulk

[Table of Contents](#)

amorphous alloy products. We believe the net proceeds from this offering, together with our anticipated cash flows from our bulk amorphous alloy business, will be sufficient to fund our long-term liquidity requirements. We may, however, need to raise additional funds through private or public debt or equity financings. However, there is no guarantee that additional capital will be available or, if available, will be on terms acceptable to us. Any such financing may be dilutive in ownership, preferences, rights, or privileges to our shareholders.

We are a party to a distribution agreement whereby we granted to a third party exclusive rights to market and sell golf products incorporating Liquidmetal technology to certain Japanese sporting equipment companies. The third party paid us a \$1.0 million distribution fee as part of this distribution agreement, of which a portion was refundable according to a formula based on the gross profit earned by the third party. None of the distribution fee has been refunded, and we do not believe it will be refunded.

We also lease our offices and warehouse facilities under various lease agreements, some of which are subject to escalations based upon increases in specified operating expenses or increases in the Consumer Price Index. The approximate future minimum rentals under non-cancelable operating leases during subsequent years are \$0.6 million, \$0.6 million, \$0.6 million, \$0.7 million, and \$0.7 million for the years ended December 31, 2002, 2003, 2004, 2005, and 2006, respectively. The approximate future minimum rentals under non-cancelable operating leases during years subsequent to 2006 are \$0.3 million. It is our intention to continue leasing these facilities for the entire lease term.

We believe that we will have adequate cash resources for the next twelve months. In the absence of this initial public offering, we would seek alternative financing arrangements or reduce certain capital expenditures and other expenses through the reduction of staff and certain other operating expenses to further decrease future cash needs.

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:

- We have accounted for our retail golf business as a discontinued operation. In calculating the loss on disposal of our retail golf business, we made certain estimates with regard to the valuation of the assets and liabilities of the retail golf business. Estimates were made for the collectability of accounts receivables, the liquidation value of inventories, the liquidation of certain other operating assets, and the estimated future losses of the retail golf business through the estimated disposal date of April 30, 2002. Also included in the loss on disposal is our estimate of stock option compensation expense attributable to an endorsement contract. The estimated stock option expense is based in part on an estimated future common stock price. If the market price of our common stock fluctuates from our estimate over the remaining life of the endorsement contract, the estimated stock option expense may be subject to significant volatility. To the degree actual results vary from any of these estimates or management adjusts the estimates, the accounting of the loss on disposal of discontinued operations may increase or decrease and cash received from the liquidation of these assets may not meet our estimates. In December 2001, the Company recorded a \$5.6 million reduction to the estimated loss on disposal of the discontinued retail golf segment due to a change in the estimated stock option value attributable to options granted pursuant to an endorsement agreement. The change in the

estimated stock option value was due to a change in the estimated fair market value of the underlying common stock.

- We have recorded stock-based compensation expense related to the issuance of stock options to non-employees. To the extent that these non-employees have not completed the services required to earn the options, we are required to value these option grants based on their fair market value, which is based in part on the underlying market price of our common stock at the time the financial statements are presented. If the market price of our common stock increases over the period in which the non-employees earn the stock option awards, the expense attributable to these stock options increases and is charged against income. Due to the number of options issued to non-employees, material amounts could be charged against earnings and could cause significant volatility in future earnings if the market price of our common stock increases.
- 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. subsidiaries are translated into U.S. dollars in consideration. 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 shareholders' 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 value our purchased inventory at the lower of cost or market determined using the first-in, first-out (FIFO) method. We value our manufactured inventory using the standard cost method. As we carry more manufactured inventory, estimates made of the costs to manufacture this inventory will be critical to the standard cost valuation. In the event in future periods these capitalized costs are determined to exceed the lower of cost or market value for the inventory, the inventory valuation would be written down and a loss charged to income.
- We record valuation allowances to reduce the deferred tax assets to the amounts estimated to be recognized. 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 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 have capitalized certain costs relating to our initial public offering, as allowed by generally accepted accounting principles. If our initial public offering is not completed on a timely basis, these capitalized amounts will result in a loss charged to income.

Qualitative and Quantitative Disclosures About Market Risk

We are exposed to various market risks as a part of our operations, 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. Some of the proceeds of this offering may be invested in short-term, interest-bearing, investment grade securities. The value of these securities will be subject to interest rate risk and could fall in value if interest rates rise.

[Table of Contents](#)

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 operation of a manufacturing facility in South Korea, a substantial portion of our costs will be denominated in the 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.

New Accounting Pronouncements

In June 1998, the Financial Accounting Standards Board, or FASB, issued SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*. SFAS No. 133, as later amended, establishes accounting and reporting standards for derivative instruments and hedging activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value. The accounting for changes in the fair value of a derivative depends upon the intended use of the derivative and resulting designation. We adopted SFAS No. 133 on January 1, 2001. The adoption of SFAS No. 133 did not have a material effect on our consolidated financial statements.

In June 2001, the FASB issued SFAS No. 141, *Business Combinations* and SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 141 requires that all business combinations be accounted for under the purchase method and that certain acquired intangible assets in a business combination be recognized as assets apart from goodwill. SFAS No. 142 requires that ratable amortization of goodwill and intangible assets with indefinite lives be replaced with periodic tests of the goodwill's impairment and that intangible assets with finite lives other than goodwill should be amortized over their useful lives. Implementation of SFAS No. 141 and SFAS No. 142 is required for fiscal year 2002. Adoption of SFAS No. 141 and 142 did not have a material effect on our consolidated financial statements.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. SFAS No. 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which such liabilities are incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs should be capitalized as part of the carrying amount of the long-lived asset. SFAS No. 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. Adoption of SFAS No. 143 did not have a material effect on our consolidated financial statements.

Issued in October 2001, SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, replaces SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*. The accounting model for long-lived assets to be disposed of by sale applies to all long-lived assets, including discontinued operations, and replaces the provisions of APB Opinion No. 30, *Reporting Results of Operations — Reporting the Effects of Disposal of a Segment of a Business*, for the disposal of segments of a business. SFAS No. 144 requires that those long-lived assets be measured at the lower of the carrying amount or fair value less cost to sell, whether reported in continuing operations or in discontinued operations. Therefore, discontinued operations will no longer be measured at net realizable value or include amounts for operating losses that have not yet occurred. SFAS No. 144 also broadens the reporting of discontinued operations to include all components of an entity with operations that can be distinguished from the rest of the entity and that will be eliminated from the ongoing operations of the entity in a disposal transaction. The provisions of SFAS No. 144 are effective for financial statements issued for fiscal years beginning after December 15, 2001 and, generally, are to be applied prospectively. We have elected not to early adopt SFAS No. 144. Adoption of SFAS No. 144 did not have a material effect on our consolidated financial statements.

BUSINESS

Overview

We develop, manufacture, and market products made from amorphous alloys, and we believe that we are the only company dedicated solely to the commercialization of bulk amorphous alloys. We have the exclusive right to develop, manufacture, and sell what we believe are the only commercially available bulk amorphous alloys. Our amorphous alloys, or Liquidmetal alloys, possess a combination of performance, processing, and cost advantages that we believe makes them preferable to other materials in a variety of applications. Bulk Liquidmetal alloys offer processing characteristics typically associated with plastics, combined with performance characteristics exhibited by high-performance metals and alloys. We market and sell Liquidmetal alloy industrial coatings and make products and components from bulk Liquidmetal alloys that can be incorporated into the finished goods of our customers across a variety of industries. Additionally, we are exploring new product applications for Liquidmetal alloys and are expanding our manufacturing facilities and capabilities.

Since our inception in 1987, we have marketed and sold industrial coatings made of our proprietary alloys. In 1993, we acquired an exclusive license to commercialize what we believe is the world's first commercially viable bulk amorphous alloy, and we began selling products made from this alloy in 1997. Since 1997, we have made significant advances in the composition and processing of Liquidmetal alloys. We believe that these advances have improved the performance, processing, and cost advantages of our alloys, and through our ongoing research and development programs, we believe that we will continue to enhance and improve our amorphous alloy technology.

Industry Background

During the past century, advances in materials science have resulted in the introduction of new technologies, enhancements to industrial processes, and improvements in the quality of everyday life. From time to time, fundamental research has resulted in the introduction of entirely new classes of materials that offer improved performance and cost characteristics. The adoption of new classes of materials in substitution for incumbent materials generally has been driven by commercial and economic considerations.

The development of plastics and the commercialization of titanium are examples of major advances in materials science that have realized commercial success. Plastics, developed in the early 1900s, are synthetic materials based on the mixing of various chemical compounds. Plastic can be processed in a number of different ways into various objects, films, or shapes. Plastic's ability to be shaped into a variety of forms at relatively low costs has led to its widespread use today. The processing and cost advantages of plastic have enabled it to supplant, for example, wood, glass, or iron in numerous applications. However, plastics are relatively weak materials and are therefore not viable in many applications that require high strength characteristics.

The development of high-strength titanium alloys in the 1950s resulted in a variety of new commercially viable uses for titanium. Titanium alloy's strength and durability characteristics make it desirable in applications that require high performance and low failure rates, such as aerospace, marine, military, and specialized industrial uses. However, titanium is relatively difficult to process, and therefore, products made from it can be expensive to produce.

We believe that bulk Liquidmetal alloys are unique in that they offer in one material the relative advantages of plastics and high-performance alloys, like titanium. Bulk Liquidmetal alloys resolve the limitations of these materials by combining processing and cost advantages similar to plastics with performance characteristics that exceed in many respects those of titanium alloys. While bulk Liquidmetal alloys may not be able to replace plastics in applications in which high strength is not important or replace high-performance alloys in applications, such as internal engine components, that are subject to high temperatures, we believe that the combination of performance, processing, and cost advantages of bulk Liquidmetal alloys will result in them replacing plastics, titanium, and other materials in a variety of

[Table of Contents](#)

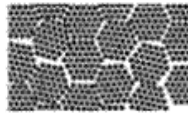
applications. Moreover, we believe that these advantages will facilitate the introduction of entirely new products and applications that are not possible or commercially viable with existing materials.

Our Technology

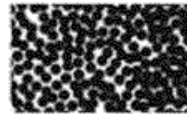
The performance, processing, and cost advantages of Liquidmetal alloys are a function of their unique atomic structure and their proprietary material composition.

Unique Atomic Structure

The atomic structure of Liquidmetal alloys is the fundamental feature that differentiates them from other alloys and metals. In a 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 that 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 retain their amorphous atomic structure throughout the solidification process and therefore do not develop crystalline grains and dislocations. Consequently, bulk Liquidmetal alloys exhibit superior strength and other superior performance characteristics compared to other metals and alloys. 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, improving performance over time.



Depiction of crystalline atomic structure



Depiction of amorphous atomic structure

Prior to 1993, commercially viable amorphous alloys could be created only in thin forms. However, in 1993, researchers at Caltech developed the first commercially viable amorphous alloy in a bulk form. 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. The raw materials that we use in Liquidmetal alloys are readily available and can be purchased from multiple suppliers.

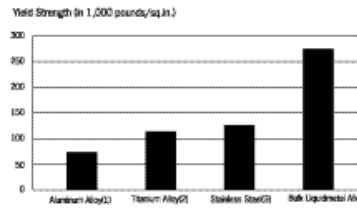
Advantages of Liquidmetal Alloys

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.

Performance Advantages

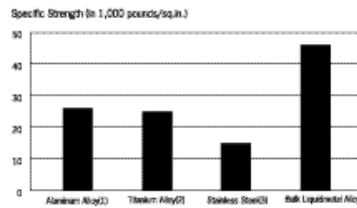
Liquidmetal alloys provide several distinct advantages over other materials in applications that require high strength, strength-to-weight ratio, elasticity, and hardness. The following graphs compare the typical strength, strength-to-weight ratio, elasticity, and hardness properties of our primary bulk alloy composition against those of several other alloys that are widely used today in commercial applications.

Strength



[Bar graph comparing the yield strength of bulk Liquidmetal alloy to aluminum alloy, titanium alloy, and stainless steel as measured in yield strength in pounds per square inch.]

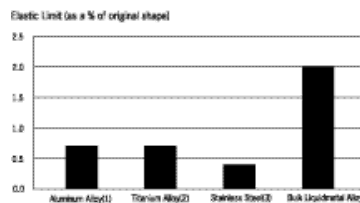
Strength-to-Weight Ratio



[Bar graph comparing the strength-to-weight ratio of bulk Liquidmetal alloy to aluminum alloy, titanium alloy, and stainless steel as measured in specific strength in pounds per square inch.]

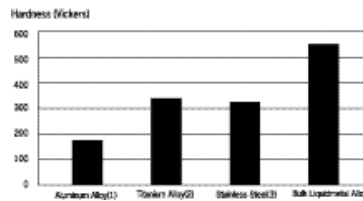
The strength of a material is frequently measured in terms of yield strength, which is the stress at which definite damage or deformation occurs to the material with little or no increase in load. Yield strength is an important performance measure in many structural applications where the potential cost of damage is high, such as orthopedic devices. A material's strength-to-weight ratio, or specific strength, can be defined as its yield strength divided by its specific gravity. A high strength-to-weight ratio is particularly important in applications in which the damage costs are high and weight is a consideration, such as protective casings for electronic devices.

Elasticity



[Bar graph comparing the elasticity of bulk Liquidmetal alloy to aluminum alloy, titanium alloy, and stainless steel as measured in elastic limit as a percentage of original shape.]

Hardness



[Bar graph comparing the hardness of bulk Liquidmetal alloy to aluminum alloy, titanium alloy, and stainless steel as measured by the Vickers hardness test.]

Elasticity is a measure of a material's ability to return to its original shape after being stretched or forced out of shape. The elastic strain limit, or elastic limit, of a material is the point at which permanent damage or deformation starts. Elasticity is an important performance measurement in applications that need to resist permanent damage from impact to protect aesthetics or in applications where energy transfer is important, such as golf club heads.

Hardness measures a material's ability to resist penetration and wear by another material. In the widely-used Vickers hardness test, a diamond point is pressed slowly against the surface of the material with a known force applied. The area of the dent is measured to yield the Vickers hardness number. Hardness is important in applications that are subjected to heavy wear or penetration and applications in which an ability to penetrate is important, such as munitions.

Data Source: <http://www.matweb.com> (other than data relating to bulk Liquidmetal alloys). This online database contains comprehensive information regarding the properties of various materials. Data relating to bulk Liquidmetal alloy comes from *Scripta Metallurgica*, Vol. 30, pp. 431 and 433, 1994, and *Applied*

(footnotes continued on next page)

(footnotes continued from previous page)

Physics Letters, Vol. 71, p. 476, 1997, both of which describe laboratory tests performed by the California Institute of Technology.

- (1) The aluminum alloy being compared here is 7075-T6, a widely used high-strength aluminum alloy. This alloy is used in aerospace, automotive, defense, and other applications.
- (2) The titanium alloy being compared here is a type of Ti-6Al-4V, a widely used titanium alloy particularly known for its high strength. This alloy is commonly used in structural, aircraft, biomedical, and other applications. The properties being shown here are the properties exhibited by the cast form of the material.
- (3) The alloy being compared here is a type of corrosion-resistant cast steel heat-treated to 5528 C, similar to the alloy known in the steel industry as 17-4 stainless, a widely used premium stainless steel. This alloy is utilized in industrial, aerospace, aircraft, and other applications.

In addition, bulk Liquidmetal alloys have other performance features that may make them desirable in specific applications. For example, very low coefficients of friction have been measured in certain applications of bulk Liquidmetal alloys, such as applications in which bulk Liquidmetal alloys wear against themselves. Moreover, bulk Liquidmetal alloys have demonstrated high resistance to erosion and corrosion in saline and caustic environments. For example, our bulk Liquidmetal alloys showed no signs of corrosion in an industry standard saline corrosion test performed by an independent testing laboratory. These characteristics, combined with bulk Liquidmetal alloys' high strength and hardness, could yield a material that demonstrates high resistance to wear.

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 alloys 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 applications, such as pressurized tanks, in which the ability of the material to yield significantly before it breaks is more important than the strength advantage that our alloys offer. Additionally, although our bulk alloys show a high resistance to crack initiation because of their very high strength and hardness, many 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 engaged in research and development with the goal of improving material properties and developing new composites 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 typically associated with plastics and not readily available for other metals and alloys. The following is a description of some of the processing advantages offered by our alloys:

- *Net-Shape Casting Capability.* Casting is the process of injecting molten material into a mold so that it solidifies into a desired shape. Net-shape casting is a type of casting that permits the creation of highly finished products that do not require costly and difficult post-finishing processing or machining. Bulk Liquidmetal alloys have superior net-shape casting capabilities because of their relatively low melting point and low thermal expansion levels. Other alloys crystallize, which inhibits effective net-shape casting. However, bulk Liquidmetal alloys remain relatively fluid during cooling, which allows our alloys to be distributed readily throughout a mold and shaped into final form before solidifying. As a result, unlike titanium and other high-

performance alloys, our bulk amorphous alloys can be cast into intricate, sophisticated, engineered designs without costly post-finishing processes.

- *Thermoplastic Molding Capability.* Thermoplastic molding consists of heating a solid piece of material until it is transformed into a moldable, although not yet molten, state and then introducing it into a mold. Thermoplastic molding is beneficial and economical because it may require less energy than casting, resulting in lower direct energy costs and less shrinkage and lends itself more readily to continuous processing. Unlike other metals and alloys, but similar to plastics, bulk Liquidmetal alloys can be thermoplastically molded in bulk form because they are relatively fluid during heating and cooling. The thermoplastic molding capabilities of our bulk Liquidmetal alloys will make them desirable as a substitute for plastics in applications where greater durability and strength are needed.
- *Creation of Composites.* 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. We can create composites that may increase fatigue resistance, reduce density while retaining strength, vary stiffness, and modify other characteristics.
- *Retention of Properties in Cast Form.* Casting undermines the performance characteristics of most other metals and alloys. We believe this shortcoming serves as an effective cost barrier to the processing and fabrication of intricate and sophisticated designs. Unlike other metals and alloys, bulk Liquidmetal alloys completely retain their performance characteristics (including strength and hardness) in cast form, which enables them to be cast into sophisticated designs that exhibit great strength and hardness.
- *Multiple Finished Form Possibilities.* In addition to the processing alternatives that are available for the bulk form of our alloys, Liquidmetal alloys may be processed into a variety of other finished forms, including a coating or a spray. Most other metals and alloys cannot be processed into these forms.

The beneficial processing features of our bulk alloys are made possible in part by the alloys' relatively low melting temperatures. Although a relatively low melting temperature is a beneficial characteristic for processing purposes, it renders our current bulk alloy compositions unsuitable for various high-temperature applications, such as jet engine exhaust components.

Prior to the discovery of our initial bulk alloy composition in 1993, amorphous alloys could only be created in very thin forms, such as coatings and films. However, bulk Liquidmetal alloys can be formed into objects that are up to one inch thick, and we are not aware of any other commercially available amorphous alloys that can achieve this thickness. Although we can join together multiple amorphous alloy objects to create a larger product, the current thickness limitation renders our alloys 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 can provide significant cost advantages over other metals and alloys in certain applications. These advantages may allow us to provide our customers with an opportunity to reduce the cost of their finished goods, while maintaining or improving the performance of such products. We believe our cost advantages will facilitate and accelerate the introduction of bulk Liquidmetal alloys into existing

and new applications. The following is a description of some of the potential cost advantages offered by bulk Liquidmetal alloys:

- *Lower Processing Requirements.* Bulk Liquidmetal alloys have processing characteristics similar to plastics, which allow them to be shaped efficiently into intricate, sophisticated, engineered products in a substantially finished form. This capability eliminates or reduces certain finishing steps, such as grinding, shaping or forming and therefore significantly reduces processing costs associated with making high fidelity parts in high volume. With other metals and alloys, the cost of a finished product increases significantly with intricacy of design.
- *Lower Capital Requirements.* Because of their reduced processing requirements, bulk Liquidmetal alloys allow us substantial flexibility in the design of equipment to fabricate our products. In contrast, capital-intensive heavy industrial equipment generally is required in foundry and forging operations to make products from other metals and alloys. Furthermore, the absence of heavy industrial equipment provides for a smaller machinery footprint, which enables more efficient siting of facilities and reduces permitting and regulatory costs.
- *Scalability Advantages.* We believe that the processing advantages and lower capital costs associated with the production of our products will enable us to scale up production more efficiently and quickly as compared to foundry and forging operations for other metals and alloys. In other metal processing operations, the scaling up of production often involves the addition of new production lines or the costly reconfiguration of existing production lines. This can be extremely time-consuming and expensive, especially when it necessitates significant production down-time and facility expansion. In contrast, we anticipate that the scaling-up of our production to meet increased demand will be modular in nature and will involve primarily the replication of existing machinery. Because we believe that the addition of new machinery can be accomplished relatively quickly and with lower capital and space requirements, we believe that we can rapidly and efficiently increase our productivity.

Our Strategy

Our goal is to use our leadership position in amorphous alloy technology to develop and commercialize a wide variety of product applications. The key elements of our strategy include:

- *Identifying and Developing New Applications for Our Liquidmetal Alloy Technology.* We intend to identify and develop new applications that will benefit from the performance, processing, and cost advantages of Liquidmetal alloys. To this end, we plan to continue to enter into relationships with existing and potential customers that allow us to identify and develop new application opportunities.
- *Focusing on Major Industries Characterized by High Unit Volumes.* We are focusing our commercialization efforts on applications for bulk Liquidmetal alloy products with relatively high unit volumes that are sold in major industries. For example, we have targeted the cellular phone casing market because of its potential for very high unit volumes. Manufacturing products made from bulk Liquidmetal alloys in high volumes should enable us to facilitate revenue growth and enable us to improve manufacturing and processing efficiencies associated with our products.
- *Developing Internal Manufacturing Capability and Efficiencies.* We intend to internally manufacture substantially all of the products we develop using our bulk Liquidmetal alloys, including products that we jointly develop with our customers. We believe that expanding our manufacturing skills and capabilities should provide us with numerous benefits, such as the ability to maintain quality control over our products, to focus on improvements to the processing of our alloys, and to better protect our intellectual property.
- *Establishing 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

[Table of Contents](#)

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 intend to pursue a brand development strategy through targeted advertising, conference and trade show appearances, promotions, public relations, and other means.

- *Enhancing Our Competitive Position by Aggressively Developing, Exploiting, and Protecting Both Existing and Future Advances in Amorphous Alloy Technology.* We intend to invest significant resources toward developing and acquiring new technologies that will enhance and expand our existing technology position. In particular, we intend to aggressively seek to develop and acquire technologies that relate to the composition, processing, and application of amorphous alloy technologies. Our efforts will include intensive research and development activities aimed at decreasing the manufacturing cost and improving the performance characteristics and processing flexibility of Liquidmetal alloys. To aid in our research and development efforts, we plan to continue to establish cooperative research relationships with leading academic institutions. We intend to vigorously defend our proprietary technology position by aggressively pursuing any potential infringements on our technology.
- *Pursuing Acquisitions, Joint Ventures, and Other Strategic Transactions.* We intend to pursue acquisitions, joint ventures, and other strategic transactions to gain access to new technologies, products, markets, and manufacturing capabilities. In particular, we may engage in acquisitions and other strategic transactions to gain access to technologies that will enhance or complement the composition, processing, and application of our alloys. Upon the completion of this offering, we intend to focus our acquisition efforts on companies and facilities that will expand or enhance our manufacturing capabilities.

Initial Applications

We have identified the following initial market opportunities to allow us to execute our strategy. We believe that these opportunities are consistent with our strategy in terms of market size, building brand recognition, and providing an opportunity to develop and refine our processing capabilities.

Casings for Electronic Products

We produce casing components for electronic devices. We targeted this market because of its high product volume and potential branding opportunities. For example, the market for cellular phones is projected to reach nearly 672 million units in 2005, according to IDC. Liquidmetal alloys can be used for each of the structural components of a cellular phone, including the shield, face plate, hinge, back plate, side plates, and the clam shell, which is the plate that flips open on some cellular phone models.

To date, we have produced cellular phone casing components for several cellular phone manufacturers. We are currently manufacturing prototype casing parts for Samsung, and we are working with LG Electronics to develop casing components for their cellular phones. We are also working with Motorola to develop cellular phone casing components, and we have received orders from Motorola for limited quantities of prototype casing components. Additionally, we are working with TCL Mobile Communication Company, Ltd., a leading Chinese cellular phone manufacturer, to develop casing components for their cellular phones.

Bulk Liquidmetal alloys also have potential application as a casing material in a variety of other electronic devices. For example, we recently received a purchase order from Samsung for production quantities of casing components for personal digital assistants, or PDAs, to be used in military applications. We also have a purchase order from Samsung for production quantities of camera casings. In addition, we recently received a purchase order from Jascom Co., Ltd., a South Korean electronics manufacturer, for production quantities of casing components for a combination MP3/CD player.

[Table of Contents](#)

We believe that aesthetics and the continuing miniaturization of, and the introduction of advanced features to, electronic devices are the primary drivers of growth, market share, and profits in this industry, particularly with respect to cellular phones and PDAs. For example, the introduction of larger screens into smaller casings has been a significant challenge confronting electronics manufacturers attempting to take advantage of new wireless technology. In particular, normal usage of smaller and thinner devices may result in accidental damage to the display screens and internal electronic components. The high strength-to-weight ratio and elastic limit of bulk Liquidmetal alloys enable the production of smaller, but stronger, casings that protect the screens and miniature electronic circuits of electronic devices better than materials currently in use, such as plastic and magnesium. Additionally, we believe that the strength characteristics of our alloys could facilitate the creation of a new generation of electronic devices, which currently may not be viable because of the strength limitations of other materials. We also believe that our alloys readily offer style and design flexibility, such as shiny metallic finishes, to accommodate the changing tastes of the consumer.

Sporting Goods and Leisure Products

We are developing and marketing a variety of applications for bulk Liquidmetal alloys in the sporting goods and leisure products industry. Possible applications include products associated with golf, skiing, tennis, and diving products. We believe that the high strength, hardness, and elasticity of our alloys will enhance product performance. We have entered into product development agreements with Head Sport AG and Rawlings, Inc., sporting goods manufacturers, to test and develop components for use in their products.

Using our bulk Liquidmetal alloys, we have manufactured prototypes of various golf club components, including club head components for irons and woods. We intend to manufacture golf club components for established golf equipment manufacturers that will use our components in golf clubs marketed and sold under their respective brand names. We recently entered into a development agreement with Ping, Inc., a leading golf club manufacturer, for the development of golf club heads made from bulk Liquidmetal alloys. We believe that the experience, knowledge, and recognition that we gained through our discontinued retail golf club business will assist us in developing this component manufacturing business.

We also believe that bulk Liquidmetal alloys can be used to efficiently produce premium watchcases and other similar intricately engineered designs with high-quality finishes. We believe that the advantages of our bulk alloys will enable us to reduce the number of separate operations required for the manufacture of a metal watchcase. We have produced prototype watchcases with bulk Liquidmetal alloys, and we have recently entered into a development agreement with TAG Heuer S.A., a high-quality Swiss watchmaker, to develop bulk Liquidmetal alloy watchcases for use in TAG Heuer watches. We have also entered into an agreement with Casio Computer Co., Ltd. to develop bulk Liquidmetal alloy components for Casio watches.

Medical Devices

We are developing and manufacturing prototypes of various medical devices made from Liquidmetal alloys. We believe that Liquidmetal alloys are well-suited for these devices because of the strength, hardness, and corrosion resistance of our alloys, together with the ability of our bulk Liquidmetal alloys to be formed into complex shapes with a high quality finish. We believe that these qualities will provide improved performance, longer life, and lower production costs than the materials currently being used.

We are producing scalpel blades for eye surgeries and phacoemulsification tips, which are instruments used to remove cataracts, in limited quantities for testing by potential customers. In addition, we entered into an agreement with St. Luke's Cataract and Laser Institute, a leader in ophthalmology and cataract surgeries, to market and endorse a line of Liquidmetal alloy ophthalmic instruments. We are also working with Ethicon Endosurgery, a Johnson & Johnson Company, to develop components for surgical instruments.

[Table of Contents](#)

We also have identified orthopedic devices as an additional initial application for Liquidmetal alloys and have made prototypes of certain orthopedic devices from bulk Liquidmetal alloys. Orthopedic devices include artificial joints, trauma devices, and spinal implants. Worldwide sales of orthopedic devices were approximately \$9.1 billion and \$8.3 billion in 2000 and 1999, respectively, according to Dorland's Medical and Healthcare Marketplace Guide. We believe that Liquidmetal alloys represent a superior alternative to the titanium alloys, cobalt chromium alloys, and stainless steel currently used in many orthopedic devices. Titanium alloys are strong, but they do not move well against other materials and are therefore not used in devices with parts that move against each other, such as ball-and-socket hip joints. Cobalt chromium alloys wear well, but they are comparatively heavy. Stainless steel corrodes relatively quickly. In contrast, we believe that Liquidmetal alloy orthopedic devices will be stronger and produce less friction than titanium orthopedic devices, have a greater strength-to-weight ratio than cobalt chromium orthopedic devices, and have better corrosion resistance than stainless steel orthopedic devices. We have completed initial studies relating to the biological compatibility of our alloys for purposes of developing our orthopedic applications, and the results of these studies have been favorable.

Additionally, we are working with Glidewell Laboratories to develop dental devices made from Liquidmetal alloys. Glidewell Laboratories, which produces crowns, bridges, and full and partial dentures, is the largest dental laboratory in the world.

Industrial Coatings and Powders

We market and sell industrial coatings and powders made of Liquidmetal alloys. Our coatings are used primarily as a protective coating for industrial machinery and equipment. We believe that the high degree of hardness and low coefficient of friction of our coatings, combined with their strong adhesion properties, reduce the wear and consequent failure of the machinery and equipment on which they are used.

Our coatings are widely used in the oil drilling industry as a protective coating on drill pipe and casings. Drill pipe consists of metal pipe, usually about six inches in diameter, that is threaded on both ends and attached to other segments of drill pipe to provide the rotary torque to turn the oil drill bit. A casing is a metal pipe that is lowered into an oil well to surround and protect the drill pipe and other drilling equipment. Horizontal drilling places tremendous stress on pipes and casings as the drill changes direction from vertical to horizontal. Both drill pipe and casing experience excessive wear, which leads to higher replacement costs and greater failure rates. Liquidmetal alloys 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. Our coatings customers currently include Grant Prideco, Inc., TAFE, Inc., and Smith International, Inc. We estimate that our coatings represented about 80% of worldwide sales of hard band coatings for oil drill pipe in 2001.

Our coatings are used to coat boiler tubes in coal burning power plants in order to extend the lives of these tubes. These 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. Tests on Liquidmetal alloy coatings have indicated that our coatings extend the life of these boiler tubes by three to five times their current average life depending on the specific environment. In addition, tests on our coatings have indicated that our coatings reduce the build-up of residue on these tubes, helping to improve the efficiencies of the boilers.

We believe that Liquidmetal alloy powders can be used as a binding agent in industrial applications, such as in drill bits in the oil industry and in agricultural blades. Initial testing by third parties suggests that our powders offer high erosion resistance in these applications and could serve as a superior substitute for cobalt, which is the primary metal binding agent used in high-performance industrial drilling, milling, and cutting instruments.

Defense Applications

We have produced prototype rods for kinetic energy penetrators for use in military applications. Kinetic energy penetrators, or KEPs, are armor piercing munitions. The most sophisticated KEP rods currently are made from depleted uranium. One of the features that makes a depleted uranium KEP rod desirable is that it sharpens as it penetrates.

We believe that Liquidmetal alloys represent a superior alternative to depleted uranium in KEP rods. KEP rods made from Liquidmetal alloys sharpen as they penetrate, do not emit low level radiation and have superior strength characteristics as compared to depleted uranium KEP rods. We recently completed a two-year study sponsored by the U.S. Department of Defense Small Business Innovative Research Program relating to Liquidmetal alloy KEP rods. The initial results of this study indicate that Liquidmetal alloy is a possible substitute for current materials, such as depleted uranium, used in KEP rods. Subsequently, we recently were awarded a contract by DARPA for funding of up to \$2 million to test Liquidmetal alloy rods in actual munitions. Additionally, preliminary results of live-fire ballistic tests conducted by the Army Research Laboratory have demonstrated that tungsten KEPs perform better whenever Liquidmetal alloy is combined with the tungsten to create a composite material.

We are working with a number of Department of Defense research and development agencies to identify additional military applications that may benefit from using Liquidmetal alloys. We have also entered into discussions with major defense companies to jointly fund internal research and development programs to pursue the application of Liquidmetal alloy technology for specific defense products.

Liquidmetal Golf

Beginning in 1997, we engaged in the retail marketing and sale of golf clubs through our majority owned subsidiary, Liquidmetal Golf. On September 29, 2001, our board of directors and the board of directors of Liquidmetal Golf voted to discontinue Liquidmetal Golf's retail golf club business, and this business is treated as a discontinued operation in our consolidated financial statements. We decided to discontinue the retail golf business to conform our business operations to our strategy of manufacturing components and products that are incorporated into the finished goods of our customers.

Historically, Liquidmetal Golf's retail golf club business consisted of the marketing and sale of golf clubs that were designed by Liquidmetal Golf and that carried the Liquidmetal Golf brand name. These clubs, which were manufactured by a third party, were marketed and sold by Liquidmetal Golf directly to retail outlets and consumers. Although the retail golf club business has been discontinued, Liquidmetal Golf will be engaged in the business of manufacturing and selling golf club components to golf original equipment manufacturers who will integrate these components into their own clubs and then sell them under their respective brand names. Liquidmetal Technologies owns 79.19% of the outstanding equity interest in Liquidmetal Golf.

Liquidmetal Golf completed the discontinuation of its retail golf business as of April 30, 2002, and has liquidated substantially all of its inventory. In addition, Liquidmetal Golf is negotiating the cancellation of contracts and agreements relating to its operations. In 2001, Liquidmetal Golf entered into an endorsement agreement with Paul Azinger, a professional golfer, under which Mr. Azinger endorses the Liquidmetal Golf brand of clubs. Liquidmetal Golf expects to exercise its right under the agreement to terminate the agreement as of January 1, 2003, and intends to complete its obligations under the contract through the termination date.

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

[Table of Contents](#)

4,500,000 shares of Liquidmetal Golf common stock to Liquidmetal Technologies. In addition, Liquidmetal Technologies and Liquidmetal Golf are parties to a services agreement under which Liquidmetal Technologies provides Liquidmetal Golf with various goods and services, including operating facilities, research and development, sales and marketing, manufacturing, management support, and other support services. Under the services agreement, Liquidmetal Golf pays Liquidmetal Technologies a service fee equal to Liquidmetal Golf's allocated share of Liquidmetal Technologies' operating costs based on actual time and resources expended in providing the services.

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 20 owned or licensed U.S. patents and various 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 Caltech. We have the exclusive right to commercialize this alloy and other amorphous alloy technology through a license agreement with Caltech. Under the Caltech license agreement, we have the exclusive worldwide right to make, use, and sell products from all of Caltech's inventions, proprietary information, know-how, and other technology relating to amorphous alloys and existing as of September 1, 2001. We also have an exclusive worldwide license to eight patents and five patent applications held by Caltech relating to amorphous alloy technology, as well as all related foreign counterpart patents and patent applications. Furthermore, the license agreement gives us the exclusive right to make, use, and sell products from substantially all related amorphous alloy technology that is developed in Professor William Johnson's Caltech laboratory during the period September 1, 2001 through August 31, 2005. All fees and other amounts payable by us for these rights and licenses have been paid in full, and no further royalties, license fees, or other amounts will be payable in the future under this license agreement.

Our rights under the license agreement are perpetual in duration. However, Caltech has the right to convert the license to a non-exclusive license if we fail to utilize the licensed technology for a period of 18 or more consecutive months, provided that Caltech must give us 180-days advance written notice of the conversion and we may cure the failure at any time during the 180-day notice period. If we cure the failure, then the license will not be converted into a non-exclusive license.

Under the license agreement, we have the right to sublicense any of the licensed technology or patents. The license agreement also provides that Caltech reserves the right to use the licensed technology and patents for noncommercial educational and research purposes. The patents and patent applications that we license from Caltech relate primarily to the composition and processing of our alloys. The currently issued U.S. patents covered by the license agreement will expire between 2013 and 2017.

Under the Caltech license agreement, the parties are obligated to provide reasonable cooperation to each other in connection with any threatened or actual infringement of the licensed technology by third parties. We have the right to commence an action for infringement of any of the licensed technology, and although Caltech is not obligated to bring suit or take action against infringers, Caltech is obligated to join in any such lawsuit upon our request.

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. We currently hold 12 patents and numerous pending patent applications in the United States, as well as 29 foreign counterparts to these patents outside of the United States. 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 between 2004 and 2017, and the

[Table of Contents](#)

patents relating to our bulk amorphous alloys expire on various dates between 2013 and 2017. 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 and know-how and other proprietary technical and business information, we require all of our employees, consultants, advisors and collaborators to 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.

Research and Development

Objectives

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

- *Enhance the Processing Efficiencies.* We plan to continue research and development of processes and compositions that will decrease our cost of making products from Liquidmetal alloys. Because our bulk alloys can be formed in a manner similar to plastics, in contrast to the more extensive and energy-intensive processes required to form other metals and alloys, we are seeking ways to decrease the cost of end-products by reducing the requirements for processing.
- *Improve Performance Characteristics.* We plan to continue research and development on new compositions of Liquidmetal alloys to generate a broader class of amorphous alloys with a wider range of specialized performance characteristics.
- *Develop New Applications.* We will continue 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.

Conduct of Research and Development

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 currently focused on product and process development. Our internal research and development efforts are conducted by a team of twelve scientists, engineers, and researchers who are employed by us or engaged by us as consultants. Included among these employees is Professor Johnson, who discovered our initial bulk amorphous alloy at Caltech in 1993, and his graduate student at the time, Atakan Peker, who is employed as our chief scientist. Professor Johnson joined our company as an employee as of October 1, 2001 and is also a member of our board of directors and Technology Advisory Board. We intend to hire additional scientists and engineers to expand our internal research and development program.

In addition to our internal research and development efforts, we enter into cooperative research and development relationships with leading academic institutions. Professor Johnson continues to supervise a laboratory at Caltech, and through our license agreement with Caltech, we have a continuing relationship with the other researchers in Professor Johnson's Caltech laboratory. We have also entered into research relationships with several other academic institutions for the conduct of research relating to the properties and characteristics of our alloys.

We also enter into development relationships with other companies for the purpose of identifying new applications for our alloys and establishing customer relationships with such companies. For example, we have entered into product development agreements with Head Sport, TAG Heuer, Rawlings, and Ping for the development of various products made from our alloys. Some of our product development programs are partially funded by our customers. We are also engaged in negotiations with a number of other

[Table of Contents](#)

potential customers regarding possible product development relationships. Our research and development expenses for the three months ended March 31, 2002 and March 31, 2001 and for the years ended December 31, 2001, 2000 and 1999 were \$2.7 million, \$0.3 million, \$2.1 million, \$0.5 million, and \$0.3 million, respectively.

Technology Advisory Board

To assist us in our research and development efforts, we have assembled a Technology Advisory Board composed of leading researchers and scientists in the field of materials science. The members of our Technology Advisory Board are from leading academic and research institutions in the field of materials science, such as the Massachusetts Institute of Technology and Cambridge University. Our Technology Advisory Board meets on a semi-annual basis to discuss issues related to the advancement and application of our technology and the progress of our research and development programs, although our Technology Advisory Board may also be convened at other times on an as-needed basis. Additionally, we occasionally consult with individual members of our Technology Advisory Board on various issues relating to our technology.

Manufacturing

We have historically outsourced all of our manufacturing requirements, but we are developing our own manufacturing facilities to enable us to internally manufacture substantially all of our bulk amorphous alloy products. We currently operate a manufacturing facility in Incheon, South Korea, and we believe that this facility will meet our anticipated manufacturing needs through the third quarter of 2002. To expand our manufacturing capabilities in South Korea, we recently leased a parcel of land in a light industrial park in Pyoung-taek, South Korea. This parcel of land consists of approximately four acres, and we currently intend to construct two manufacturing facilities on this parcel with the proceeds from this offering. We broke ground on the first such facility in the first quarter of 2002, and we expect that this facility, which will consist of at least 10,000 square feet, will be operational by the second or third quarter of 2002. We expect to commence construction of a larger facility, consisting of approximately 100,000 square feet, on the Pyoung-taek parcel immediately upon the completion of this offering. We expect that the second Pyoung-taek facility will be operational in the third quarter of 2002.

We currently expect that our South Korean facilities will meet our anticipated manufacturing needs through the end of 2004, although these needs may change depending upon the actual and forecasted orders we receive for our products. We also recently entered into a lease for 12,000 square feet of space in a research and light industrial facility in Pinellas County, Florida, and we intend to develop and equip this space for use as a research, development, and testing facility, as well as for possible prototype manufacturing. We currently intend to develop or acquire additional manufacturing facilities and capabilities elsewhere, including the United States, for purposes of meeting our long-term manufacturing needs.

Raw Materials

Liquidmetal alloy compositions are comprised of many elements, all of which are readily 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.

Customers

For the past three years, three of our customers have accounted for more than 10% of our revenues from continuing operations. Revenues from Grant Prideco, Inc. represented approximately 22%, 19%, and 19% of revenue from continuing operations for the years ended December 31, 2001, 2000, and 1999, respectively. Revenues from TAFA, Inc. represented approximately 14%, 13% and 20% of revenue from continuing operations for the years ended December 31, 2001, 2000 and 1999, respectively. Revenue

[Table of Contents](#)

from Smith International, Inc. represented approximately 16% of revenue from continuing operations for the year ended December 31, 2001. Each of these three customers have purchased solely industrial coatings from us. We expect that a significant portion of our revenues 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, we expect that our bulk Liquidmetal alloys will face competition from other materials, including metals, alloys, and plastics, that are currently used in the commercial applications that we pursue. 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 Grant Prideco, Inc., Varco International, Inc., and Arco 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

We typically ship our coating products shortly after receipt of an order. Accordingly, we do not maintain a significant backlog. Also, 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.

Employees

As of April 15, 2002, we had 89 full-time employees. None of our employees is represented by labor unions or covered by collective bargaining agreements. We have not experienced any work stoppages, and we consider our employee relations to be good.

Properties

Our principal executive office is located in Tampa, Florida and consists of approximately 14,000 square feet. This office is occupied pursuant to a lease agreement that expires in February 2006. Our principal research and development office is located in Lake Forest, California and consists of approximately 30,000 square feet. This office is occupied pursuant to a lease agreement that expires in

[Table of Contents](#)

June 2007. We also lease an office and warehouse facility in Houston, Texas for our coatings business, and this facility, which is approximately 5,500 square feet, is leased through October 2003.

Our manufacturing facility in Incheon, South Korea consists of approximately 9,000 square feet and is leased through July 2002. We currently intend to renew this lease for an additional one-year term. We believe that our Incheon facility will meet our anticipated manufacturing needs through the third quarter of 2002. The first manufacturing facility that we are constructing in Pyoung-taek, South Korea will consist of at least 10,000 feet. The parcel of land on which we are constructing this facility consists of approximately four acres and is leased through 2022. We currently expect that these two facilities, together with our second anticipated manufacturing facility on the Pyoung-taek parcel, will meet our anticipated manufacturing needs through the end of 2004.

We recently entered into a lease for 12,000 square feet of space in a research and light industrial facility in Pinellas County, Florida. This lease expires in May 2007. We currently intend to develop and equip this space for use as a research, development, and testing facility, as well for possible prototype manufacturing. We anticipate that we will begin developing and equipping this space in the second quarter of 2002 and currently expect that we will begin utilizing the space in the third quarter of 2002.

Governmental Regulation

Any precision surgical instruments that we make from our Liquidmetal alloys, such as scalpel blades and phacoemulsification tips, 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 premarket 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) premarket 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.

[Table of Contents](#)

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.

Legal Proceedings

We are not a party to any material legal proceedings.

MANAGEMENT**Executive Officers and Directors**

The following table sets forth information regarding our executive officers and directors as of April 15, 2002:

<u>Name</u>	<u>Age</u>	<u>Position</u>
John Kang	39	Chief Executive Officer, President, and Director
James Kang	41	Chairman of the Board of Directors
William Johnson, Ph.D.	53	Vice Chairman of the Board of Directors
Neil Paton, Ph.D.	61	Chief Technology Officer
Scott Wiggins	38	Executive Vice President, Corporate Development and Operations
Brian McDougall	39	Chief Financial Officer and Executive Vice President
John Grant	58	Executive Vice President, Government and Community Affairs
Ricardo Salas	38	Director
Jack Chitayat	38	Director
Shekhar Chitnis	43	Director
Tjoa Thian Song	37	Director
Henri Tchen	55	Director
Jeffrey Oster	60	Director
Betsy Atkins	46	Director
David Browne	42	Director

John Kang has been our Chief Executive Officer and President since June 2001 and has been one of our directors since 1994. From December 1994 to December 2000, he served as Chairman of our board of directors in a non-employee capacity, and from December 2000 to June 2001, he served as Chairman of our board of directors in an employee capacity. 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. Mr. Kang is the brother of James Kang, the Chairman of our board of directors.

James Kang has served as one of our directors since December 1994 and as the Chairman of our board of directors since June 2001. From December 1994 to June 2001, he served variously as our Chief Executive Officer and President. Mr. Kang received a B.A. degree in Marketing from the University of Illinois in 1983, and an M.B.A. degree from the Kellogg School of Management at Northwestern University in 1985. Mr. Kang is the brother of John Kang, our Chief Executive Officer and President.

[Table of Contents](#)

William Johnson, Ph.D., has served as the Vice Chairman of our board of directors since June 2000 and has been our Vice Chairman of Technology since October 2001. Since 1997, Professor Johnson has been the Mettler Professor of Engineering and Applied Physics at Caltech. He held a Visiting Professor appointment at the Metal Physics Institute in Gottingen, Germany (1983) and received a Von Humbolt Distinguished Scientist Fellowship in Gottingen (1988). He is the 1995 recipient of the TMS/ AIME Hume Rothery Award for his experimental work. He received a B.A. degree in Physics from Hamilton College and a Ph.D. degree in Applied Physics from Caltech. He spent two years at IBM's Research Center (1975-1977). At Caltech, Professor Johnson directed the research that led to the discovery of our bulk Liquidmetal alloy.

Neil Paton, Ph.D. has been our Chief Technology Officer since March 2002. He also serves as the Chairman of our Technology Advisory Board and, prior to becoming our Chief Technology Officer, was a consultant to us since August 2001. From 1990 to September 2001, Dr. Paton served as Vice President, Technology, for Howmet Corporation and President of Howmet Research Corporation, where he was responsible for development of new products, manufacturing processes, and materials for gas turbines. Dr. Paton also worked 20 years for Rockwell International, where he held various positions in materials development and advanced engineering. He has authored or co-authored over 80 technical publications and given more than 60 technical presentations based on his research. He also holds 15 patents. Dr. Paton was awarded a Titanium Metal Corporation of America Fellowship (1965 to 1968) and the Rockwell International Engineer of the Year Award (1976). He was a member of the Solid State Sciences Committee of the National Academy of Sciences (1974-1979). He has been a member of the Minerals, Metals and Materials Society, the American Institute of Mining Metallurgical and Petroleum Engineers, and ASM, a materials information society. He was elected Fellow ASM International in November 1992. He received a B.S. degree and M.S. degree in Mechanical Engineering both from the University of Auckland, New Zealand, and a Ph.D. in Materials Science from the Massachusetts Institute of Technology.

Scott Wiggins has been an Executive Vice President of our company since December 2000. From 1993 to 2000, Mr. Wiggins was employed by Merrill Lynch & Co. Global Markets & Investment Banking where he was responsible for financing domestic and international infrastructure projects. Mr. Wiggins received a B.S. degree in Engineering with high honors in 1985 and an M.S. degree in Engineering in 1987, both from the University of Florida. In 1991, Mr. Wiggins received his M.B.A. degree with concentrations in management, strategy and marketing from the Kellogg School of Management at Northwestern University. Mr. Wiggins is a registered professional engineer.

Brian McDougall has been our Chief Financial Officer and an Executive Vice President since May 2001. From March 1996 to May 2001, Mr. McDougall held various positions, including Vice President of Financial Operations, Chief Information Officer, and Chief Financial Officer at Sage Best Software. Mr. McDougall's focus at Sage Best was to build an efficient financial and systems operating environment that supported the company's growth as well as change from private to public ownership leading ultimately to an acquisition in February 2000. From October 1984 until February 1996, Mr. McDougall was employed by AT&T Paradyne in various financial management positions, including Business Operations Controller and Assistant to the Executive Operating Team. Mr. McDougall received his B.A. degree in Finance in 1984 and an M.B.A. degree in 1993 from the University of South Florida.

John Grant has been an Executive Vice President of our company since August 2001. From 2000 to 2001, Mr. Grant served as Executive Director of the Florida Office of Public Guardian, which is a part of the Executive Office of the Governor of the State of Florida. From 1989 to 2000, Mr. Grant worked as a partner in the Tampa, Florida law firm of Harris Barrett Mann & Dew. From 1986 to 2000, Mr. Grant served as a state senator in the Florida Senate, where he chaired the Senate committees on Commerce, Banking and Insurance, Education, and Judiciary. Mr. Grant also currently serves as an adjunct professor for the University of South Florida's Department of Political Science. He has served on numerous public and private charitable and corporate boards and is currently a director of Insurance Management Solutions Group, Inc. Mr. Grant received a B.A. degree in Political Science in 1964 from the University of South Florida and an M.S. degree in Government in 1965 from Florida State University. He received a J.D.

[Table of Contents](#)

degree in 1968 from Stetson University. Mr. Grant also holds an Honorary Doctor of Humane Letters from Trinity College of Florida and Florida Metropolitan University.

Ricardo Salas has served as one of our directors since April 1995 and was our Secretary from March 2001 to March 2002. Since January 2000, he has served as Chief Executive Officer of iLIANT Corporation, an information technology and outsourcing service firm in the health care industry. Since June 1997 he has been Vice President of J. Holdsworth Capital LTD, a private investment firm. From June 1999 to January 2000, Mr. Salas was a vice president of Medical Manager Corporation and from April 1994 to February 1997 he also served as vice president of National Medical Systems, Inc. Mr. Salas received a B.A. degree in Economics from Harvard College in 1986.

Jack Chitayat has served as one of our directors since April 1995. Mr. Chitayat was a founder and Managing Director of Atlantic Holding Company, S.A., a company specializing in the principal investment, acquisition, syndication and management of over 1.5 million square feet of U.S. commercial real estate since April 1991. Additionally, Mr. Chitayat is Vice President of J. Holdsworth Capital Ltd., a private investment and management group engaged in the acquisition and subsequent operation of middle market manufacturing, distribution, and service businesses, as well as venture-backed start-ups since January 1987. Mr. Chitayat has a B.A. degree in Economics and International Relations from Tufts University.

Shekhar Chitnis has served as one of our directors since September 1998. Mr. Chitnis previously served as our Chief Operating Officer from September 1997 to November 15, 2001. From October to July 1993, Mr. Chitnis was employed by Ford Motor Company (USA) in Product Development and Program Management. From August 1993 through August 1997, he was the Director of Marketing and Product Development of Ford Motor Company of Japan. Mr. Chitnis received a B.S. degree in Electrical and Mechanical Engineering from the University of Bhopal (India) in 1980 and an M.B.A. degree in Marketing and Finance from the University of Chicago in 1985.

Tjoa Thian Song has served as one of our directors since 1996. Mr. Tjoa since 1995 has been the Executive Director of Greatland Company Pte. Ltd., a Singapore-based distributor and manufacturer of tobacco products. Since 1972, Greatland Company has been the international distributor for P.T. Gudang Garam, an Indonesian cigarette manufacturer listed on the Jakarta Stock Exchange. Mr. Tjoa received his B.S. degree in Electrical Engineering from the University of Texas at Austin in 1986 and also received an M.B.A. degree from the National University of Singapore.

Henri Tchen has served as one of our directors since April 2002. Since October 1998, he has served as Vice President and co-founder of Synapse Capital, LLC, which is engaged in venture capital investing and private wealth management. From August 1994 to September 1998, he served as the Chief Financial Officer of Kingston Technology Corporation, where he negotiated the ultimate sale of a majority of the company for approximately \$1.5 billion. Mr. Tchen received his M.B.A. degree in Finance, Marketing, and Accounting from Columbia University Graduate School of Business in 1973, and a B.S. degree in Applied Economics from the University of Brussels in 1971.

Jeffrey Oster has served as one of our directors since April 2002. In 1998, he retired as a Lieutenant General from the United States Marine Corps, having served almost 35 years of active duty. General Oster has provided independent consulting services in defense related matters since his retirement in 1998. From July 1993 until his retirement in 1998, he served as the Deputy Chief of Staff for Programs and Resources where he was responsible for all aspects of financial management for the United States Marine Corps, including development, implementation, and execution of the strategic financial plan and the annual \$17.5 billion budget. General Oster had a lead role in defining, supporting, and defending the United States Marine Corps resource requirements in the Department of Defense, the Office of Management and Budget, the White House, and before Congress. General Oster received his B.S. degree in Geology in 1963 and an M.B.A. degree in 1975, both from the University of Wisconsin.

Betsy Atkins has served as one of our directors since April 2002. Since 1994, she has served as Chief Executive Officer of Operating Group of Accordiant Ventures, which is engaged in early stage

[Table of Contents](#)

venture funding and investing. Ms. Atkins was a founder and director of Ascend Communications Corporation, and from 1989 to 1998, she was its founding Vice President of Marketing and Sales International and customer service. Ms. Atkins is also a director of Lucent Technologies, Polycom, Inc., and Wilmington Trust. In September 2001, she was appointed by the U.S. President as a director of the Pension Benefit Guaranty Corporation. Ms. Atkins received her B.A. from the University of Massachusetts and a scholarship from Trinity College Oxford.

David Browne has served as one of our directors since April 2002. Mr. Browne served as President and Chief Executive Officer of LensCrafters, Inc. from 1990 to 1999. From 1998 to 1999, he also served on the Board of Directors and as Co-Chief Executive Officer of Luxottica Group, an Italy-based optical frame manufacturer and the parent company of LensCrafters, Inc., where he led the acquisition of Bausch & Lomb's Ray-Ban Division. Mr. Browne is also a director of Athletes In Action, an international Christian sports ministry, the National Underground Railroad Freedom Center, and a former member of the board of directors of the Points of Light Foundation in Washington, D.C., where he was actively involved in the President's Summit on Volunteerism. Mr. Browne received his B.S. degree in Economics from University of Pennsylvania in 1981.

Technology Advisory Board

To assist us in our research and development efforts, we have assembled a Technology Advisory Board. The following individuals serve as members of our Technology Advisory Board, together with William Johnson and Neil Paton, who serve also as the Vice Chairman of our board of directors and our Chief Technology Officer, respectively. We believe that the members of our Technology Advisory Board are among the world's leading materials scientists in the area of Metallurgy. Each of the members of our Technology Advisory Board have signed agreements with us under which the members have agreed to serve on the board through 2004 and have agreed to assign to us all technology and intellectual property arising in connection with their service on the board. The Technology Advisory Board is scheduled to meet semi-annually to discuss issues related to the advancement and application of our technology and the progress of our research and development programs, although the Technology Advisory Board may also be convened at other times on an as-needed basis.

Michael Ashby, Ph.D. is a retired member of the Cambridge University Engineering Department since 1973 where he holds the post of Royal Society Research Professor. He received a Ph.D. and B.A. in Natural Sciences at the University of Cambridge and then joined the Institute for Metal Physics at the University of Göttingen, Germany from 1962 to 1965, and held the post of Professor of Applied Physics at Harvard University from 1966 to 1973. He is a member of the Royal Society, the Royal Academy of Engineering and the U.S. National Academy of Engineering.

Merton Flemings, Ph.D. is a professor at the Massachusetts Institute of Technology since 1956. He is engaged in research in the broad field of solidification and solidification processing, including casting, composite materials, crystal growing, ingot solidification, rapid solidification, continuous casting, and semi-solid processing. His current work includes studies on semi-solid forming, spray casting, super cooling of metals, metal-matrix composites, and inclusion formation in steel. Professor Flemings is an Administrative Director of the Singapore-MIT Alliance. He received a Ph.D. in Metallurgy in 1954 and an M.S. in 1952 from MIT.

William Nix, Ph.D. is a Professor at Stanford University. Dr. Nix's special interests are imperfections in crystalline solids and their relation to the mechanical properties of bulk and thin film materials. Current projects focus on the development of experimental techniques for the study of mechanical properties of interconnect thin films and on modeling the processes. He was awarded the ASM Gold Medal from ASM International in 1998 and the Educator Award from The Metallurgical Society in 1995. He received a Ph.D. in Materials Science in 1963 and a M.S. in 1960 from Stanford University.

Akihisa Inoue, Ph.D. has been a Professor at the Institute for Materials Research at Tohoku University in Japan since 1990. Mr. Inoue earned his Bachelor of Engineering degree in Metallurgical Engineering from the Himeji Institute of Technology in 1970. He earned a M.S. degree in Engineering in

[Table of Contents](#)

Materials Science and his Doctor of Engineering in Materials Science from Tohoku University in 1972 and 1975 respectively. Mr. Inoue has received many honors and awards, among them the Japan Institute of Metals Best Paper Award eight times and the Japan Institute of Metals Engineering Development Award six times. In 2000, he was awarded the Japan Institute of Metals Distinguished Service Award and the ISI Citation Classic Award.

Board of Directors

In accordance with our bylaws, our board of directors consists of between nine and seventeen members as fixed by resolution of the board. Currently, our board consists of eleven members. Each member of our board of directors serves a one-year term and until his or her successor is elected and qualified or upon the earlier resignation or removal.

Upon our becoming a “listed corporation” within the meaning of Section 301.5 of the Corporations Code of California, our board of directors will automatically be divided into three classes, with each director serving a three year term and one class being elected at each year’s annual meeting of the shareholders. John Kang, Tjoa Thian Song, Ricardo A. Salas, and William Johnson will be in the class of directors whose initial term expires at the annual meeting of shareholders to be held in 2002. Jack Chitayat, Shekhar Chitnis, Henri Tchen, and Jeff Oster will be in the class of directors whose initial term expires at the annual meeting of shareholders to be held in 2003. James Kang, David Browne, and Betsy Atkins will be in the class of directors whose initial term expires at the annual meeting of shareholders to be held in 2004.

Committees of the Board of Directors

Our board of directors has authority to appoint committees to perform certain management or administrative functions. In April 2002, our board of directors established two committees:

Audit Committee. Our audit committee consists of David Browne, Jeff Oster, and Jack Chitayat. Our audit committee is responsible for monitoring the integrity of our financial statements, our compliance with legal and regulatory requirements, and the independence and performance of our internal and external auditors.

Compensation Committee. Our compensation committee consists of Ricardo Salas, Betsy Atkins, and Henri Tchen. Our compensation committee makes recommendations to the board of directors concerning executive compensation and administers our equity-based incentive plans.

Directors’ Compensation

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 or committee meetings. Non-employee directors are also entitled to receive a \$10,000 annual cash stipend for serving on either our audit committee or our compensation committee. Additionally, each non-employee director is entitled to receive a per-meeting fee of \$1,000 for each meeting of the board of directors attended in person.

We also have a 2002 Non-employee Director Stock Option Plan pursuant to which our non-employee directors are entitled to receive stock options. When they are first elected or appointed to our board of directors, the non-employee directors are entitled to receive an initial stock option grant to purchase 50,000 shares of our common stock, and on the first business day of January of each year in which they continue to serve as a member of our board an annual stock option grant to purchase 10,000 shares of our common stock, in each case at 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 Interlocks and Insider Participation

Prior to April 2002, we did not have a compensation committee. Our board of directors made all decisions concerning executive compensation prior to April 2002. None of our executive officers serves as a member of the board of directors or compensation committee of an entity that has an executive officer serving as a member of our board of directors.

Executive Compensation

The following table sets forth certain information for the years ended December 31, 2001, 2000, and 1999 concerning compensation earned for service rendered to us in all capacities by our Chief Executive Officer and the other most highly compensated executive officers whose compensation, as such term is defined by the Commission, exceeded \$100,000 for the year ended December 31, 2001.

In accordance with the rules of the Commission, the compensation described in the table below does not include medical, group life insurance or other benefits which are available generally to all of our salaried employees and certain perquisites and other personal benefits received which do not exceed the lesser of \$50,000 or 10% of any officer's salary and bonus disclosed in the table below.

Summary Compensation Table

Name and Principal Position	Year	Annual Compensation			Long-Term Compensation	
		Salary	Bonus	Other Annual Compensation	Securities Underlying Options	All Other Compensation
James Kang(1)	2001	\$193,338	—	—	2,580,646	—
Chairman of the Board of Directors	2000	\$116,477	—	—	—	—
	1999	\$116,441	—	—	—	—
John Kang(2)	2001	\$200,000	—	—	—	—
Chief Executive Officer and President	2000	—	—	—	1,612,904	—
	1999	—	—	—	—	—
Shekhar Chitnis(3)	2001	\$200,005	—	—	—	\$150,000
Chief Operating Officer	2000	\$156,039	—	—	516,130	—
	1999	\$107,465	—	—	—	—
Scott Wiggins	2001	\$175,000	—	—	—	—
Executive Vice President	2000	—	—	—	161,291	—
	1999	—	—	—	—	—
Brian McDougall	2001	\$108,145	—	—	161,291	—
Chief Financial Officer and Executive Vice President	2000	—	—	—	—	—
	1999	—	—	—	—	—

- (1) As of June 28, 2001, James Kang became the Chairman of our board of directors and ceased to be our Chief Executive Officer.
- (2) As of June 28, 2001, John Kang became our Chief Executive Officer and President and ceased to be the Chairman of our board of directors.
- (3) As of November 15, 2001, Mr. Chitnis no longer serves as an officer of the company. He continues to serve as one of our directors. The amount listed under "All Other Compensation" constitutes accrued severance payments.

[Table of Contents](#)

The following table sets forth information with respect to grants of stock options during 2001 to the executive officers named in the Summary Compensation Table above.

Options Granted Last Year

Name	Individual Grants					Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term	
	Number of Securities Underlying Options Granted	Percentage of Total Options Granted to Employees in 2001	Exercise or Base Price (\$/Share)	Market Price of Underlying Security on Date of Grant	Expiration Date	5%	10%
James Kang	2,580,646	83%	\$6.20	\$6.20	April 30, 2011	\$10,062,814	\$11,303,377
John Kang	—	—	—	—	—	—	—
Shekhar Chitnis	—	—	—	—	—	—	—
Scott Wiggins	—	—	—	—	—	—	—
Brian McDougall	161,291	5%	\$4.65	\$6.20	May 21, 2011	471,671	529,846

The following table sets forth information with respect to the aggregate stock option exercises by the executive officers named in the Summary Compensation Table during 2001 and the year-end value of unexercised options held by such executive officers:

Aggregate Option Exercises in Last Year and Year-End Values

Name	Shares Acquired on Exercise	Value Realized	Number of Unexercised Options at Year End		Value of Unexercised in-the-Money Options at Year End(1)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
James Kang	1,483,873	\$8,650,000	290,323	2,741,936	\$ 3,970,161	\$27,495,968
John Kang	—	—	1,612,904	—	18,306,452	—
Shekhar Chitnis	161,292	1,750,000	258,065	258,065	3,409,032	3,409,032
Scott Wiggins	—	—	161,291	—	1,830,653	—
Brian McDougall	—	—	32,258	129,033	366,128	1,464,525

(1) Based upon a value of \$16.00 per share as of December 31, 2001.

Employment Agreements

James Kang. On May 1, 2001, we entered into an employment agreement with James Kang that, as amended, provides for his employment as Chairman of our board of directors. Mr. Kang's employment agreement expires on May 1, 2006. 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 severance benefits equal to 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 of the Company immediately preceding the termination. Pursuant to the agreement, Mr. Kang was issued options to purchase 2,580,646 shares of our common stock at an exercise price of \$6.20 per share. The options expire on April 30, 2011 and vest at a rate of 33% per year for three years, with the first 33% vesting on May 21, 2002 and an additional 33% on May 21, 2003 and 2004. In addition, Mr. Kang is prohibited, during his employment with us and for two years after he is no longer employed by us, from soliciting any of our employees or customers.

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. Mr. Kang's employment agreement expires on December 31, 2005. Mr. Kang receives an annual base salary equal to \$200,000 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

[Table of Contents](#)

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 of the Company 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.

Scott Wiggins. On December 31, 2000, we entered into an employment agreement with Scott Wiggins that provides for his employment as an Executive Vice President. Mr. Wiggins' employment agreement expires on December 31, 2003. Mr. Wiggins receives an annual base salary equal to \$175,000 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. Wiggins' employment without cause, or if Mr. Wiggins 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. Wiggins a lump-sum cash payment equal to 100% of Mr. Wiggins' annual base salary. Pursuant to the agreement, Mr. Wiggins was issued options to purchase 161,291 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. Wiggins 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.

Brian McDougall. On May 21, 2001, we entered into an employment agreement with Brian McDougall that provides for his employment as our Chief Financial Officer. Mr. McDougall's employment agreement expires on May 21, 2006. Mr. McDougall receives an annual base salary equal to \$175,000 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. McDougall's employment without cause, we are responsible for paying Mr. McDougall his annual base salary for two years following the effective date of the termination, in addition to continuing certain benefits as provided in the agreement. Pursuant to the agreement, Mr. McDougall was issued options under our 1996 Stock Option Plan to purchase 161,291 shares of our common stock at an exercise price of \$4.65 per share. The options expire on May 21, 2011 and vest at a rate of 20% per year for five years. In addition, Mr. McDougall is prohibited, during his employment with us and for two years after he is no longer employed by us, from soliciting any of our employees or competing with us in any manner.

Shekhar Chitnis. As of November 15, 2001, Mr. Chitnis ceased to be an officer of our company but continues to serve as a member of our board of directors. On November 15, 2001, we entered into a separation agreement and a consulting agreement with Mr. Chitnis. Under the separation agreement, Mr. Chitnis ceased to be an employee and officer of our company, and we agreed to continue paying Mr. Chitnis his \$150,000 annual base salary through December 31, 2002, in addition to continuing certain benefits as provided in the agreement. Under the consulting agreement, we agreed to engage Chitnis Consulting, Inc., which is 100% owned by Mr. Chitnis, as a consultant on an as-needed basis through December 31, 2005 and will pay Chitnis Consulting consulting fees of \$50,000 per year through December 31, 2005. In addition, Mr. Chitnis and Chitnis Consulting are prohibited, during the term of the consulting agreement and for two years after the consulting agreement expires or is terminated, from soliciting any of our employees or customers.

Each of these employment agreements and Mr. Chitnis' consulting agreement contains provisions requiring the employee or consultant to protect the confidentiality of our proprietary and confidential information. Each employee and consultant is also required to assign to us any invention developed by him during his employment or consulting engagement.

2002 Equity Incentive Plan

Our 2002 Equity Incentive Plan, which was adopted by our board of directors and approved by our shareholders in April 2002, provides for the grant of stock options to officers, employees, consultants,

[Table of Contents](#)

and directors of our company and its subsidiaries. The purpose of the plan is to advance the interests of our shareholders 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 shareholders. 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 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 \$100,000, 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 April 2012.

As of April 15, 2002, there are no outstanding options or stock awards of any kind under the plan.

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

[Table of Contents](#)

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 April 15, 2002, options to purchase 1,910,356 shares of common stock were outstanding and exercisable at a weighted average price of \$3.65 per share under the 1996 Stock Option Plan. As of April 15, 2002, 1,467,749 shares had been issued upon exercise of options under the plan.

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 shareholders 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 April 15, 2002, options to purchase 850,000 shares of common stock were outstanding at a weighted average price of \$16 per share under the 2002 Non-employee Director Stock Option Plan. There were no options exercisable under the 2002 Non-employee Director Stock Option Plan as of April 15, 2002.

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

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.

Indemnification of Directors and Executive Officers and Limitation of Liability

As allowed by the California Corporations Code, we have adopted provisions in our articles of incorporation and bylaws that provide that the liability of directors of the company for monetary damages shall be eliminated to the fullest extent permissible under California law. Furthermore, our articles of incorporation provide that we are authorized to provide indemnification of agents (including directors and executive officers) through bylaw provisions, agreements, approval of shareholders or disinterested directors, or otherwise, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the applicable limits set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to the company and its shareholders. Our bylaws provide that agents of the company shall be indemnified against expenses actually and reasonably incurred by them in connection with the successful defense on the merits in any proceeding that they are a party to by reason of the fact that they were agents of the corporation, but only if they acted in good faith, in a manner that they believed to be in the best interests of the corporation, and with such care as a reasonably prudent person in a like position would use under similar circumstances.

If an agent is not successful on the merits in any such proceeding, then the corporation will only indemnify the agent if it is determined that the agent has satisfied the foregoing standard of conduct, and such determination is made by:

- a majority vote of a quorum of directors who are not parties to the proceeding,
- approval by the affirmative vote of the majority of the company's shares entitled to vote of a duly held meeting at which a quorum is present or by written consent of the holders of a majority of shares entitled to vote, or
- the court in which the proceeding was pending.

However, our bylaws provide that, in the case of an action by or in the right of the company, no indemnification will be permitted:

- if the agent is adjudged to be liable in the performance of the agent's duty to the company, unless and only to the extent that the court determines that, in view of all the circumstances of the case, the agent is fairly and reasonably entitled to indemnity for the expenses which the court shall determine,
- for amounts paid in settling or otherwise disposing of a threatened or pending action, with or without court approval, and
- for expenses incurred in defending a threatened or pending action that is settled or otherwise disposed of with or without court approval.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors or officers pursuant to the foregoing provisions, or otherwise, in the opinion of the Commission, this indemnification is against public policy as expressed in the Securities Act of 1933, and is therefore unenforceable. In the event that a claim for indemnification for these liabilities, other than the payment by the company of expenses incurred or paid by a director or officer in the successful defense of any action, suit or proceeding, is asserted by a director or officer, we will, unless in the opinion of our legal

[Table of Contents](#)

counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question as to whether this indemnification is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of the issue.

There is no pending litigation or proceeding involving any of our directors, officers, employees or other agents as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director, officer, employee or other agent.

CERTAIN TRANSACTIONS

As of April 15, 2002, we owed \$1.4 million plus accrued interest of \$147,423 to John Kang and Rick Salas under a subordinated, unsecured promissory note that is due on December 31, 2002. John Kang is our chief executive officer, president, and a director, and Rick Salas is a director. This note bears interest at 8.5% per annum, with interest being payable at maturity. The note may be prepaid by our company only with the written consent of Mr. Kang and Mr. Salas. In connection with the issuance of this note, we issued to Mr. Kang and Mr. Salas a warrant to purchase shares of our common stock. The number of shares issuable under this warrant is equal to the original principal amount of the note (\$1.5 million) divided by the per share exercise price of the warrant, which is \$4.65. This warrant expires on December 31, 2005, and as of September 30, 2001, no portion of this warrant has been exercised.

As of April 15, 2002, we owed John Kang \$2.75 million plus accrued interest of \$23,178 under two additional subordinated, unsecured promissory notes. These notes bear interest, payable at maturity, of 8.0% per annum. \$2.0 million in principal amount under these notes becomes due on May 1, 2003, or, if earlier, upon the closing of an initial underwritten public offering, and \$0.75 million in principal amount under these notes becomes due upon the earlier of July 1, 2003 or the closing of an initial public offering.

In March 2001, we issued 1,294,358 shares of our common stock to Mr. Kang and Mr. Salas as a result of the conversion by Mr. Kang and Mr. Salas of a separate \$2.0 million convertible subordinated promissory note held by them jointly. This note provided for conversion at a value of \$1.55 per share.

As of April 15, 2002, we owed \$1.5 million plus accrued interest of \$152,883 to Tjoa Thian Song, a director of our company, under a subordinated, unsecured promissory note that is due on December 31, 2002. The amount outstanding under the note bears interest, payable at maturity, at 8.5% per annum. This note may be prepaid with the written consent of Mr. Tjoa. In connection with the issuance of this note, we issued to Mr. Tjoa a warrant to purchase shares of our common stock. The number of shares issuable under this warrant is equal to the original principal amount of the note (\$1.5 million) divided by the per share exercise price of the warrant, which is \$4.65. This warrant expires on December 31, 2005, and as of September 30, 2001, no portion of this warrant has been exercised.

As of April 15, 2002, we also owed Mr. Tjoa \$1.75 million plus accrued interest of \$37,301 under two additional subordinated, unsecured promissory notes. These notes bear interest, payable at maturity, of 8.0% per annum. \$1.0 million in principal amount under these notes becomes due on December 31, 2002, or, if earlier, upon the closing of an initial underwritten public offering or a significant funding transaction, and \$0.75 million in principal amount under these notes becomes due upon the earlier of July 1, 2003 or the closing of an initial public offering. These notes may be prepaid by us at any time without penalty.

On November 30, 2001, we issued 45,500 shares of our common stock to Mr. Tjoa pursuant to an agreement under which Mr. Tjoa agreed to accept such shares as payment in full for an unsecured promissory note payable to Mr. Tjoa by our company. On November 30, 2001, the outstanding balance on this note was \$0.5 million in principal plus accrued interest of \$64,212.

On January 31, 2001, we issued 215,054 shares of our common stock to Synapse Fund I, LLC. These shares were issued in exchange for the transfer to our company of a \$1.0 million promissory note previously issued by our Liquidmetal Golf subsidiary to Synapse Fund I. Also on January 31, 2001, we issued 215,054 shares of our common stock to Synapse Fund II, LLC. These shares were issued in exchange for the transfer to our company of a separate \$1.0 million promissory note previously issued by our Liquidmetal Golf subsidiary to Synapse Fund II. Henri Tchen, a member of our board of directors, is the director of both Synapse Fund I and Synapse Fund II.

On September 1, 2001, we entered into an amended and restated license agreement with Caltech. William Johnson, Ph.D., the Vice Chairman of our board of directors, is a professor at Caltech, and substantially all of the amorphous alloy technology licensed to us under the Caltech license agreement was developed in Professor Johnson's Caltech laboratory. Under the Caltech license agreement, we have a fully paid, exclusive license to make, use, and sell products from inventions, proprietary information, know-how, and other rights relating to amorphous alloys owned by Caltech and existing as of September 1, 2001. The

[Table of Contents](#)

license agreement also gives us the exclusive right to make, use, and sell products derived from substantially all amorphous alloy technology developed in Professor Johnson's Caltech laboratory during the period September 1, 2001 through August 31, 2005. We agreed to pay Caltech a one-time fee of \$150,000 in connection with this agreement. In May 2000, we issued 96,774 shares of our common stock to Caltech pursuant to a prior license agreement.

On December 31, 2000, we entered into an employment agreement with John Kang, who is our Chief Executive Officer and who serves as one of our directors. The employment agreement provides that John Kang will be employed as our president and chief executive officer for a term that expires on December 31, 2005. Under this employment agreement, John Kang is paid a base salary of \$200,000 per year. For more information regarding John Kang's employment agreement, see "Management — Employment Agreements."

On May 1, 2001, we entered into an employment agreement with James Kang under which he serves as the Chairman of our board of directors. The employment agreement provides for an annual base salary of \$300,000 per year, and the agreement expires on April 30, 2005. For more information regarding James Kang's employment agreement, see "Management — Employment Agreements."

On October 1, 2001, we entered into an employment agreement with William Johnson, Ph.D., a member of our board of directors. The employment agreement provides that Professor Johnson will be employed as the Vice Chairman of our board of directors for a term that expires on September 30, 2003. Under this employment agreement, Professor Johnson is paid a base salary of \$300,000 per year.

On November 15, 2001 we entered into separation and consulting agreements with Shekhar Chitnis, a member of our board of directors and a former executive officer. Under these agreements, Mr Chitnis ceased to be an employee and officer of our company, and we agreed to pay Mr. Chitnis a \$150,000 annual base salary through December 31, 2002. The agreements further provide that we will engage Chitnis Consulting, Inc., which is owned 100% by Mr. Chitnis, as a consultant on an as-needed basis through December 31, 2004 and will pay Chitnis Consulting consulting fees of \$50,000 per year through December 31, 2005. For more information regarding these agreements, see "Management — Employment Agreements."

PRINCIPAL SHAREHOLDERS

The following table sets forth information regarding the beneficial ownership of our common stock as of April 15, 2002 by:

- each person that beneficially owns more than 5% of our outstanding common stock,
- each of our directors and executive officers identified in the Summary Compensation Table, and
- all directors and executive officers as a group.

Beneficial ownership is determined under the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Unless otherwise indicated, each of the shareholders has sole voting and investment power with respect to the shares beneficially owned, subject to applicable community property laws. Unless otherwise noted in the footnotes, the address for each principal shareholder is c/o Liquidmetal Technologies, 100 North Tampa St., Suite 3150, Tampa, Florida 33602.

As of April 15, 2002, there were 239 holders of record of our common stock. For purposes of calculating amounts beneficially owned by a shareholder before the offering, the number of shares deemed outstanding includes 35,307,388 shares of common stock outstanding as of April 15, 2002. In addition, shares of common stock subject to options or warrants that are currently exercisable or exercisable within 60 days of April 15, 2002 are deemed to be outstanding and to be beneficially owned by the person holding the options or warrants for the purpose of computing the beneficial ownership of that person but are not treated as outstanding for the purpose of computing the beneficial ownership of any other person. The percentage of beneficial ownership after this offering is based on 40,764,245 shares of common stock, assuming no exercise of the underwriters' overallotment option. For purposes of calculating the percentage beneficially owned after the offering, the number of shares deemed outstanding includes all shares deemed to be outstanding before the offering, all shares being sold in the offering, and 456,857 shares of common stock issuable pursuant to the automatic conversion of our Series A convertible preferred stock upon the completion of this offering.

Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percent of Common Stock Beneficially Owned	
		Before Offering	After Offering
ATI Holdings, LLC	16,386,465	46.4%	40.2%
John Kang(1)	19,308,785	51.8%	45.2%
James Kang(2)	1,816,591	5.0%	4.3%
William Johnson(3)	1,317,743	3.7%	3.2%
Scott Wiggins(4)	161,291	*	*
Brian McDougall(5)	64,518	*	*
Ricardo A. Salas(6)	1,382,675	3.9%	3.4%
Shekhar Chitnis(7)	779,521	2.2%	1.9%
Jack Chitayat(8)	555,194	1.6%	1.4%
Tjoa Thian Song(9)	4,197,166	11.7%	10.1%
Henri Tchen(10)	1,146,956	3.2%	2.8%
Jeffrey Oster	—	—	—
Betsy Atkins	—	—	—
David Browne	40,323	*	*
All directors and executive officers as a group (11 persons)	29,480,440	74.1%	65.1%

* Less than 1.0%

Table of Contents

- (1) Includes:
 - (a) 16,386,465 shares held of record by ATI Holdings, LLC. Mr. Kang has the power to direct the voting and disposition of such shares as the sole manager of J. Holdsworth Capital Management, LLC, which is the sole manager of ATI Holdings, LLC. Mr. Kang disclaims beneficial ownership of these shares except to the extent of his pecuniary interest in ATI Holdings, LLC;
 - (b) 48,388 shares held of record by Cook Street, LLC. Mr. Kang has the sole power to direct the voting and disposition of such shares as the sole manager of Cook Street, LLC. Mr. Kang disclaims beneficial ownership of these shares except to the extent of his pecuniary interest in Cook Street, LLC;
 - (c) 483,871 shares held of record by J. Holdsworth Capital, Ltd. Mr. Kang is the president and a 25% shareholder of J. Holdsworth Capital, Ltd. Mr. Kang disclaims beneficial ownership of these shares except to the extent of his pecuniary interest in J. Holdsworth Capital, Ltd.;
 - (d) 322,581 shares issuable pursuant to a warrant held jointly by Mr. Kang and Ricardo Salas that is currently exercisable; and
 - (e) 1,612,904 shares issuable pursuant to options that are currently exercisable or that are exercisable within sixty days.
 - (2) Includes 1,156,989 shares issuable pursuant to options that are currently exercisable or that are exercisable within sixty days. Also includes 969 shares held by James Kang's minor children.
 - (3) Includes 161,291 shares issuable pursuant to options that are currently exercisable or that are exercisable within sixty days.
 - (4) All of these shares are issuable pursuant to options that are currently exercisable or that are exercisable within sixty days.
 - (5) All of these shares issuable pursuant to options that are currently exercisable or that are exercisable within sixty days.
 - (6) Includes 483,871 shares held of record by J. Holdsworth Capital, Ltd., in which Mr. Salas is a 25% shareholder. Mr. Salas disclaims beneficial ownership of these shares except to the extent of his pecuniary interest in J. Holdsworth Capital, Ltd. Also includes 322,581 shares issuable pursuant to a warrant held jointly by Mr. Salas and John Kang that is currently exercisable and 161,291 shares held by Mr. Salas as trustee of a grantor trust.
 - (7) Includes 11,590 shares held by Mr. Chitnis' minor children. Also includes 402,581 shares issuable to Mr. Chitnis pursuant to stock options that are currently exercisable or that are exercisable within sixty days.
 - (8) Includes 483,871 shares held of record by J. Holdsworth Capital, Ltd., in which Mr. Chitayat is a 25% shareholder. Mr. Chitayat disclaims beneficial ownership of these shares except to the extent of his pecuniary interest in J. Holdsworth Capital, Ltd.
 - (9) Includes 322,581 shares issuable pursuant to options that are currently exercisable or that are exercisable within sixty days. Also, includes 322,581 shares issuable pursuant under a currently exercisable warrant.
 - (10) All of these shares are held of record by Synapse Fund I, LLC and Synapse Fund II, LLC. Mr. Tchen is the vice president of Synapse Capital, LLC, which is the sole manager of both of these funds.
-

DESCRIPTION OF CAPITAL STOCK

General

We are authorized to issue up to 200,000,000 shares of common stock, no par value, of which 35,307,388 shares were issued and outstanding as of April 15, 2002. We are also authorized to issue up to 10,000,000 shares of preferred stock, no par value, of which 456,857 shares designated as Series A convertible preferred stock were issued and outstanding as of April 15, 2002. Unless otherwise specifically noted, all share data in this prospectus has been adjusted to reflect a one-for-3.1 reverse stock split of our outstanding common stock and preferred stock on April 4, 2002.

Common Stock

Holders of our common stock are entitled to one vote per share on all matters to be voted upon by shareholders. In accordance with California law, the affirmative vote of a majority of the shares represented and voting at a duly held meeting at which a quorum is present (which shares voting affirmatively also constitute at least a majority of the required quorum) shall be the act of the shareholders. However, upon a shareholder giving notice prior to the voting as required by law, shareholders may cumulate their votes in the election of directors. This means that the shareholders would be entitled to a number of votes equal to the number of their shares multiplied by the number of directors to be elected. A shareholder would then be entitled to cast all of the shareholder's votes for any director or for any two or more directors as the shareholder would choose. However, in accordance with our bylaws and California law, upon the completion of this offering, shareholders will no longer have the right to cumulate their votes in elections for directors.

Shares of our common stock have no preemptive rights, no redemption or sinking fund provisions, and are not liable for further call or assessment. The holders of such common stock are entitled to receive dividends when and as declared by our board of directors out of funds legally available for dividends. Our board of directors has never declared or paid any cash dividends, and our board of directors does not currently anticipate paying any cash dividends in the foreseeable future.

Upon a liquidation of our company, our creditors and any holders of our preferred stock with preferential liquidation rights will be paid before any distribution to holders of common stock. The holders of common stock would be entitled to receive a pro rata distribution per share of any excess amount. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock which we may designate and issue in the future.

Preferred Stock

Our articles of incorporation empower our board of directors to issue up to 10,000,000 shares of preferred stock from time to time in one or more series. Our board also may fix the rights, preferences, privileges, and restrictions of those shares, including dividend rights, conversion rights, voting rights, redemption rights, terms of sinking funds, liquidation preferences, and the number of shares constituting any series or the designation of the series. Any preferred stock terms selected by our board of directors could decrease the amount of earnings and assets available for distribution to holders of our common stock or adversely affect the rights and power, including voting rights, of the holders of our common stock without any further vote or action by the shareholders. The rights of holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued by us in the future. The issuance of preferred stock could also have the effect of delaying or preventing a change in control of our company or make removal of management more difficult.

As of April 15, 2002, 456,857 shares of preferred stock were outstanding. All of these shares are designated as Series A convertible preferred stock. The holders of our Series A convertible preferred stock are entitled to one vote per share and vote together with the common stock as a single class on all matters to be voted upon by the shareholders, except for matters on which California law entitles the holders of

[Table of Contents](#)

preferred stock to vote as a separate class and except for any amendment to our articles of incorporation that materially and adversely changes the rights of the holders of Series A convertible preferred stock. The holders of our Series A convertible preferred stock are entitled to dividends whenever dividends are declared on our common stock, in which case the holders of Series A convertible preferred stock will participate equally, share for share, in the dividend with the common stock. Upon the dissolution, liquidation, or winding up of the company, the holders of Series A convertible preferred stock will be entitled to receive, before any payment or distribution to the common stock, a preferred distribution of \$12.40 per share. The holders of Series A convertible preferred stock are also entitled to anti-dilution rights in the event that we issue additional shares of common stock at less than \$12.40 per share. Each share of Series A convertible preferred stock is convertible into a share of common stock at any time at the option of the holder. If the per share offering price in this offering is at least \$15.00 per share, however, all shares of Series A convertible preferred stock will convert automatically into common stock upon the consummation of this offering, and no shares of preferred stock will remain outstanding.

Warrants and Special Options

On February 21, 2001, we issued a warrant to purchase shares of our common stock jointly to John Kang and Ricardo Salas. This warrant was issued in connection with the issuance to Mr. Kang and Mr. Salas of a \$1,500,000 subordinated, unsecured promissory note that is due on December 31, 2002. 322,581 shares are issuable under this warrant at an exercise price of \$4.65 per share. This warrant expires on December 31, 2005, and as of December 31, 2001, no portion of this warrant has been exercised.

On February 21, 2001, we issued a warrant to purchase shares of our common stock to Tjoa Thian Song. This warrant was issued in connection with the issuance to Mr. Tjoa of a \$1,500,000 subordinated, unsecured promissory note that is due on December 31, 2002. 322,581 shares are issuable under this warrant at an exercise price equal to \$4.65 per share. This warrant expires on December 31, 2005, and as of December 31, 2001, no portion of this warrant has been exercised.

On January 1, 2001, we granted Paul Azinger a non-qualified stock option to purchase up to 1,021,507 shares of our common stock at an exercise price of \$1.16 per share. This option was granted to Mr. Azinger in consideration of Mr. Azinger entering into an endorsement agreement with our Liquidmetal Golf subsidiary. Under the option agreement, Mr. Azinger's option vests as to 161,291 shares on December 31, 2001 and 215,054 shares on each of December 31, 2002, 2003, 2004, and 2005. This option expires on December 31, 2010 or the fifth anniversary of the date on which Mr. Azinger's endorsement agreement terminates, whichever occurs first. The option agreement provides that if Liquidmetal Golf terminates the endorsement agreement prior to December 31, 2002, then the option will become immediately vested as to 376,345 shares, and the unvested portion of the option will immediately terminate.

Registration Rights

Following this offering, two shareholders holding a total of 183,492 outstanding shares of our common stock will have piggyback registration rights with respect to these shares. In the event that we propose to register additional shares of common stock under the Securities Act of 1933 for our own account, these shareholders are entitled to receive notice of that registration and to include their shares in the registration, subject to limitations described in the agreements granting these rights. These registration rights will not apply to certain registrations, such as the registration of securities issued under employee benefit plans and a registration incident to a corporate merger or reorganization. In addition, each shareholder holding these rights may only exercise them with respect to two registrations. These registration rights expire on the third anniversary of our initial public offering or, if earlier, on the date on which the holders can sell all of their registrable securities under Rule 144 under the Securities Act of 1933 during any three-month period.

Additionally, Paul Azinger will have piggyback registration rights with respect to any shares of common stock that Mr. Azinger receives upon the exercise of his stock option. Mr. Azinger's stock option

[Table of Contents](#)

agreement provides that, if we propose to register additional shares of common stock under the Securities Act of 1933, whether for our own account or the account of another shareholder, Mr. Azinger is entitled to receive notice of that registration and to include his shares in the registration, subject to limitations described in his stock option agreement. These registration rights will not apply to a registration of securities issued under an employee benefit plan or a registration incident to a corporate merger or reorganization. These registration rights expire on the date on which Mr. Azinger can sell all of his registrable securities under Rule 144 under the Securities Act of 1933 without any volume limitations.

All registration rights are subject to conditions and limitations, among them the right of the underwriters of any offering to limit the number of shares of common stock held by these security holders to be included in the registration. We are generally required to bear all of the expenses of all registrations, except underwriting discounts and selling commissions. Registration of the shares of common stock held by security holders with registration rights would result in these shares becoming freely tradeable without restriction under the Securities Act of 1933 immediately upon effectiveness of this registration.

Anti-Takeover Effect

California Law. Section 1203 of the California Corporations Code includes provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control or management of our company. First, if an “interested person” makes an offer to purchase the shares of some or all of our existing shareholders, we must obtain an affirmative opinion in writing as to the fairness of the offering price prior to completing the transaction. California law considers a person to be an “interested person” if the person directly or indirectly controls our company, if the person is directly or indirectly controlled by one of our officers or directors, or if the person is an entity in which one of our officers or directors holds a material financial interest. If after receiving an offer from such an “interested person”, we receive a subsequent offer from a neutral third party, then we must notify our shareholders of this offer and afford each of them the opportunity to withdraw their consent to the “interested person” offer. Section 1203 and other provisions of the California Corporations Code could make it more difficult for a third party to acquire a majority of our outstanding voting stock by discouraging a hostile bid, or delaying, preventing or deterring a merger, acquisition or tender offer in which our shareholders could receive a premium for their shares, or effect a proxy contest for control of the company or other changes in our management.

Articles of Incorporation and Bylaw Provisions. Our articles of incorporation authorize our board of directors, without shareholder approval, to issue up to 10,000,000 shares of “blank check” preferred stock. In addition, our bylaws limit the ability of our shareholders to call a special meeting of the shareholders. These and other provisions contained in our articles of incorporation and bylaws could delay or discourage transactions involving an actual or potential change in control of us or our management, including transactions in which shareholders might otherwise receive a premium for their shares over their current prices. Such provisions could also limit the ability of shareholders to remove current management or approve transactions that shareholders may deem to be in their best interests and could adversely affect the price of our common stock.

Classified Board of Directors. Our bylaws provide that upon our becoming a “listed corporation” within the meaning of Section 301.5 of the Corporations Code of California, our board of directors will automatically be divided into three classes of directors, with each class serving a staggered three-year term. The classification system of electing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us and may maintain the composition of the board of directors, as the classification of the board of directors generally increases the difficulty of replacing a majority of directors. We anticipate that we will qualify as a “listed corporation” immediately upon the completion of this offering.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Co.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering there has been no public market for our common stock. Future sales of substantial amounts of our common stock in the public market could adversely affect the market price of our common stock. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of certain contractual and legal restrictions on resale, sales of substantial amounts of our common stock in the public market after the restrictions lapse could adversely affect the market price of our common stock and our ability to raise capital in the future.

Upon completion of this offering, we will have outstanding 40,764,245 shares of common stock, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options or warrants, based on shares outstanding as of April 15, 2002. This includes 456,857 shares of our Series A convertible preferred stock that will be automatically converted into 456,857 shares of our common stock upon the completion of this offering. Of these shares, the 5,000,000 shares of our common stock sold in this offering will be freely tradable, unless shares are purchased by an existing "affiliate." Our affiliates are people or entities that directly or indirectly control our company, are controlled by our company, or are under common control with our company. For instance, our directors, executive officers and principal shareholders are deemed to control our company, and thus are affiliates.

The remaining 35,764,245 outstanding shares of common stock will be "restricted" securities within the meaning of Rule 144 under the Securities Act of 1933, and may not be sold in the absence of registration under the securities laws unless an exemption from registration is available.

One of those exemptions is Rule 144. In general, Rule 144 as currently in effect, allows a shareholder (including an affiliate) who has beneficially owned restricted shares for at least one year to sell within any three-month period a number of shares which do not exceed the greater of (1) 1% of our then outstanding shares of common stock, approximately 40,732 shares immediately after this offering, or (2) the average weekly trading volume of our common stock during the four calendar weeks preceding the date on which notice of the sale is filed with the Commission. Sales under Rule 144 also must be sold through brokers or "market makers," and there must be current public information about the company available. Shares properly sold in reliance on Rule 144 to persons who are not affiliates become freely tradable without restriction or registration under the securities laws. The Rule 144 restrictions are not applicable to a person who has beneficially owned shares for at least two years (including "tacked on" holding periods) and who is not an affiliate of the company.

Another exemption is Rule 701. Subject to certain limitations on the aggregate offering price of a transaction and other conditions, Rule 701 may be relied upon by shareholders with respect to the resale of securities originally purchased by employees, directors, officers and consultants under stock options issued under our stock option plan. To be eligible for resale under Rule 701, shares must have been issued pursuant to written compensatory benefit plans or written contracts relating to the compensation of such persons. In addition, the Commission has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Securities Exchange Act of 1934, including exercises after the date of this offering. Securities issued in reliance on Rule 701 are restricted securities. Subject to the contractual restrictions described below, securities may be sold under Rule 701 by affiliates beginning 90 days after the date of this prospectus if they comply with Rule 144, other than the holding period requirement.

All of the executive officers and directors and some shareholders and option holders have signed lock-up agreements in favor of the underwriters which prohibit them from selling or otherwise disposing of any shares of our common stock or securities convertible into shares of our common stock for a period of 180 days after the date of this prospectus. Transfers or dispositions can be made sooner with the prior written consent of Merrill Lynch. However, Merrill Lynch currently has no plans to release any portion of the securities subject to these lock-up agreements.

As of April 15, 2002, options to purchase a total of 8,169,934 shares of our common stock were outstanding. Following the completion of this offering, we intend to file registration statements to register

[Table of Contents](#)

all 8,169,934 shares of our common stock subject to outstanding options, and an additional 11,000,000 shares of our common stock reserved for issuance under our 2002 incentive stock plans. Accordingly, shares to be registered in this manner will be available for sale in the open market, except to the extent the shares are subject to vesting restrictions or the lock-up agreements. Affiliates will still be required to comply with Rule 144. Following the completion of this offering, 645,162 shares of our common stock will be subject to outstanding warrants. These shares, when issued pursuant to the warrants, will be restricted securities and will be subject to Rule 144.

As a result of Rule 144, Rule 701, the lock-up agreements and our intention to file registration statements covering shares of common stock subject to outstanding stock options under our stock option plan, approximately 10,854,805 shares will be eligible for sale in the public market during the 180 days after the date of this prospectus. In addition, approximately 34,038,603 shares will become eligible for sale in the public market upon expiration of the lock-up agreements 180 days after the date of this prospectus.

UNDERWRITING

Merrill Lynch, Pierce, Fenner & Smith Incorporated, UBS Warburg LLC, and Robert W. Baird & Co. Incorporated are acting as representatives of the underwriters named below. Subject to the terms and conditions described in a purchase agreement between us and the underwriters, we have agreed to sell to the underwriters, and the underwriters severally and not jointly have agreed to purchase from us, the number of shares listed opposite their names below.

Underwriter	Number of Shares
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
UBS Warburg LLC	
Robert W. Baird & Co. Incorporated	
Total	5,000,000

Subject to the terms and conditions in the purchase agreement, the underwriters have agreed to purchase all the shares of our common stock being sold pursuant to the purchase agreement if any of these shares of our common stock are purchased. If an underwriter defaults, the purchase agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the purchase agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares of our common stock, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the purchase agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares of our common stock to the public at the initial public offering price on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ _____ per share. The underwriters may allow, and the dealers may realow, a discount not in excess of \$ _____ per share to other dealers. After the initial public offering, the offering price, concession and discount may be changed.

The following table shows the public offering price, underwriting discount to be paid by us to the underwriters and the proceeds, before expenses, to us. This information assumes either no exercise or full exercise by the underwriters of their overallotment options.

	Per Share	Without Option	With Option
Public offering price	\$	\$	\$
Underwriting discount	\$	\$	\$
Proceeds, before expenses, to Liquidmetal Technologies	\$	\$	\$

The expenses of this offering, not including the underwriting discount, are estimated at \$1,900,000 and are payable by us.

Overallotment Option

We have granted an option to the underwriters to purchase up to 750,000 additional shares of our common stock at the initial public offering price less the underwriting discount. The underwriters may

[Table of Contents](#)

exercise this option for 30 days from the date of this prospectus solely to cover any overallocments. If the underwriters exercise this option, each underwriter will be obligated, subject to conditions contained in the purchase agreement, to purchase a number of additional shares of our common stock proportionate to that underwriter's initial amount reflected in the above table.

Reserved Shares

At our request, the underwriters have reserved for sale, at the initial public offering price, up to 500,000 shares of our common stock offered hereby to be sold as part of the underwritten offering to certain individuals and entities designated by us. We have reserved shares for certain employees and friends. If these individuals and entities purchase reserved shares, this will reduce the number of shares available for sale to the general public. Any reserved shares that are not orally confirmed for purchase within one day of the pricing of this offering will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.

No Sales of Similar Securities

We, our executive officers and directors and certain shareholders have agreed not to sell or transfer any shares of our common stock for 180 days after the date of this prospectus without first obtaining the written consent of Merrill Lynch. Specifically, we and these other individuals have agreed not to directly or indirectly:

- offer, pledge, sell or contract to sell any shares of our common stock;
- sell any option or contract to purchase any shares of our common stock;
- purchase any option or contract to sell any shares of our common stock;
- grant any option, right or warrant for the sale of any shares of our common stock;
- lend or otherwise dispose of or transfer any shares of our common stock;
- request or demand that we file a registration statement related to any shares of our common stock; or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequences of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to shares of our common stock and to securities convertible into, or exchangeable or exercisable for, or repayable with, shares of our common stock. It also applies to shares of our common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and Merrill Lynch. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us;
- our financial information;
- the history of, and the prospects for, our company and the industry in which we compete;
- an assessment of our management, its past and present operation, and the prospects for, and timing of, our future revenues;

[Table of Contents](#)

- the present state of our development; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares of our common stock may not develop. It is possible that after this offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares of our common stock in the aggregate to accounts over which they exercise discretionary authority.

Electronic Distribution

Merrill Lynch will be facilitating Internet distribution for this offering to certain of its Internet subscription customers. Merrill Lynch intends to allocate a limited number of shares for sale to its online brokerage customers. An electronic prospectus is available on the Internet Web site maintained by Merrill Lynch. Other than the prospectus in electronic format, the information on the Merrill Lynch Web site is not a part of this prospectus.

Quotation in the Nasdaq National Market

Application has been made for quotation of the shares on the Nasdaq National Market under the symbol "LQMT."

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares of our common stock is completed, rules of the Commission may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may make short sales of our common stock. Short sales involve the sale by the underwriters at the time of the offering of a greater number of shares than they are required to purchase in the offering. Covered short sales are sales made in an amount not greater than the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the public offering price at which they may purchase the shares through the over-allotment option.

Naked short sales are sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Similar to other purchase transactions, the purchases by the underwriters to cover syndicate short positions may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of our common stock may be higher than it would otherwise be in the absence of these transactions.

The representatives may also impose a penalty bid on underwriters and selling group members. This means that if the representatives purchase shares of our common stock in the open market to reduce an underwriter's short position or to stabilize the purchase of such shares, they may reclaim the amount of the selling commission from the underwriters and selling group members who sold those shares. The imposition of a penalty bid may also affect the price of the shares of our common stock in that it discourages resales of those shares.

[Table of Contents](#)

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

LEGAL MATTERS

The validity of the shares of common stock issued in this offering will be passed upon for us by the law firm of Foley & Lardner, Tampa, Florida. Certain legal matters in connection with this offering will be passed upon for the underwriters by the law firm of Sidley Austin Brown & Wood LLP, New York, New York.

EXPERTS

The consolidated financial statements as of December 31, 2001 and 2000, and for each of the three years in the period ended December 31, 2001, included in this prospectus have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein and have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the Commission a Registration Statement (of which this prospectus is a part) on Form S-1 under the Securities Act of 1933 relating to the common stock we are offering. This prospectus does not contain all the information that is in the Registration Statement. Certain portions of the Registration Statement have been omitted as allowed by the rules and regulations of the Commission. Statements in this prospectus which summarize documents are not necessarily complete, and in each case you should refer to the copy of the document filed as an exhibit to the Registration Statement. For further information regarding our company and our common stock, please see the Registration Statement and its exhibits and schedules. You may examine the Registration Statement free of charge at the public reference facilities maintained by the Commission at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and at the regional office of the Commission at Suite 1400, 500 West Madison Street, Chicago, Illinois. Copies of the Registration Statement may also be obtained from the public reference facilities of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, or by calling the Commission at 1-800-SEC-0330, at prescribed rates. In addition, the Registration Statement and the exhibits and schedules to the Registration Statement can be obtained from the Commission's Internet site at <http://www.sec.gov>.

Upon completion of this offering, we will become subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934 and, in accordance therewith, will file periodic reports, proxy statements and other information with the Commission. Such periodic reports, proxy statements and other information will be available for inspection and copying at the Commission's public reference rooms and the Internet site of the Commission referred to above. Our Internet site address is www.liquidmetal.com. Information on our Internet site does not constitute a part of this prospectus.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page</u>
Independent Auditors' Report	F-2
Consolidated Financial Statements:	
Consolidated Balance Sheets	F-3
Consolidated Statements of Operations and Comprehensive Loss	F-4
Consolidated Statements of Shareholders' Equity (Deficiency)	F-5
Consolidated Statements of Cash Flows	F-6
Notes to Consolidated Financial Statements	F-8

INDEPENDENT AUDITORS' REPORT

Board of Directors and Shareholders

Liquidmetal Technologies
Tampa, Florida

We have audited the accompanying consolidated balance sheets of Liquidmetal Technologies and subsidiaries (the "Company") as of December 31, 2001 and 2000, and the related consolidated statements of operations and comprehensive loss, shareholders' equity (deficiency), and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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 and subsidiaries at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America.

DELOITTE & TOUCHE LLP

Certified Public Accountants

Tampa, Florida

April 4, 2002

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	Pro Forma March 31, 2002	March 31, 2002	December 31,	
			2001	2000
	(unaudited)	(in thousands, except share data)		
ASSETS				
CURRENT ASSETS:				
Cash and cash equivalents		\$ 872	\$ 2,230	\$ 124
Accounts receivable (net of allowance for doubtful accounts of \$60 at March 31, 2002 and \$30 at December 31, 2001 and 2000)		1,098	911	785
Inventories		347	503	192
Prepaid expenses		1,338	967	57
Total current assets		3,655	4,611	1,158
PROPERTY, PLANT AND EQUIPMENT, NET		1,244	1,163	162
INTANGIBLE ASSETS, NET		718	723	597
OTHER ASSETS		194	183	28
Total assets		\$ 5,811	\$ 6,680	\$ 1,945
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIENCY)				
CURRENT LIABILITIES:				
Accounts payable and accrued expenses	\$ 3,485	\$ 3,485	\$ 2,706	\$ 575
Net liabilities of discontinued operations	5,723	5,723	7,492	1,627
Deferred revenue	830	830	830	830
Accrued severance	113	113	167	87
Current portion of notes payable to shareholders	5,216	3,216	2,988	2,006
Total current liabilities	15,367	13,367	14,183	5,125
NOTES PAYABLE TO SHAREHOLDERS, LESS CURRENT PORTION	—	2,000	—	500
Total liabilities	15,367	15,367	14,183	5,625
COMMITMENTS AND CONTINGENCIES				
SHAREHOLDERS' EQUITY (DEFICIENCY):				
Preferred stock, no par value; 10,000,000 shares authorized and 456,857 issued and outstanding at March 31, 2002 and December 31, 2001; none issued and outstanding in 2000	—	5,577	5,577	—
Common stock, no par value; 200,000,000 shares authorized 35,731,986 issued and outstanding pro forma March 31, 2002; and 35,275,129 issued and outstanding at March 31, 2002, 35,023,515 issued and outstanding at December 31, 2001, 30,884,042 issued and outstanding in 2000	35,764	30,187	29,752	19,305
Paid in capital	22,526	22,526	22,401	12,421
Unamortized stock-based compensation	(4,180)	(4,180)	(6,717)	—
Accumulated deficit	(63,614)	(63,614)	(58,588)	(35,502)
Accumulated foreign exchange translation gain	(52)	(52)	72	96
Total shareholders' equity (deficiency)	(9,556)	(9,556)	(7,503)	(3,680)
Total liabilities and shareholders' equity (deficiency)	\$ 5,811	\$ 5,811	\$ 6,680	\$ 1,945

See notes to consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

	Three Months Ended March 31,		Year Ended December 31,		
	2002	2001	2001	2000	1999
	(unaudited)		(in thousands, except per share data)		
REVENUE	\$ 1,463	\$ 874	\$ 3,882	\$ 4,200	\$ 2,012
COST OF SALES	681	442	1,924	1,983	805
Gross profit	782	432	1,958	2,217	1,207
OPERATING EXPENSES:					
Selling	571	133	827	527	403
General and administrative	1,701	282	3,143	922	444
Research and development	2,694	252	2,057	455	333
Total expenses	4,966	667	6,027	1,904	1,180
INCOME (LOSS) BEFORE INTEREST EXPENSE AND DISCONTINUED OPERATIONS	(4,184)	(235)	(4,069)	313	27
Interest expense, net	(312)	(188)	(1,095)	(188)	(190)
INCOME (LOSS) FROM CONTINUING OPERATIONS	(4,496)	(423)	(5,164)	125	(163)
DISCONTINUED OPERATIONS:					
Loss from operations of discontinued retail golf segment, net	—	(1,887)	(5,973)	(8,938)	(7,977)
Loss from disposal of discontinued retail golf segment, net	(530)	—	(11,949)	—	—
NET LOSS	(5,026)	(2,310)	(23,086)	(8,813)	(8,140)
Foreign exchange translation (loss) gain	(124)	1	(24)	96	—
COMPREHENSIVE LOSS	\$(5,150)	\$(2,309)	\$(23,110)	\$(8,717)	\$(8,140)
PER COMMON SHARE BASIC:					
Income (loss) from continuing operations	\$ (0.13)	\$ (0.01)	\$ (0.15)	\$ 0.00	\$ (0.01)
Loss from discontinued operations	\$ (0.02)	\$ (0.06)	\$ (0.54)	\$ (0.30)	\$ (0.30)
Net loss	\$ (0.14)	\$ (0.07)	\$ (0.69)	\$ (0.29)	\$ (0.30)
PER COMMON SHARE DILUTED:					
Income (loss) from continuing operations	\$ (0.13)	\$ (0.01)	\$ (0.15)	\$ 0.00	\$ (0.01)
Loss from discontinued operations	\$ (0.02)	\$ (0.06)	\$ (0.54)	\$ (0.27)	\$ (0.30)
Net loss	\$ (0.14)	\$ (0.07)	\$ (0.69)	\$ (0.26)	\$ (0.30)

See notes to consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIENCY)

For the Years Ended December 31, 2001, 2000 and 1999
and for the Three Months Ended March 31, 2002

	Preferred Shares	Preferred Stock	Common Shares	Common Stock	Paid in Capital	Unamortized Stock-Based Compensation	Accumulated Deficit	Accumulated Foreign Exchange Translation Gain	Total
(in thousands, except per share data)									
Balance, December 31, 1998	—	\$ —	25,525,261	\$12,700	\$ 7,875	\$ —	\$(18,542)	\$ —	\$ 2,033
Common stock issued	—	—	3,584,230	1,989	—	—	—	—	1,989
Conversion of note payable	—	—	346,774	538	—	—	—	—	538
Stock-based compensation	—	—	—	—	266	—	—	—	266
Dilution gain on common stock issued by subsidiaries	—	—	—	—	853	—	—	—	853
Discount on convertible notes payable of subsidiaries	—	—	—	—	1,000	—	—	—	1,000
Net loss	—	—	—	—	—	—	(8,140)	—	(8,140)
Balance, December 31, 1999	—	—	29,456,265	15,227	9,994	—	(26,682)	—	(1,461)
Common stock issued	—	—	1,358,422	3,970	—	—	—	—	3,970
Conversion of note payable	—	—	69,355	108	—	—	—	—	108
Stock-based compensation	—	—	—	—	852	—	—	—	852
Dilution gain on common stock issued by subsidiaries	—	—	—	—	500	—	—	—	500
Conversion of note payable of subsidiaries	—	—	—	—	1,075	—	—	—	1,075
Foreign exchange translation gain	—	—	—	—	—	—	—	96	96
Other	—	—	—	—	—	—	(7)	—	(7)
Net loss	—	—	—	—	—	—	(8,813)	—	(8,813)
Balance, December 31, 2000	—	—	30,884,042	19,305	12,421	—	(35,502)	96	(3,680)
Preferred stock issued	456,857	5,665	—	—	—	—	—	—	5,665
Commission expense on sale of preferred stock	—	(88)	—	—	—	—	—	—	(88)
Common stock issued	—	—	977,034	5,477	—	—	—	—	5,477
Stock options exercised	—	—	1,822,581	2,400	—	—	—	—	2,400
Conversion of notes payable	—	—	1,339,858	2,570	—	—	—	—	2,570
Discounts on notes payable	—	—	—	—	1,692	—	—	—	1,692
Stock-based compensation	—	—	—	—	8,301	—	—	—	8,301
Unamortized stock-based compensation	—	—	—	—	—	(6,717)	—	—	(6,717)
Dilution gain on common stock issued by subsidiaries	—	—	—	—	37	—	—	—	37
Purchase of common stock by subsidiaries	—	—	—	—	(50)	—	—	—	(50)
Foreign exchange translation (loss)	—	—	—	—	—	—	—	(24)	(24)
Net loss	—	—	—	—	—	—	(23,086)	—	(23,086)
Balance, December 31, 2001	456,857	5,577	35,023,515	29,752	\$22,401	(6,717)	(58,588)	72	(7,503)
Stock options exercised	—	—	251,614	435	—	—	—	—	435
Stock-based compensation	—	—	—	—	125	(125)	—	—	—
Unamortized stock-based compensation	—	—	—	—	—	2,662	—	—	2,662
Foreign exchange translation (loss)	—	—	—	—	—	—	—	(124)	(124)
Net loss	—	—	—	—	—	—	(5,026)	—	(5,026)
Balance, March 31, 2002 (unaudited)	456,857	\$5,577	35,275,129	\$30,187	\$22,526	\$(4,180)	\$(63,614)	\$ (52)	\$ (9,556)

See notes to consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Three Months Ended March 31,		Year Ended December 31,		
	2002	2001	2001	2000	1999
	(unaudited)		(in thousands)		
OPERATING ACTIVITIES:					
Net loss	\$(5,026)	\$(2,310)	\$(23,086)	\$(8,813)	\$(8,140)
Loss from operations and loss on disposition of discontinued operations	530	1,887	17,922	8,938	7,977
Income (loss) from continuing operations	(4,496)	(423)	(5,164)	125	(163)
Adjustments to reconcile net loss to net cash used by operating activities:					
Depreciation and amortization	323	21	132	131	94
Amortization of debt discount	228	96	780	—	—
Bad debt expense	30	—	—	—	—
Stock-based compensation	1,507	—	393	—	—
Changes in operating assets and liabilities:					
Accounts receivable	(217)	96	(126)	(374)	(7)
Inventories	156	(32)	(311)	(57)	378
Prepaid expenses and other assets	(175)	(80)	(273)	(32)	(23)
Accounts payable and accrued expenses	572	192	1,303	363	(60)
Unearned revenue	—	—	—	—	(170)
Other liabilities	(54)	(65)	80	(262)	(262)
Net cash used by continuing operations	(2,126)	(195)	(3,186)	(106)	(213)
Net cash used by discontinued operations	(1,242)	(3,290)	(8,866)	(4,752)	(3,714)
Net cash used by operating activities	(3,368)	(3,485)	(12,052)	(4,858)	(3,927)
INVESTING ACTIVITIES:					
Purchases of property and equipment	(385)	(44)	(1,070)	(62)	(12)
Investment in patents and trademarks	(14)	(11)	(89)	(59)	(3)
Net cash used by investing activities	(399)	(55)	(1,159)	(121)	(15)
FINANCING ACTIVITIES:					
Proceeds from borrowings	2,000	2,900	4,000	1,250	1,310
Repayment of borrowings	—	—	(100)	(750)	—
Proceeds from issuance of common stock	—	770	3,477	3,700	1,690
Proceeds from issuance of preferred stock, net	—	—	5,577	—	—
Stock options exercised	435	—	2,400	—	—
Dividends paid	—	—	—	(7)	—
Proceeds from issuance (repurchase) of common stock by subsidiaries, net	—	2	(13)	500	1,223
Net cash provided by financing activities	2,435	3,674	15,341	4,693	4,223
EFFECT OF FOREIGN EXCHANGE TRANSLATION	(26)	1	(24)	96	—
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(1,358)	133	2,106	(190)	281
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	2,230	124	124	314	33
CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$ 872	\$ 257	\$ 2,230	\$ 124	\$ 314
SUPPLEMENTAL CASH FLOW INFORMATION					
Interest paid	\$ —	\$ 10	\$ 52	\$ 162	\$ 157

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)

During the three months ended March 31, 2001 and the years ended December 31, 2001, 2000, and 1999, respectively, \$2,006, \$2,570, \$108 and \$538 in notes payable and accrued interest were converted to the Company's common stock.

During the three months ended March 31, 2001 and during the year ended December 31, 2001, Liquidmetal Golf transferred and assigned to the Company two subordinated promissory notes in exchange for the Company's common stock in the amount of \$2,000.

In 1999, the Company partially paid down the Kang/ Salas 7.5% convertible subordinated promissory note through the issuance of common stock shares to the note holders in lieu of cash of \$299.

During the three months ended March 31, 2002, and March 31, 2001, the Company recorded a net addition to shareholders' deficiency of \$1,156, and \$269, respectively, comprised of stock compensation in the discontinued retail golf segment.

In 2001, 2000 and 1999, respectively, the Company recorded a net addition to shareholders' deficiency of \$1,191, \$852 and \$1,266 comprised of stock compensation and discounts on convertible notes payable in the discontinued retail golf operations.

During the three months ended March 31, 2001 and the year ended December 31, 2001, the Company recorded paid in capital of \$1,692 comprised of discounts on notes payable.

During the three months ended March 31, 2002, the Company incurred \$207 of costs related to the initial public offering that had not been paid as of March 31, 2002. During the year ended December 31, 2001, the Company incurred \$792 of costs related to the initial public offering that had not been paid as of December 31, 2001.

As of December 31, 2001, the Company accrued \$100 for payments to be made to Caltech in exchange for rights to certain patents (see Note 5). In 2000, the Company issued 96,774 shares of common stock in the amount of \$270 to Caltech in exchange for rights to certain patents (see Note 5).

In 2000, a subordinated convertible promissory note in the amount of \$1,075, issued by Liquidmetal Golf was converted to Liquidmetal Golf's common stock.

See notes to consolidated financial statements.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the Years Ended December 31, 2001, 2000 and 1999
(Information for the three months ended March 31, 2002 and 2001 is unaudited)
(In Thousands, Except Share Data)

1. Description of Business

Liquidmetal® Technologies (“Liquidmetal Technologies”) and its subsidiaries (collectively “the Company”) are in the business of developing, manufacturing, and marketing products made from bulk amorphous alloys. Liquidmetal Technologies markets and sells Liquidmetal alloy industrial coatings and also makes products and components from bulk Liquidmetal alloys that can be incorporated into the finished goods of its customers across a variety of industries. Additionally, Liquidmetal Technologies is exploring new product applications for Liquidmetal alloys and is developing its own manufacturing facilities in Korea for the production of its products.

Liquidmetal Technologies derives substantially all of its revenue from the sale of Liquidmetal alloy coatings. The Company’s customers use these amorphous alloys to coat various end-use metallic equipment parts and tools. In the periods presented, the Company derived a majority of its revenue from the operation of its retail golf segment, now accounted for as a discontinued operation. The retail golf segment outsourced the manufacture of and marketed golf clubs made of the Company’s Liquidmetal alloys.

2. Summary of Significant Accounting Policies

Principles of Consolidation. The consolidated financial statements include the accounts of Liquidmetal Technologies and its wholly-owned subsidiaries, Amorphous Technologies International (Asia) PTE LTD (“LMT Singapore”), located in Singapore, and Liquidmetal Korea Co., Ltd. (“LMT Korea”), located in Korea, and its majority-owned subsidiary, Liquidmetal Golf and its subsidiaries, which included the retail golf segment, now accounted for as a discontinued operation. Effective in 2001, management closed the Singapore operations which did not result in a significant impact on the financial statements for any of the periods presented. All intercompany balances and transactions have been eliminated. Minority interest is included in the consolidated financial statements, as a component of the loss from operations of the discontinued retail golf segment (see Note 9).

Interim Financial Statements. The accompanying financial statements as of March 31, 2002 and for the periods ending March 31, 2002 and March 31, 2001 are unaudited. These financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission relating to interim financial statements. All adjustments of a normal recurring nature, which, in the opinion of management are necessary to present a fair statement of results for the interim periods, have been made. Results of operations are not necessarily indicative of the results to be expected for the full year.

Sales of Stock by Subsidiaries. Gains on sales of stock by Liquidmetal Golf are recognized as components of the Company’s shareholders’ equity (deficiency).

Financial Condition. The accompanying financial statements reflect net losses for all periods presented, negative working capital of \$9,712, \$9,572 and \$3,967 as of March 31, 2002, December 31, 2001 and 2000, respectively, and a shareholders’ deficiency of \$9,556, \$7,503 and \$3,680 at March 31, 2002, December 31, 2001 and 2000, respectively. Management believes that the Company will continue as a going concern due to the steps it has taken to decrease future cash needs by discontinuing the retail golf segment and raising additional debt and equity financing; however, the Company can not necessarily assure that it will continue to be successful in obtaining financing in the future. Subsequent to March 31, 2002, the Company has obtained additional debt of \$1,500. Additionally, if the Company’s planned initial public offering of common stock is unsuccessful, the Company will take the necessary steps of reducing incremental employees and other costs to further decrease future cash needs. Management believes that

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

these steps will provide the funds required to fund the Company's currently foreseeable liquidity requirements for at least the next twelve months.

Revenue Recognition. On December 3, 1999, the staff of the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements* ("SAB 101") that summarizes the staff's views in applying accounting principles generally accepted in the United States of America to revenue recognition in financial statements. The Company's revenue recognition policy complies with the requirements of SAB 101. Revenue is recognized at the time the Company ships its products, as this is when title passes to the customer. Revenue is deferred and included in liabilities when the Company receives cash in advance for services not yet performed or goods not yet delivered. Revenue from research and development contracts is recognized under the percentage of completion method.

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.

Accounts Receivable. 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. There are no significant concentrations of credit risk to the Company associated with accounts receivable.

Inventories. Inventories are accounted for on the first-in, first-out basis and reported at the lower of cost or market. Inventories consist of raw materials and finished goods. The Company records an allowance for obsolescence for inventory 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 2 to 10 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 12 to 17 years.

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.

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, 2001 and 2000, unless otherwise stated. The fair values of non-current assets and liabilities approximate their carrying value unless otherwise stated.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 \$11 and \$14 for the three months ended March 31, 2002 and 2001, respectively. Advertising and promotion expenses were \$62, \$11 and \$24 for the years ended December 31, 2001, 2000 and 1999, 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. As permitted under Statement of Financial Accounting Standards (“SFAS”) No. 123, *Accounting for Stock-Based Compensation*, the Company has elected to follow Accounting Principles Board (“APB”) Opinion No. 25, *Accounting for Stock Issued to Employees*, which prescribes the intrinsic value method in accounting for its stock options issued to employees and directors. Stock options issued to non-employees of the Company have been accounted for in accordance with SFAS No. 123 which prescribes the fair value accounting method.

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.

Translation of Foreign Currency. 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 Singapore have been translated based upon Singapore Dollars as the functional currency. The financial statements of LMT Korea have been translated based upon Korean Won as the functional currency. LMT Singapore’s and LMT Korea’s assets and liabilities were translated using the exchange rate at year end and income and expense items were translated at the average exchange rate for the year. 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.

Unaudited Pro Forma Shareholders equity/(deficiency). The accompanying pro forma Shareholders equity/(deficiency) assumes conversion of all issued and outstanding preferred stock as of March 31, 2002 to common stock that must occur upon the closing of an underwritten offering to the general public pursuant to a Registration Statement to be filed and declared effective by the Securities and Exchange Commission (a “Qualified Offering”). The accompanying pro forma current liabilities also

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

assumes that the Company's long-term debt becomes immediately due and payable upon the closing of a Qualified Offering.

New Accounting Pronouncements. In June 1998, the Financial Accounting Standards Board ("FASB") issued SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*. SFAS No. 133, as later amended, establishes accounting and reporting standards for derivative instruments and hedging activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value. The accounting for changes in the fair value of a derivative (that is, gains and losses) depends upon the intended use of the derivative and resulting designation. The Company adopted SFAS No. 133 on January 1, 2001. The adoption of SFAS No. 133 did not have a material effect on the Company's financial statements.

In June 2001, the FASB issued SFAS No. 141, *Business Combinations* and SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 141 requires that all business combinations be accounted for under the purchase method and that certain acquired intangible assets in a business combination be recognized as assets apart from goodwill. SFAS No. 142 requires that ratable amortization of goodwill and intangible assets with indefinite lives be replaced with periodic tests of the goodwill's impairment and that intangible assets with finite lives other than goodwill should be amortized over their useful lives. Implementation of SFAS No. 141 and SFAS No. 142 is required for fiscal year 2002. The adoption of SFAS No. 141 and 142 did not have a material effect on the Company's financial statements.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. SFAS No. 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which such liabilities are incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs should be capitalized as part of the carrying amount of the long-lived asset. SFAS No. 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. The adoption of SFAS No. 143 did not have a material effect on the Company's financial statements.

Issued in October 2001, SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, replaces SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*. The accounting model for long-lived assets to be disposed of by sale applies to all long-lived assets, including discontinued operations, and replaces the provisions of APB Opinion No. 30, *Reporting Results of Operations — Reporting the Effects of Disposal of a Segment of a Business*, for the disposal of segments of a business. SFAS No. 144 requires that those long-lived assets be measured at the lower of the carrying amount or fair value less cost to sell, whether reported in continuing operations or in discontinued operations. Therefore, discontinued operations will no longer be measured at net realizable value or include amounts for operating losses that have not yet occurred. SFAS No. 144 also broadens the reporting of discontinued operations to include all components of an entity with operations that can be distinguished from the rest of the entity and that will be eliminated from the ongoing operations of the entity in a disposal transaction. The provisions of SFAS No. 144 are effective for financial statements issued for fiscal years beginning after December 15, 2001 and, generally, are to be applied prospectively. The adoption of SFAS No. 144 did not have a material effect on the Company's financial statements.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

3. Inventories

Inventories of continuing operations consisted of the following:

	March 31,	December 31,	
	2002	2001	2000
Raw materials	\$ —	\$186	\$ —
Finished goods	347	317	192
	—	—	—
Total inventories	\$347	\$503	\$192

4. Property, Plant and Equipment

Property, plant and equipment consisted of the following:

	March 31,	December 31,	
	2002	2001	2000
Machinery and equipment	\$ 612	\$ 234	\$ 234
Computer equipment	142	126	66
Office equipment, furnishings and improvements	289	253	53
Construction in process of machinery and equipment	523	808	—
	—	—	—
Total	1,566	1,421	353
Accumulated depreciation	(322)	(258)	(191)
	—	—	—
Total property, plant and equipment, net	\$1,244	\$1,163	\$ 162

Depreciation expense included in general and administration expenses was approximately \$17 and \$15 for the three months ended March 31, 2002 and March 31, 2001. Depreciation expense included in general and administrative expense was approximately \$69, \$74 and \$72 for the years ended December 31, 2001, 2000, and 1999, respectively.

Additionally, during the three months ended March 31, 2002, \$287 of depreciation expense was included in research and development expenses, of which \$240 was as a result of accelerated depreciation expense due to a change in the estimated useful life of certain machinery and equipment.

5. Intangible Assets

Intangible assets consisted of the following:

	March 31,	December 31,	
	2002	2001	2000
Purchased patent rights	\$ 420	\$ 420	\$ 270
Internally developed patents	522	506	493
Trademarks	65	66	40
	—	—	—
Total	1,007	992	803
Accumulated amortization	(289)	(269)	(206)
	—	—	—
Total intangible assets, net	\$ 718	\$ 723	\$ 597

Purchased patent rights represent the exclusive right to commercialize the bulk amorphous alloys and other amorphous alloy technology acquired from California Institute of Technology ("Caltech"), a shareholder, through a license agreement with Caltech ("License Agreement"). Under the License

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Agreement, the Company has the exclusive right to make, use, and sell products from all of Caltech's inventions, proprietary information, know-how, and other technology relating to amorphous alloys in existence as of September 1, 2001. The Company also has an exclusive license to 8 patents and 5 patent applications held by Caltech relating to amorphous alloy technology, as well as all related foreign counterpart patents and patent applications. Of the patents currently issued to Caltech and licensed by the Company, the earliest expiration date is 2011 and the latest expiration date is 2017. Furthermore, the license agreement gives the Company the exclusive right to make, use, and sell products from substantially all amorphous alloy technology that is developed in Professor William Johnson's Caltech laboratory during the period September 1, 2001 through August 31, 2005. 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 patents and patent applications under the License Agreement with Caltech, 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.

Amortization expense was approximately \$19 and \$6 for the three months ended March 31, 2002 and March 31, 2001. Amortization expense was approximately \$63, \$57 and \$22 in December 31, 2001, 2000, and 1999, respectively.

6. Notes Payable to Shareholders

Notes payable at March 31, 2002 and December 31, 2001 and 2000 were comprised of the following:

	March 31,	December 31,	
	2002	2001	2000
Kang/ Salas 8.5%, principal \$1,500, due December 31, 2002	\$ 1,400	\$ 1,400	\$ —
Tjoa 8.5%, principal \$1,500, due December 31, 2002	1,500	1,500	—
Tjoa 7.5%, principal \$500	—	—	500
Kang/ Salas 7.5%, principal \$3,900	—	—	2,006
Tjoa 8.0%, principal \$1,000, due December 31, 2002	1,000	1,000	—
Kang 8.0%, principal \$2,000, due May 1, 2003	2,000	—	—
	5,900	3,900	2,506
Less debt discount	(684)	(912)	—
	5,216	2,988	2,506
Less current portion	(3,216)	(2,988)	(2,006)
Notes payable less current portion, net of discounts	\$ 2,000	\$ —	\$ 500

Kang/ Salas 8.5% and Tjoa 8.5% — In conjunction with the issuance of these subordinated promissory notes, the Company issued detachable warrants for each of these notes for the purchase of 322,581 common stock shares of the Company at an exercise price of \$4.65 per share (the fair value at the date of grant), as adjusted for the stock split and reverse stock split (see Note 7). The warrants expire on December 31, 2005. As of December 31, 2001, none of the detachable warrants had been exercised. The warrants are detachable from the note and therefore each warrant was allocated a portion of the

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

proceeds in the amount of approximately \$846, based on their estimated relative fair values at the time they were issued.

Tjoa 7.5% — On November 30, 2001, in lieu of cash repayment of this note, the Company converted the entire \$564 of principal and accrued interest into common stock for 45,500 shares of the Company's common stock at \$12.40 per share, based on the fair value of the Company's common stock at the date of the conversion.

Kang/ Salas 7.5% — In March 2001, the holders of the note converted the remaining principal balance of the note to 1,294,358 common stock shares at \$1.55 per share, based on the fair value of the Company's common stock at the time of issuance of the note, as adjusted for the stock split and reverse stock split (see Note 7).

Anstalt 7.5% — On January 26, 2000, Anstalt converted the entire \$108 of principal and accrued interest into common stock for 69,354 shares of the Company's common stock at \$1.55 per share, based on the fair value of the Company's common stock at the time of issuance of the note, as adjusted for the stock split and reverse stock split (see Note 7).

Kang 8.0% — On March 12, 2002, the Company borrowed an additional \$2,000 on an unsecured basis from Mr. John Kang that is due on the earlier of May 1, 2003 or the closing of an initial public offering.

On April 3, 2002, the Company borrowed an additional \$750 on an unsecured basis from Mr. John Kang that is due on the earlier of July 1, 2003 or the closing of an initial public offering.

On April 3, 2002, the Company borrowed an additional \$750 on an unsecured basis from Mr. Tjoa that is due on the earlier of July 1, 2003 or the closing of an initial public offering.

Total interest expense including the debt discount amortization on the notes payable to shareholders was \$311 and \$189 for the three months ended March 31, 2002 and 2001, respectively. Total interest expense including the debt discount amortization on the notes payable to shareholders was \$1,103, \$200 and \$190 for the years ended December 31, 2001, 2000 and 1999, respectively.

7. Shareholders' Equity (Deficiency)

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 through the issuance 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 effect of the split and reverse split.

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. Each share of preferred stock is convertible into one share of Class A common stock automatically if a price of at least \$15 per share is attained at the time the Company completes an initial public offering of its common stock or at the option of the holder, at any time. The Series A Preferred Stock shareholders will share equally with common stock shareholders any dividends that may be declared by the Company. Upon any liquidation of the Company, the preferred stock holders will be entitled to receive in preference to the holders of the Company's common stock an amount of \$12.40, as adjusted for the revised stock split per share. The holders of the shares of preferred stock are entitled to one vote per share and have the right to vote on all matters submitted to a vote of the common stock shareholders.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

8. 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. At March 31, 2002, there were 6,491,891 options available to be granted under the 1996 Company Plan.

Subsequent to March 31, 2002, the Company granted an additional 16,130 options under the 1996 Company Plan. Additionally, subsequent to March 31, 2002, 32,259 options at an exercise price of \$0.78 were exercised that were granted under the 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.

On April 4, 2002, our shareholders and board of directors adopted the 2002 Incentive Equity 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. Currently, there are no options or stock awards of any kind outstanding under the 2002 Equity 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 150,000 options outstanding under the 2002 Equity Plan as of April 15, 2002.

The Company applies APB Opinion No. 25 for options awarded under the 1996 Company Plan when the exercise price of options granted to employees is less than the fair value of the underlying stock on the date of grant. The Company applies SFAS No. 123 for options granted to nonemployees who perform services for the Company. Stock-based compensation expense was recognized as follows for the three months ended March 31, 2002:

	In accordance with		
	APB Opinion No. 25	SFAS No. 123	Total
General and administrative	\$ 94	\$ —	\$ 94
Research and development	9	1,404	1,413
	<u>\$103</u>	<u>\$1,404</u>	<u>\$1,507</u>

Of the \$1,404 in compensation expense recorded under SFAS No. 123 and related interpretations during the three months ended March 31, 2002, \$1,229 was triggered by modifications made to accelerate the remaining vesting periods of options in connection with the hiring of certain consultants as employees in March 2002.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Stock-based compensation expense was recognized as follows for the year ended December 31, 2001:

	In accordance with		
	APB Opinion No. 25	SFAS No. 123	Total
General and administrative	\$ 61	\$ —	\$ 61
Research and development	—	332	332
	\$ 61	\$332	\$393

No stock-based compensation expense was recorded during the three months ended March 31, 2001.

Additionally, the Company has 2,909,680 options outstanding at March 31, 2002 which were granted outside the 1996 Company Plan, 2002 Equity Plan and 2002 Director Plan. Included in these options are options granted during the period ended December 31, 2001 of 1,021,507 to Paul Azinger who was contracted to perform services for the retail golf segment. The expense pertaining to these options was recorded in the discontinued retail golf segment (see Note 9).

Had the Company determined compensation cost based on the fair value at the grant date for stock options consistent with the method of SFAS No. 123, the Company's income (loss) from continuing operations and basic and diluted income (loss) per share from continuing operations would have been as follows (in thousands, except loss per share information):

	Three Months Ended March 31, 2002	Three Months Ended March 31, 2001	Years Ended December 31,		
			2001	2000	1999
Income (loss) from continuing operations:					
As reported	\$ (4,496)	\$ (423)	\$ (5,164)	\$ 125	\$ (163)
Pro forma	(6,006)	(666)	(11,411)	(7,056)	(758)
Basic income (loss) per share from continuing operations:					
As reported	(0.13)	(0.01)	(0.15)	0.00	(0.01)
Pro forma	(0.17)	(0.02)	(0.34)	(0.23)	(0.03)
Diluted income (loss) from continuing operations per share:					
As reported	(0.13)	(0.01)	(0.15)	0.00	(0.01)
Pro forma	(0.17)	(0.02)	(0.34)	(0.23)	(0.03)

The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants for the three months ended March 31, 2002 and 2001 and the fiscal years ended December 31, 2001, 2000, and 1999, respectively: expected volatility of 100% for all periods; dividend yield of 0.0% for all periods; expected option life of approximately 5 years; and a risk-free interest rate ranging from 4.5% to 6.2%.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes the Company's stock option transactions for the three months ended March 31, 2002:

	Number of Shares	Weighted Average Price
Options outstanding at December 31, 2001	8,166,703	\$ 4.53
Granted	120,974	15.87
Exercised	(251,614)	1.73
Forfeited	—	—
Options outstanding at March 31, 2002	8,036,063	\$ 4.78

The following table summarizes the Company's stock option transactions for the three months ended March 31, 2001:

Options outstanding at December 31, 2000	5,761,312	\$2.77
Granted	1,027,959	1.19
Exercised	—	—
Forfeited	—	—
Options outstanding at March 31, 2001	6,789,271	\$2.53

The weighted average fair value of options granted during the three months ended March 31, 2002 and 2001, was \$12.25 and \$4.08, respectively. There were 3,792,078 options with a weighted average exercise price of \$3.79 exercisable at March 31, 2002 and 4,304,313 options with a weighted average exercise price of \$2.69 exercisable at March 31, 2001.

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 ("in-the-money"). In-the-money options of 1,246,670 with a weighted average fair value of \$4.56 were outstanding at March 31, 2002 and 1,021,507 with a weighted average fair value of \$4.07 were outstanding at March 31, 2001.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes the Company's stock option transactions for the three year period ended December 31, 2001:

	Number of Shares	Weighted Average Price
Options outstanding at December 31, 1998	3,112,915	\$1.49
Granted	—	—
Exercised	—	—
Forfeited	—	—
Options outstanding at December 31, 1999	3,112,915	1.49
Granted	2,648,397	4.26
Exercised	—	—
Forfeited	—	—
Options outstanding at December 31, 2000	5,761,312	2.77
Granted	4,308,623	5.46
Exercised	(1,822,586)	1.32
Forfeited	(80,646)	1.55
Options outstanding at December 31, 2001	8,166,703	\$4.53

The weighted average fair value of options granted during the years ended December 31, 2001 and 2000, was \$3.30 and \$5.02, respectively. There were 3,165,171 options with a weighted average exercise price of \$3.83 exercisable at December 31, 2001; 4,017,215 options with a weighted average exercise price of \$2.77 exercisable at December 31, 2000 and 1,680,652 options with a weighted average exercise price of \$1.24 exercisable at December 31, 1999.

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 measurement date ("in-the-money"). In-the-money options of 1,214,411 with a weighted average fair value of \$4.35 were outstanding at December 31, 2001. There were no in-the-money options at December 31, 2000 and 1999.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes the Company's stock options outstanding and exercisable by the different exercise prices as of March 31, 2002:

Exercise Price	Number of Options Outstanding at March 31, 2002	Weighted Average Remaining Contract Life (Years)	Number of Options Exercisable at March 31, 2002
\$0.78	32,259	0.02	32,259
\$1.16	1,021,507	4.76	161,290
\$1.55	629,036	0.85	629,036
\$2.33	296,774	2.08	296,774
\$2.79	548,389	4.10	548,389
\$4.65	2,261,299	4.78	1,884,005
\$6.20	2,759,683	5.14	95,163
\$9.30	16,130	5.34	—
\$12.40	350,012	5.40	145,162
\$15.50	32,259	9.99	—
\$16.00	88,715	9.86	—
	<u>8,036,063</u>	4.53 years	<u>3,792,078</u>

The following table summarizes the Company's stock options outstanding and exercisable by the different exercise prices as of December 31, 2001:

Exercise Price	Number of Options Outstanding at December 31, 2001	Weighted Average Remaining Contract Life (Years)	Number of Options Exercisable at December 31, 2001
\$0.78	129,034	0.27	129,034
\$1.16	1,021,507	5.00	—
\$1.55	629,036	1.10	503,229
\$2.33	451,613	2.33	290,323
\$2.79	548,389	4.35	274,195
\$4.65	2,261,299	5.03	1,865,163
\$6.20	2,759,683	5.59	22,581
\$9.30	16,130	5.58	—
\$12.40	350,012	5.65	80,646
	<u>8,166,703</u>	4.67 years	<u>3,165,171</u>

9. Discontinued Operations

On September 29, 2001, the Company's Board of Directors and the Board of Directors of Liquidmetal Golf voted to discontinue Liquidmetal Golf's retail golf operations. Management currently expects to terminate the operations of the retail golf segment by April 30, 2002, by means of liquidating the retail golf assets and liabilities. Previously, management expected to terminate the operations of the retail golf segment by December 31, 2001; however, after further evaluation, management revised the estimated disposal date to April 30, 2002. The disposition of the golf retail 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.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In connection with the discontinuance of the retail golf operations, the Company incurred an estimated loss on disposal of \$11,949 for the year ended December 31, 2001. The estimated loss on disposal was comprised of an accrual for estimated operating losses of \$1,688 during the phase-out period, \$1,847 related to inventory adjustments, \$4,947 of accrued stock compensation costs, \$2,438 in fees to be paid to Paul Azinger prior to the termination of the endorsement agreement, \$930 due to other asset writedowns and \$100 in severance and other disposal expenses.

During the three months ended March 31, 2002, the Company incurred an additional estimated loss on disposal of \$530 which was comprised of \$628 due to changes in estimated operating losses offset by \$98 from the reversal of the accumulated foreign exchange gains after the liquidation of Liquidmetal Golf Europe Inc. The \$628 of operating losses due to a change in estimate was comprised of \$40 net reduction to accrued expenses, \$368 related to inventory adjustments and \$300 due to a change in accrued warranty expenses.

Net liabilities of the discontinued operations of the retail golf segment have been segregated on the balance sheets presented, the components of which are as follows:

	March 31, 2002	December 31,	
		2001	2000
Assets:			
Cash and cash equivalents	\$ 490	\$ 317	\$ 237
Accounts receivable, net	951	321	471
Inventories	131	1,468	2,686
Other assets	—	—	43
Property and equipment, net	66	78	191
Total assets	1,638	2,184	3,628
Liabilities:			
Current liabilities	7,361	9,676	3,255
Notes payable to shareholders (current and non-current portion)	—	—	2,000
Total liabilities	7,361	9,676	5,255
Net liabilities of discontinued operations	\$(5,723)	\$(7,492)	\$(1,627)

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The results of operations for all periods presented have been restated for discontinued operations. The operating results of the discontinued operations are as follows:

	March 31,		Years Ended December 31,		
	2002	2001	2001	2000	1999
Net sales	\$ —	\$ 619	\$ 3,333	\$ 6,707	\$ 5,930
Cost of sales	—	408	2,185	4,683	5,259
Gross profit	—	211	1,148	2,024	671
Operating expenses	—	2,098	7,121	10,962	9,018
Loss from operations	—	(1,887)	(5,973)	(8,938)	(8,347)
Minority interest in losses of retail golf subsidiary	—	—	—	—	370
Loss on disposal	(530)	—	(11,949)	—	—
Net loss	(530)	(1,887)	(17,922)	(8,938)	(7,977)
Foreign exchange translation (loss) gain during the period	(98)	1	2	96	—
Comprehensive loss	\$(628)	\$(1,886)	\$(17,920)	\$(8,842)	\$(7,977)

Translation of Foreign Currency. Upon consolidation of the Company's foreign subsidiary into the Company's consolidated financial statements, any balances with the subsidiary denominated in the foreign currency are translated at the exchange rate at year-end. The financial statements of Liquidmetal Golf include the financial statements of its wholly-owned subsidiary, Liquidmetal Golf Europe Inc., which have been translated based upon United Kingdom Pounds as the functional currency. Liquidmetal Golf Europe, Inc.'s assets and liabilities were translated using the exchange rate at year end and income and expense items were translated at the average exchange rate for the year. The resulting translation adjustment is recorded directly as a separate component of shareholders' equity (deficiency) and included in other comprehensive income (loss).

Accounts Receivable. Liquidmetal Golf has a factoring agreement that provides for the sale and transfer of a substantial portion of the accounts receivable of the retail golf operations. Liquidmetal Golf accounts for a portion of the factored receivable balances as a sale when the factor assumes the risk of collection for certain approved accounts. At March 31, 2001 and December 31, 2000, Liquidmetal Golf had \$137 and \$150 due from the factor, respectively. For certain accounts that the factor does not assume the risk of collection, Liquidmetal Golf accounts for these factored receivables as a financing arrangement and records a liability for this portion of the factored receivable balances. At March 31, 2002 and 2001, and December 31, 2001 and 2000, Liquidmetal Golf had a payable to the factor of \$10, \$109, \$79 and \$109, respectively. At March 31, 2002 and 2001, and December 31, 2001 and 2000, Liquidmetal Golf had an allowance for doubtful accounts of \$1,416, \$381, \$1,401 and \$299, respectively.

Notes Payable to Shareholders. Notes payable of Liquidmetal Golf at December 31, 2001 and 2000 were comprised of the following (in thousands):

	March 31,	December 31,	
	2002	2001	2000
Synapse I 7.5%, principal \$1,000	\$ —	\$ —	\$1,000
Synapse II 7.5%, principal \$1,000	—	—	1,000
Total notes payable to shareholders	\$ —	\$ —	\$2,000

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Synapse I 7.5% and Synapse II 7.5% — The notes were each transferred and assigned to Liquidmetal Technologies on January 31, 2001 in exchange for 215,055 shares of the Liquidmetal Technologies' common stock at \$4.65 per share based on the fair value of the Company's common stock.

Liquidmetal Golf's total interest expense including the amortized debt discount on the notes payable to shareholders was \$25 for the three months ended March 31, 2001 and \$37, \$145 and \$1,513 for the years ended December 31, 2001, 2000 and 1999, respectively.

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 applies APB Opinion No. 25 and related interpretations in accounting for its plans. Accordingly, Liquidmetal Golf recognized compensation when the exercise price of the options was less than the fair value of the underlying stock on the date of grant. Liquidmetal Golf recognized stock compensation expense for options granted to employees of \$61 for the three months ended March 31, 2001 and \$81, \$852 and \$266 for the years ended December 31, 2001, 2000 and 1999, respectively. The compensation expense for these options has been fully charged to operations as of December 31, 2001.

Additionally, Liquidmetal Technologies recorded stock option based compensation and an addition to paid in capital of \$5,733 related to options issued in 2001 to Paul Azinger for shares of common stock of Liquidmetal Technologies. As the endorsement services related to this option grant provided a benefit to Liquidmetal Golf, the stock compensation expense was recorded by Liquidmetal Golf. Prior to the discontinuance of the retail golf operations, Liquidmetal Golf had recorded stock compensation expense of \$786 for services received during 2001. Additionally, the loss on disposal during the year ended December 31, 2001 includes \$4,947 of estimated stock compensation expense to be incurred prior to the planned termination of the endorsement agreement. During the three months ended March 31, 2002, \$1,156 of this amount was earned, thereby reducing the net liabilities of the discontinued retail golf segment and unamortized stock compensation (a contra-equity account). The remaining unearned portion of this amount, \$3,467, is included in the net liabilities of the discontinued retail golf segment and in unamortized stock compensation (a contra-equity account) at March 31, 2002.

Had compensation cost been determined based on the fair value at the grant dates for awards under those plans consistent with the method of SFAS No. 123, Liquidmetal Golf's net loss would have been as follows:

	Three Months Ended March 31,		Year Ended December 31,		
	2002	2001	2001	2000	1999
As reported	\$(530)	\$(1,887)	\$(17,922)	\$(8,938)	\$(7,977)
Pro forma	(564)	(1,904)	(18,154)	(9,346)	(8,366)

The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants for the three months ended March 31, 2002 and 2001 the fiscal years ended December 31, 2001, 2000, and 1999: expected volatility of 100% for all periods; dividend yield of 0.0% for all periods; expected option life of approximately 5 years; and a risk-free interest rate ranging from 5.2% to 6.2%, as appropriate.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes the Liquidmetal Golf's stock option transactions for the three months ended March 31, 2002:

	Number of Shares	Weighted Average Price
Options outstanding at December 31, 2001	310,250	\$5.41
Granted	—	—
Exercised	—	—
Forfeited	(65,000)	7.50
Options outstanding at March 31, 2002	245,250	\$4.87

The following table summarizes the Liquidmetal Golf's option transactions for the three months ended March 31, 2001:

Options outstanding at December 31, 2000	458,505	\$3.74
Granted	—	—
Exercised	(3,750)	0.50
Forfeited	—	—
Options outstanding at March 31, 2001	454,755	\$3.77

There were 222,875 options with a weighted average exercise price of \$4.55 exercisable at March 31, 2002 and 232,626 options with a weighted average exercise price of \$2.70 exercisable at March 31, 2001.

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 ("in-the-money"). In-the-money options of 131,250 with a weighted average fair value of \$5.74 were outstanding at March 31, 2002 and 290,755 with a weighted average fair value of \$6.33 were outstanding at March 31, 2001.

The following table summarizes Liquidmetal Golf's stock option transactions for the three year period ended December 31, 2001:

	Number of Shares	Weighted Average Price
Options outstanding at December 31, 1998	420,000	\$ 7.98
Granted	147,500	8.00
Exercised	—	—
Forfeited	(176,250)	15.61
Options outstanding at December 31, 1999	391,250	4.55
Granted	75,755	0.01
Exercised	—	—
Forfeited	(8,500)	8.00
Options outstanding at December 31, 2000	458,505	3.74
Granted	—	—
Exercised	(148,255)	0.25
Forfeited	—	—
Options outstanding at December 31, 2001	310,250	\$ 5.41

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The weighted average fair value of options granted during the years ended December 31, 2000 and 1999 was \$7.99 and \$6.17, respectively. There were 235,625 options with a weighted average exercise price of \$4.04 exercisable at December 31, 2001; 213,688 options with a weighted average exercise price of \$2.93 exercisable at December 31, 2000 and 118,000 options with a weighted average exercise price of \$1.68 exercisable at December 31, 1999.

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 (“in-the-money”). In-the-money options of 146,250, 294,505 and 218,750 with weighted average fair values of \$5.74, \$6.32, and \$5.74 were outstanding at December 31, 2001, 2000 and 1999, respectively.

The following table summarizes the Liquidmetal Golf’s stock options outstanding and exercisable by the different exercise prices as of March 31, 2002:

Exercise Price	Number of Options Outstanding at March 31, 2002	Weighted Average Remaining Contract Life (Years)	Number of Options Exercisable at March 31, 2002
\$ 0.50	131,250	0.08	131,250
\$ 8.00	89,500	2.49	67,125
\$16.00	22,000	1.08	22,000
\$24.00	2,500	1.33	2,500
	<u>245,250</u>	1.07 years	<u>222,875</u>

The following table summarizes Liquidmetal Golf’s stock options outstanding and exercisable by the different exercise prices at December 31, 2001:

Exercise Price	Number of Options Outstanding at December 31, 2000	Weighted Average Remaining Contract Life (Years)	Number of Options Exercisable at December 31, 2000
\$ 0.50	146,250	0.33	145,000
\$ 8.00	129,500	2.77	64,750
\$16.00	32,500	1.33	24,000
\$24.00	2,000	1.58	1,875
	<u>310,250</u>	1.46	<u>235,625</u>

Endorsement Agreements. The Company has entered into various endorsement agreements with professional golfers to promote Liquidmetal Golf’s line of golf equipment products, whereby, the Company pays the professional golfers annual compensation and win incentives based on specific performance criteria in each agreement. The expense associated with these contracts is recorded as a selling expense. The compensation incurred under these agreements was \$293 for the three months ended March 31, 2001 and \$1,137, \$60 and \$150 during the years ended December 31, 2001, 2000 and 1999, excluding the stock option based compensation expense associated with the Paul Azinger contract of \$5,732 and additional fees to be paid under this contract prior to termination of \$2,438 which are included in the loss from disposal of the discontinued retail golf segment. The majority of these agreements expired on December 31, 2001. The Paul Azinger agreement expires on December 31, 2005; however, the Company plans on terminating the contract on or prior to January 1, 2003. The entire amount of compensation expense expected to be incurred through the expected termination of the contract is included in the loss from disposal of discontinued retail golf segment.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

10. Income Taxes

For all of the financial statement periods presented, there was no provision for taxes.

The significant components of deferred taxes were as follows:

	For The Three Months Ended March 31,		Years Ended December 31,		
	2002	2001	2001	2000	1999
Non-employee stock compensation	\$ 3,170	\$ 322	\$ 2,642	\$ 240	\$ —
Inventory reserves	398	340	941	340	304
Allowance for bad debt	583	161	565	136	20
Loss on discontinued operations	40	—	1,077	—	—
Loss carry forwards	16,723	11,995	15,300	11,369	8,618
Other	345	124	233	40	144
Total deferred tax asset	21,259	12,942	20,758	12,125	9,086
Valuation allowance	(21,259)	(12,942)	(20,758)	(12,125)	(9,086)
Total net deferred tax assets	\$ —	\$ —	\$ —	\$ —	\$ —

The following table accounts for the differences between the actual tax provision and the amounts obtained by applying the statutory U.S. Federal income tax rate of 34% to income (loss) before income taxes:

	For The Three Months Ended March 31,		Years Ended December 31,		
	2002	2001	2001	2000	1999
Federal tax expense	(34.00)%	(34.00)%	(34.00)%	(34.00)%	(34.00)%
State tax expense, net	(5.44)	(5.39)	(5.56)%	(5.37)%	(4.26)%
Stock compensation	0.91	1.23	0.21%	1.06%	1.27%
Debt discount amortization	—	—	0.00%	0.26%	6.74%
Other	.13	0.09	0.07%	0.52%	1.03%
Increase in valuation allowance	38.40	38.07	39.28%	37.53%	29.22%
Total tax provision	0.00%	0.00%	0.00%	0.00%	0.00%

As of December 31, 2001, the Company had approximately \$38,700 of net operating loss (“NOL”) carry forwards for U.S. federal income tax purposes. In addition, the Company has state NOL carry forwards of approximately \$23,500 expiring in 2001 through 2011. The Company and Liquidmetal Golf elected to file on a separate company basis for both federal and state income tax purposes. Accordingly, the NOL carry forwards of one legal entity are not available to offset income of the other. At December 31, 2001, Liquidmetal Technologies had approximately \$11,500 in federal NOL carry forwards, expiring in 2003 through 2011. Additionally, Liquidmetal Technologies had approximately \$2,900 in state NOL carry forwards, expiring in 2002 through 2011. Liquidmetal Golf had approximately \$27,200 of federal NOL carry forwards, expiring in 2012 through 2021. Further, Liquidmetal Golf also had state NOL carry forwards of \$20,600 expiring in 2005 through 2011. Additionally, as of December 31, 2001, the Company also has foreign NOL carry forwards in Singapore and the United Kingdom of approximately \$280 and \$2,455 respectively, which carry forward indefinitely.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Section 382 of the Internal Revenue Code (the “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 and NOL’s is principally dependent upon the Company’s ability to generate future taxable income from operations and/or to effectuate successful tax planning strategies. The Company has provided a full valuation allowance for its net deferred tax assets resulting from the Company’s net operating losses, because management cannot conclude that it is more likely than not that the Company will realize any benefit.

11. 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:

	March 31,		December 31,		
	2002	2001	2001	2000	1999
Weighted average basic shares	35,079,644	31,192,592	33,323,217	30,233,065	26,787,858
Effect of dilutive securities:					
Stock options	—	—	—	1,752,197	—
Conversion of notes payable	—	—	—	1,299,298	—
Diluted shares	35,079,644	31,192,592	33,323,217	33,284,560	26,787,858

The conversion of preferred stock to common stock was not included in the computation of diluted EPS for the year ended December 31, 2001 and the three months ended March 31, 2002 as the inclusion would be antidilutive. Options to purchase approximately 8,036,063 shares of common stock at prices ranging from \$0.78 to \$16.00 per share were outstanding at March 31, 2002, but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive. Options to purchase approximately 8,166,667 shares of common stock at prices ranging from \$0.78 to \$12.40 per share were outstanding at December 31, 2001, but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive. Options to purchase approximately 3,112,903 shares of common stock at prices ranging from \$0.78 to 2.33 per share were outstanding at December 31, 1999, but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive.

Warrants to purchase 645,162 shares of common stock at \$4.65 per share were outstanding at December 31, 2001 and the three months ended March 31, 2002 but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive. Shares issuable pursuant to convertible promissory notes of 1,363,710 at \$1.55 per share were outstanding at December 31, 1999 but were not included in the computation of diluted EPS for the same period because the inclusion would have been antidilutive.

12. Commitments and Contingencies

In 1996, Liquidmetal Technologies entered into a distribution agreement (the “Distribution Agreement”) whereby Liquidmetal Technologies granted a third party company exclusive rights to market and sell golf products incorporating Liquidmetal technology to Japanese sporting equipment companies.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company is not restricted to selling only the Liquidmetal Golf club or other brand-name Liquidmetal Golf products to other companies under this agreement. If the Company begins to market its golf club components into Japan to finished goods manufacturers, the Company is obligated to sell its Liquidmetal inserts under this distribution agreement. The third party company paid Liquidmetal Technologies a \$1,000 distribution fee as part of the Distribution Agreement. A portion of this fee is subject to refund according to a formula based on the gross profit earned by the third party under the agreement. In the twelve months ended December 31, 1999, Liquidmetal Technologies recognized \$170 of the distribution fee upon the shipment of product to the third party company, which is the amount no longer subject to refund as a result of these shipments. At March 31, 2002, December 31, 2001 and 2000, \$830 was unearned and recorded as deferred revenue as the distribution agreement does not terminate until March 2006. The Company believes this deferred revenue is no longer refundable and will be considered earned upon future shipment of products or the termination of the Distribution Agreement.

Employment Agreements

The Company has employment agreements with certain key officers that provide for annual salaries aggregating approximately \$850,000. Additionally, the agreements provide for various severance payments to these key officers if the Company terminates any of the key officers without cause, or if any of the key officers terminate their own employment upon a change of control of the Company or for other good reason, as defined in the agreements.

Lease Commitments

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. The approximate future minimum rentals under non-cancelable operating leases during subsequent years are as follows:

March 31,	Minimum Rentals
2002	\$ 581
2003	633
2004	647
2005	661
2006	690
Thereafter	323
Total	\$3,535

Rent expense was \$145 and \$47 for the three months ended March 31, 2002 and 2001, and \$322, \$128 and \$81 for the years ended December 31, 2001, 2000 and 1999, respectively.

13. 401(k) Savings Plan

The Company has a tax-qualified employee savings and retirement plan, or 401(k) plan, that covers all of its employees. Pursuant to the 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.

LIQUIDMETAL TECHNOLOGIES AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

14. Segment Reporting

During the three months ended March 31, 2002 and March 31, 2001, and the years ended December 31, 2001, 2000 and 1999, the Company's operations were classified into two reportable segments: coatings and retail golf. The coatings segment has historically derived revenues through the sale of amorphous alloy coatings to a number of different industries. On September 29, 2001, the Company's Board of Directors voted to discontinue Liquidmetal Golf's retail golf operations. Management expects to terminate the operations of the retail golf segment by April 30, 2002, by means of liquidating the retail golf assets and liabilities. Accordingly, the revenues, costs and expenses, assets and liabilities, and cash flows of Liquidmetal Golf have been segregated in the accompanying consolidated financial statements. The Company's historical reportable segments offered different products and were managed separately based on fundamental differences in their operations.

Certain customers in the Company's coatings segment accounted for more than 10% of revenues from continuing operations as follows:

	Three Months Ended March 31,		Year Ended December 31,		
	2002	2001	2001	2000	1999
Grant Prideco, Inc.	29%	17%	22%	19%	19%
TAFA, Inc.	8%	17%	14%	13%	20%
Smith International, Inc.	10%	16%	16%	9%	5%

The principal markets for the Company's products from continuing operations have been in the United States. Export sales to foreign countries were generated only in the discontinued retail golf segment.

Long-lived assets, which include net property, plant, and equipment, located in the United States amounted to \$873 and \$793 at March 31, 2002 and 2001 and \$1,078 and \$759 at December 31, 2001 and 2000. The Company had long-lived assets of \$928 and \$808 located in Korea at March 31, 2002 and December 31, 2001, respectively. Long-lived assets located in foreign countries at December 31, 2000 and March 31, 2001 were not significant.

The accounting policies of the segments are the same as those described in the summary of significant accounting policies. Management has evaluated the historical segments' performances based upon profit or loss from operations before interest and income taxes.

15. Related Party Transactions

Related party transactions include subordinated promissory notes issued to certain shareholders, the related interest incurred on such notes (see Note 6), and amounts paid and accrued to Caltech, a shareholder, for purchased patent rights (see Note 5). Additionally, two of the holders of the shareholder promissory notes (see Note 6) are directors and one such note holder is an officer of the Company. During 2001, certain shareholders and officers provided a total of \$250 in short-term advances to Liquidmetal Korea that were fully repaid by December 31, 2001. The Company has a consulting agreement with a former employee and officer that provides for the payment of annual consulting fees of \$50 through the year end December 31, 2005. For this same former employee and officer, the Company has an accrued severance balance of \$113 at March 31, 2002 and \$167 at December 31, 2001. Lastly, an employee of the Company has purchased primarily work-in-process inventory in the discontinued retail golf segment of \$250 in March, 2002; of this amount \$50 remains receivable from the employee.



Through and including _____, 2002 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

5,000,000 Shares



Common Stock

PROSPECTUS

Merrill Lynch & Co.

UBS Warburg

Robert W. Baird & Co.

, 2002

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth the costs and expenses, other than underwriting discount and commissions, payable by the registrant in connection with the sale of our common stock being registered. All amounts are estimates, except for the Securities and Exchange Commission registration fee, the NASD filing fee and the Nasdaq National Market listing application fee. All of these costs and expenses will be borne by the registrant.

Securities and Exchange Commission filing fee	\$ 30,000
NASD filing fee	12,500
Nasdaq National Market listing application fee	125,000
Blue Sky fees and expenses	5,000
Printing and engraving expenses	300,000
Legal fees and expenses	700,000
Accountants' fees and expenses	500,000
Transfer agent and registrar expenses and fees	3,500
Miscellaneous	224,000
Total	\$1,900,000

Item 14. Indemnification of Directors and Officers.

Section 317 of the California Corporations Code authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers who are parties or are threatened to be made parties to any proceeding (with certain exceptions) by reason of the fact that the person is or was an agent of the corporation, against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred in connection with the proceeding if that person acted in good faith and in a manner the person reasonably believed to be in the best interests of the corporation. Section 204 of the California Corporations Code provides that this limitation on liability has no effect on a director's liability (a) for acts or omissions that involve intentional misconduct or a knowing and culpable violation of law, (b) for acts or omissions that a director believes to be contrary to the best interests of the corporation or its shareholders or that involve the absence of good faith on the part of the director, (c) for any transaction from which a director derived an improper personal benefit, (d) for acts or omissions that show a reckless disregard for the director's duty to the corporation or its shareholders in circumstances in which the director was aware, or should have been aware, in the ordinary course of performing a director's duties, of a risk of a serious injury to the corporation or its shareholders, (e) for acts or omissions that constitute an unexcused pattern of inattention that amounts to an abdication of the director's duty to the corporation or its shareholders, (f) under Section 310 of the law (concerning contracts or transactions between the corporation and a director), or (g) under Section 316 of the law (directors' liability for improper dividends, loans and guarantees). Section 317 does not extend to acts or omissions of a director in his capacity as an officer. Further, Section 317 has no effect on claims arising under federal or state securities laws and does not affect the availability of injunctions and other equitable remedies available to our shareholders for any violation of a director's fiduciary duty to us or our shareholders. Although the validity and scope of the legislation underlying Section 317 have not yet been interpreted to any significant extent by the California courts, Section 317 may relieve directors of monetary liability to us for grossly negligent conduct, including conduct in situations involving attempted takeovers of our company.

In accordance with Section 317, our articles of incorporation eliminate the liability of each of our directors for monetary damages to the fullest extent permissible under California law. Our articles further authorize us to provide indemnification to our agents (including our officers and directors), subject to the

[Table of Contents](#)

limitations set forth above. The articles and bylaws further provide for indemnification of our corporate agents to the maximum extent permitted by California law. Additionally, we maintain insurance policies which insure our officers and directors against certain liabilities. Finally, reference is made to the indemnification and contribution provisions of the Underwriting Agreement filed as an exhibit to this Registration Statement.

The foregoing summaries are necessarily subject to the complete text of the California Corporations Code, our articles, our bylaws and the agreements referred to above and are qualified in their entirety by reference thereto.

Item 15. *Recent Sales of Unregistered Securities.*

Within the past three years, the registrant has issued the following securities which were not registered under the Securities Act of 1933. All share and dollar numbers are adjusted for the registrant's June 29, 2001 ten-for-one stock dividend, as described below and the registrant's April 4, 2002 one-for-3.1 reverse stock split.

1. On August 31, 1999, the registrant issued 135,803 shares its common stock to Caltech as payment in lieu of accrued royalties that were owing to Caltech by the registrant as of such date. These royalties arose under a prior license agreement between Caltech and the registrant. This transaction was exempt pursuant to Section 4(2) under the Securities Act of 1933 as a transaction by an issuer not involving a public offering where Caltech received or had access to adequate information about the registrant.
2. In November 1999, the registrant issued 358,422 shares to Synapse Fund I, LLC. The purchase and sale was exempt pursuant to Section 4(2) under the Securities Act of 1933 as a transaction by an issuer not involving a public offering where the purchaser received or had access to adequate information about the registrant. The purchase was made for cash.
3. Between July 1, 1999 and December 9, 1999, the registrant issued 3,090,003 shares of its common stock to 23 accredited investors who were all existing shareholders of the registrant for aggregate consideration of approximately \$1,000,000. The purchases and sales were exempt pursuant to Rule 505 of Regulation D. All of the purchases were made for cash. Additionally, in 2000, the registrant issued 346,774 shares of its common stock to Mr. Tjoa Thian Song pursuant to the conversion of a certain promissory note, dated November 27, 1998, in the amount of \$500,000 held by Mr. Tjoa, along with accrued interest of \$8,000. The purchase and sale of the note and the issuance of the shares of common stock upon its conversion was exempt pursuant to Section 4(2) under the Securities Act of 1933 as a transaction by an issuer not involving a public offering where the purchaser received or had access to adequate information about the registrant.
4. Between April 12, 2000 and August 24, 2000, the registrant issued an aggregate of 1,164,867 shares of its common stock to eight investors in the respective amounts of 358,422 shares to Synapse Fund II, LLC, 107,525 shares to Chang Ki Cho, 143,367 shares to Yeon Woo Industry Co., Ltd., 179,209 shares to Yeon Woo Engineering Ltd., 268,819 shares to HSBC Private Banking Nominee 1(Jersey) LTD 137001301, and 107,525 shares to Mi Sook Lee, for aggregate consideration of approximately \$4,249,983. The purchases and sales were exempt pursuant to Section 4(2) under the Securities Act of 1933 as transactions by an issuer not involving a public offering where the purchasers received or had access to adequate information about the registrant. All of the purchases were made for cash.
5. On May 12, 2000, the registrant issued 96,774 shares of its common stock to Caltech pursuant to an amendment to a license agreement between the registrant and Caltech. This transaction was exempt pursuant to Section 4(2) under the Securities Act of 1933 as a transaction by an issuer not involving a public offering where Caltech received or had access

to adequate information about the registrant. The issuance to Caltech was in consideration of additional license rights granted by Caltech under the amendment to the license agreement.

6. Additionally, in 2000, the registrant issued 346,774 shares of its common stock to Mr. Tjoa Thian Song pursuant to the conversion of a certain promissory note, dated November 27, 1998, in the amount of \$500,000 held by Mr. Tjoa, along with accrued interest of \$8,000. On January 26, 2000, the registrant issued 69,354 shares of its common stock to Notara Ansalt pursuant to the conversion of a certain promissory note, dated January 26, 1999, in the amount of \$100,000 held by Notara Ansalt, along with accrued interest of \$7,500. The purchase and sale of the note and the issuance of the shares of common stock upon its conversion was exempt pursuant to Section 4(2) under the Securities Act of 1933 as a transaction by an issuer not involving a public offering where the purchaser received or had access to adequate information about the registrant.
7. Between October 16, 2000 and December 8, 2000, the registrant issued an aggregate of 96,777 shares of its common stock to four investors in the respective amounts of 21,506 shares to Ha Yun Song, 21,506 shares to YIMI Limited, 21,506 shares to Soon Jae Kwon, and 32,258 shares to Jin Sung Cook, for aggregate consideration of approximately \$450,000. The purchases and sales were exempt pursuant to Section 4(2) under the Securities Act of 1933 as transactions by an issuer not involving a public offering where the purchasers received or had access to adequate information about the registrant. All of the purchases were made for cash.
8. As of January 1, 2001, the registrant issued an option to purchase 1,021,507 shares of common stock with an exercise price of \$1.16 per share to a professional golfer, Paul Azinger, as consideration for Mr. Azinger's obligations under an endorsement agreement between Mr. Azinger and the registrant's Liquidmetal Golf subsidiary. This option vested as to 161,291 shares on December 31, 2001, and vests as to 215,054 shares on each of December 31, 2002, 2003, 2004, and 2005. The issuance of this option was exempt pursuant to Section 4(2) under the Securities Act of 1933 as a transaction by an issuer not involving a public offering where Mr. Azinger had access to adequate information about the registrant.
9. As of January 31, 2001, the registrant issued 215,054 shares of its common stock to Synapse Fund I, LLC, a California limited liability company, and 215,054 shares of its common stock to Synapse Fund II, LLC, a California limited liability company. These issuances were made pursuant to a Note Exchange Agreement, dated January 31, 2001, among the registrant, Synapse Fund I, and Synapse Fund II. As of the date of the Note Exchange Agreement, each of Synapse Fund I and Synapse Fund II held a promissory note payable by Liquidmetal Golf, a majority owned subsidiary of the registrant, in the principal amount of \$1,000,000 per note. Under the Note Exchange Agreement, both promissory notes were exchanged for shares of registrant common stock in the amount of one share per each \$1.50 of principal amount. These issuances were exempt pursuant to Section 4(2) under the Securities Act of 1933 as transactions by an issuer not involving a public offering where the noteholders received or had access to adequate information about the registrant. All of the purchases were made for cash.
10. As of February 21, 2001 the registrant issued a warrant to purchase 322,580 shares of common stock with an exercise price of \$4.65 per share jointly to John Kang and Ricardo Salas, in connection with the issuance to Mr. Kang and Mr. Salas of a \$1,500,000 subordinated, unsecured promissory note that is due on December 31, 2002. This warrant expires on December 31, 2005. On that same date, the registrant issued a warrant to purchase 322,580 shares of common stock with an exercise price of \$4.65 per share to Tjoa Thian Song, in connection with the issuance to Mr. Tjoa of a \$1,500,000 subordinated, unsecured promissory note that is due on December 31, 2002. This warrant expires on December 31, 2005. The purchases and sales of the notes and the warrants were exempt pursuant to Section 4(2) under the Securities Act of 1933 as transactions by an issuer not involving a

public offering where the purchasers received or had access to adequate information about the registrant. All of the purchases were made for cash.

11. Between April 18, 2001 and June 25, 2001, the registrant issued 546,806 shares of its common stock to 22 accredited investors for aggregate consideration of approximately \$3,535,000. The purchases and sales were exempt pursuant to Rule 506 of Regulation D. All of the purchases were made for cash, except for the issuance of 46,249 shares of common stock to Alloy Ventures, LLP pursuant to an Exchange Agreement between the registrant and Alloy Ventures. Under the Exchange Agreement, Alloy Ventures exchanged 54,030 shares of Series A convertible preferred stock that it held in Liquidmetal Golf, a majority owned subsidiary of the registrant, for 46,249 shares of the registrant's common stock.
12. In March, 2001, the registrant issued 1,294,358 shares of its common stock to Mr. John Kang and Mr. Ricardo Salas pursuant to the conversion of a certain convertible subordinated promissory note, dated March 31, 1999, in the amount of \$2,006,255 held jointly by Mr. Kang and Mr. Salas. The purchase and sale of the note and the issuance of the shares of common stock upon its conversion were exempt pursuant to Section 4(2) under the Securities Act of 1933 as transactions by an issuer not involving a public offering where the purchasers received or had access to adequate information about the registrant. All of the purchases were made for cash.
13. On June 29, 2001, the registrant effected a ten-for-one stock split of its common stock by issuing a stock dividend. The issuance of common stock pursuant to the stock dividend did not require registration under the Securities Act of 1933 because it does not fall within the definition of "sale" under Section 5 of the Securities Act of 1933.
14. During September through November, 2001 the registrant issued 456,846 shares of its Series A convertible preferred stock to 15 accredited investors for aggregate consideration of approximately \$5,664,900. The purchases and sales were exempt pursuant to Rule 506 of Regulation D. All of the purchases were made for cash.
15. Since January 1, 1999, the registrant granted stock options to purchase 7,244,124 shares of common stock with exercise prices ranging from \$1.16 to \$16.00 per share, to employees, directors, and consultants. These options generally vest over a period of 5 years from the date of grant. The grant of these options did not require registration under the Securities Act of 1933 because they do not fall within the definition of "sale" under Section 5 of the Securities Act of 1933. Since January 1, 1999, 2,106,459 options have been exercised for an aggregate consideration of \$2,960,011. The issuance of common stock upon exercise of the options was exempt either pursuant to Rule 701, as a transaction pursuant to a compensatory benefit plan, or pursuant to Section 4(2) under the Securities Act of 1933 as a transaction by an issuer not involving a public offering.
16. On November 30, 2001, the registrant issued 45,500 shares of its common stock to Tjoa Thian Song pursuant to an agreement under which Mr. Tjoa agreed to accept such shares as payment in full for an unsecured promissory note payable to Mr. Tjoa by the registrant. The outstanding principal and accrued but unpaid interest under this note was \$564,212 on November 30, 2001. The issuance of common stock to Mr. Tjoa under this agreement was exempt pursuant to Regulation S under the Securities Act of 1933.

No underwriters were employed in any of the above transactions.

[Table of Contents](#)**Item 16. Exhibits and Financial Statement Schedules.**

Exhibit Number		Description of Document
1.1	—	Form of Underwriting Agreement.
3.1*	—	Amended and Restated Articles of Incorporation.
3.2*	—	Amended and Restated Bylaws.
4.1	—	Reference is made to Exhibits 3.1 and 3.2.
4.2*	—	Form of Common Stock Certificate.
4.3*	—	Investor Rights and Shareholder Agreement, dated April 18, 2001, among Liquidmetal Technologies, ATI Holdings, LLC, Alloy Investors, Inc., and Alloy Ventures, LLP.
4.4*	—	Registration Rights Agreement, dated November 7, 2001 between Liquidmetal Technologies and Alloy Ventures II, LLLP, as amended.
5.1*	—	Opinion of Foley & Lardner.
10.1*	—	Amended and Restated License Agreement, dated September 1, 2001, between Liquidmetal Technologies and California Institute of Technology.
10.2*	—	Contract, dated September 17, 2001, between the Army Research Office (as agent for the Defense Advanced Research Projects Agency) and Liquidmetal Technologies.
10.3*	—	Standard Sublease, dated December 18, 2000, between The L.L. Knickerbocker Company, Inc., and Liquidmetal Technologies.
10.4*	—	Lease, dated October 4, 2001, between Plaza IV Associates, Ltd. and Liquidmetal Technologies.
10.5*	—	Standard Lease, dated May 27, 2001, between Investors Equity Fund, Inc. and Amorphous Technologies International.
10.6*	—	Lease Agreement, dated July 2, 2001, between Liquidmetal Technologies and KeumKwang Inc.
10.7*	—	1996 Stock Option Plan, as amended, together with form of Stock Option Agreement.
10.8*	—	Employment Agreement, dated December 31, 2000, between Liquidmetal Technologies and John Kang, as amended by Amendment No. 1 to Employment Agreement, dated June 28, 2001.
10.9*	—	Employment Agreement, dated May 1, 2001, between Liquidmetal Technologies and James Kang, as amended by Amendment No. 1 to Employment Agreement, dated June 28, 2001.
10.10*	—	Employment Agreement, dated October 1, 2001, between Liquidmetal Technologies and William Johnson, Ph.D.
10.11*	—	Employment Agreement, dated December 31, 2000, between Liquidmetal Technologies and T. Scott Wiggins.
10.12*	—	Employment Agreement, dated May 21, 2001, between Liquidmetal Technologies and Brian McDougall.
10.13*	—	Employment Agreement, dated August 1, 2001, between Liquidmetal Technologies and John A. Grant, Jr.
10.14*	—	Separation Agreement, dated November 15, 2001, between Liquidmetal Technologies and Shekhar Chitnis, together with Consulting Agreement attached as Exhibit A.
10.15*	—	Subordinated Promissory Note, dated February 21, 2001, of Liquidmetal Technologies payable to John Kang and Ricardo Salas.
10.16*	—	Subordinated Promissory Note, dated February 21, 2001, of Liquidmetal Technologies payable to Tjoa Thian Song.
10.17*	—	Note Conversion Agreement, dated November 30, 2001, between Liquidmetal Technologies and Tjoa Thian Song.
10.18*	—	Warrant for Purchase of Shares of Common Stock, dated February 21, 2001, granted by Liquidmetal Technologies to John Kang and Ricardo Salas.

[Table of Contents](#)

Exhibit Number		Description of Document
10.19*	—	Warrant for Purchase of Shares of Common Stock, dated February 21, 2001, granted by Liquidmetal Technologies to Tjoa Thian Song.
10.20*	—	Non-Qualified Stock Option Agreement, dated January 1, 2001, between Liquidmetal Technologies and Paul Azinger.
10.21*	—	Lease Agreement, dated January 21, 2002, between Liquidmetal Technologies and the Pinellas County Industrial Authority.
10.22*	—	Foreign Corporation Lease Zone Occupancy (Lease) Agreement, dated March 5, 2002, between Kyonggi Local Corporation and Liquidmetal Korea Co., Ltd.
10.23*	—	2002 Equity Incentive Plan.
10.24*	—	2002 Non-Employee Director Stock Option Plan.
10.25*	—	Subordinated Promissory Note, dated March 12, 2002, of Liquidmetal Technologies payable to John Kang.
10.26*	—	Subordinated Promissory Note, dated November 16, 2001, of Liquidmetal Technologies payable to Tjoa Thian Song.
10.27*	—	Subordinated Promissory Note, dated April 3, 2002, of Liquidmetal Technologies payable to John Kang.
10.28*	—	Subordinated Promissory Note, dated April 3, 2002, of Liquidmetal Technologies payable to Tjoa Thian Song.
10.29*	—	Employment Agreement, dated March 21, 2002, between Liquidmetal Technologies and Neil Paton.
21.*	—	Subsidiaries of the Registrant.
23.1	—	Consent of Deloitte & Touche LLP.
23.2	—	Consent of Foley & Lardner (reference is made to Exhibit 5.1).
24.1*	—	Power of Attorney (reference is made to the signature page(s) of this Registration Statement).

* Previously filed.

All financial statement schedules have been omitted because they are inapplicable or not required and because the information is included elsewhere in the consolidated financial statements or notes thereto.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt deliver to each purchaser.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission

[Table of Contents](#)

such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Tampa, State of Florida, on the 1st day of May, 2002.

LIQUIDMETAL TECHNOLOGIES

BY: /s/JOHN KANG

John Kang
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ JOHN KANG	Chief Executive Officer, President, and Director (Principal Executive Officer)	May 1, 2002
John Kang		
*	Chief Financial Officer (Principal Financial and Accounting Officer)	May 1, 2002
Brian McDougall		
*	Chairman of the Board of Directors	May 1, 2002
James Kang		
*	Vice Chairman of the Board of Directors	May 1, 2002
William Johnson		
*	Director	May 1, 2002
Shekhar Chitnis		
*	Director	May 1, 2002
Ricardo A. Salas		
*	Director	May 1, 2002
Jack Chitayat		
*	Director	May 1, 2002
Tjoa Thian Song		
*	Director	May 1, 2002
Jeffrey Oster		
*	Director	May 1, 2002
Henri Tchen		

[Table of Contents](#)

Signature	Title	Date
* _____ Betsy Atkins	Director	May 1, 2002
* _____ David Browne	Director	May 1, 2002
*By: _____ /s/ JOHN KANG John Kang, Attorney-in-Fact		

EXHIBITS

Exhibit Number		Description of Document
1.1	—	Form of Underwriting Agreement.
3.1*	—	Amended and Restated Articles of Incorporation
3.2*	—	Amended and Restated Bylaws.
4.1	—	Reference is made to Exhibits 3.1 and 3.2.
4.2*	—	Form of Common Stock Certificate.
4.3*	—	Investor Rights and Shareholder Agreement, dated April 18, 2001, among Liquidmetal Technologies, ATI Holdings, LLC, Alloy Investors, Inc., and Alloy Ventures, LLP.
4.4*	—	Registration Rights Agreement, dated November 7, 2001 between Liquidmetal Technologies and Alloy Ventures II, LLLP, as amended.
5.1*	—	Opinion of Foley & Lardner.
10.1*	—	Amended and Restated License Agreement, dated September 1, 2001, between Liquidmetal Technologies and California Institute of Technology.
10.2*	—	Contract, dated September 17, 2001, between the Army Research Office (as agent for the Defense Advanced Research Projects Agency) and Liquidmetal Technologies.
10.3*	—	Standard Sublease, dated December 18, 2000, between The L.L. Knickerbocker Company, Inc., and Liquidmetal Technologies.
10.4*	—	Lease, dated October 4, 2001, between Plaza IV Associates, Ltd. and Liquidmetal Technologies.
10.5*	—	Standard Lease, dated May 27, 2001, between Investors Equity Fund, Inc. and Amorphous Technologies International.
10.6*	—	Lease Agreement, dated July 2, 2001, between Liquidmetal Technologies and KeumKwang Inc.
10.7*	—	1996 Stock Option Plan, as amended, together with form of Stock Option Agreement.
10.8*	—	Employment Agreement, dated December 31, 2000, between Liquidmetal Technologies and John Kang, as amended by Amendment No. 1 to Employment Agreement, dated June 28, 2001.
10.9*	—	Employment Agreement, dated May 1, 2001, between Liquidmetal Technologies and James Kang, as amended by Amendment No. 1 to Employment Agreement, dated June 28, 2001.
10.10*	—	Employment Agreement, dated October 1, 2001, between Liquidmetal Technologies and William Johnson, Ph.D.
10.11*	—	Employment Agreement, dated December 31, 2000, between Liquidmetal Technologies and T. Scott Wiggins.
10.12*	—	Employment Agreement, dated May 21, 2001, between Liquidmetal Technologies and Brian McDougall.
10.13*	—	Employment Agreement, dated August 1, 2001, between Liquidmetal Technologies and John A. Grant, Jr.
10.14*	—	Separation and Consulting Agreement, dated November 15, 2001, between Liquidmetal Technologies and Shekhar Chitnis, together with Consulting Agreement attached as Exhibit A.
10.15*	—	Subordinated Promissory Note, dated February 21, 2001, of Liquidmetal Technologies payable to John Kang and Ricardo Salas.
10.16*	—	Subordinated Promissory Note, dated February 21, 2001, of Liquidmetal Technologies payable to Tjoa Thian Song.
10.17*	—	Note Conversion Agreement, dated November 30, 2001, between Liquidmetal Technologies and Tjoa Thian Song.
10.18*	—	Warrant for Purchase of Shares of Common Stock, dated February 21, 2001, granted by Liquidmetal Technologies to John Kang and Ricardo Salas.
10.19*	—	Warrant for Purchase of Shares of Common Stock, dated February 21, 2001, granted by Liquidmetal Technologies to Tjoa Thian Song.
10.20*	—	Non-Qualified Stock Option Agreement, dated January 1, 2001, between Liquidmetal Technologies and Paul Azinger.

[Table of Contents](#)

Exhibit Number		Description of Document
10.21*	—	Lease Agreement, dated January 21, 2002, between Liquidmetal Technologies and the Pinellas County Industrial Authority.
10.22*	—	Foreign Corporation Lease Zone Occupancy (Lease) Agreement, dated March 5, 2002, between Kyonggi Local Corporation and Liquidmetal Korea Co., Ltd.
10.23*	—	2002 Equity Incentive Plan.
10.24*	—	2002 Non-Employee Director Stock Option Plan.
10.25*	—	Subordinated Promissory Note, dated March 12, 2002, of Liquidmetal Technologies payable to John Kang.
10.26*	—	Subordinated Promissory Note, dated November 16, 2001, of Liquidmetal Technologies payable to Tjoa Thian Song.
10.27*	—	Subordinated Promissory Note, dated April 3, 2002, of Liquidmetal Technologies payable to John Kang.
10.28*	—	Subordinated Promissory Note, dated April 3, 2002, of Liquidmetal Technologies payable to Tjoa Thian Song.
10.29*	—	Employment Agreement, dated March 29, 2002, between Liquidmetal Technologies and Neil Paton.
21*	—	Subsidiaries of the Registrant.
23.1	—	Consent of Deloitte & Touche LLP.
23.2	—	Consent of Foley & Lardner (reference is made to Exhibit 5.1).
24.1*	—	Power of Attorney (reference is made to the signature page(s) of this Registration Statement).

* Previously filed.

=====

LIQUIDMETAL TECHNOLOGIES
(a California corporation)

5,000,000 Shares of Common Stock

PURCHASE AGREEMENT

Dated: -, 2002

=====

TABLE OF CONTENTS

PAGE

PURCHASE AGREEMENT

SECTION 1.	Representations and Warranties.....	2
(a)	Representations and Warranties by the Company.....	2
(i)	Compliance with Registration Requirements.....	3
(ii)	Independent Accountants.....	4
(iii)	Financial Statements.....	4
(iv)	No Material Adverse Change in Business.....	4
(v)	Good Standing of the Company.....	4
(vi)	Good Standing of Subsidiaries.....	4
(vii)	Capitalization.....	5
(viii)	Authorization of Agreement.....	5
(ix)	Authorization and Description of Securities.....	5
(x)	Absence of Defaults and Conflicts.....	5
(xi)	Absence of Labor Dispute.....	6
(xii)	ERISA.....	6
(xiii)	Absence of Proceedings.....	6
(xiv)	Accuracy of Exhibits.....	7
(xv)	Possession of Intellectual Property.....	7
(xvi)	Absence of Further Requirements.....	7
(xvii)	Possession of Licenses and Permits.....	7
(xviii)	Title to Property.....	8
(xix)	Accounting Controls.....	8
(xx)	Insurance.....	8
(xxi)	Investment Company Act.....	9
(xxii)	Environmental Laws.....	9
(xxiii)	Registration Rights.....	9
(xxiv)	Sales of Securities.....	9
(xxv)	Contracts and Purchase Orders.....	9
(b)	Officers' Certificates.....	9
SECTION 2.	Sale and Delivery to Underwriters; Closing.....	10
(a)	Initial Securities.....	10
(b)	Option Securities.....	10
(c)	Payment.....	10
(d)	Denominations; Registration.....	11
SECTION 3.	Covenants of the Company.....	11
(a)	Compliance with Securities Regulations and Commission Requests.....	11
(b)	Filing of Amendments.....	11
(c)	Delivery of Registration Statements.....	12
(d)	Delivery of Prospectus.....	12
(e)	Continued Compliance with Securities Laws.....	12
(f)	Blue Sky Qualifications.....	12

(g)	Rule 158.....	13
(h)	Use of Proceeds.....	13
(i)	Listing.....	13
(j)	Restriction on Sale of Securities.....	13
(k)	Reporting Requirements.....	13
(l)	Compliance with NASD Rules.....	14
(m)	Compliance with Rule 463.....	14
SECTION 4.	Payment of Expenses.....	14
(a)	Expenses.....	14
(b)	Termination of Agreement.....	14
SECTION 5.	Conditions of Underwriters' Obligations.....	14
(a)	Effectiveness of Registration Statement.....	15
(b)	Opinion of Counsel for Company.....	15
(c)	Opinion of Patent Counsel for Company.....	15
(d)	Opinion of Counsel for Underwriters.....	15
(e)	Officers' Certificate.....	15
(f)	Accountant's Comfort Letter.....	16
(g)	Bring-down Comfort Letter.....	16
(h)	Approval of Listing.....	16
(i)	No Objection.....	16
(j)	Lock-up Agreements.....	16
(k)	Conditions to Purchase of Option Securities.....	16
(i)	Officers' Certificate.....	16
(ii)	Opinion of Counsel for Company.....	17
(iii)	Opinion of Patent Counsel.....	17
(iv)	Opinion of Counsel for Underwriters.....	17
(v)	Bring-down Comfort Letter.....	17
(l)	Additional Documents.....	17
(m)	Termination of Agreement.....	17
SECTION 6.	Indemnification.....	17
(a)	Indemnification of Underwriters.....	17
(b)	Indemnification of Company, Directors and Officers.....	19
(c)	Actions against Parties; Notification.....	19
(d)	Settlement without Consent if Failure to Reimburse.....	20
(e)	Indemnification for Reserved Securities.....	20
SECTION 7.	Contribution.....	20
SECTION 8.	Representations, Warranties and Agreements to Survive Delivery.....	21
SECTION 9.	Termination of Agreement.....	21
(f)	Termination; General.....	22
(g)	Liabilities.....	22

SECTION 10. Default by One or More of the Underwriters.....22

SECTION 11. Notices.....23

SECTION 12. Parties.....23

SECTION 13. GOVERNING LAW AND TIME.....23

SECTION 14. Effect of Headings.....23

SCHEDULES

Schedule A - List of Underwriters.....Sch A-1

Schedule B - Pricing Information.....Sch B-1

Schedule C - List of Persons subject to Lock-up.....Sch C-1

EXHIBITS.....A-1

Exhibit A - Form of Opinion of Company's Counsel.....A-1

Exhibit B - Form of Opinion of Company's Patent Counsel.....B-1

Exhibit C - Form of Lock-up Letter.....C-1

LIQUIDMETAL TECHNOLOGIES

(a California corporation)

5,000,000 Shares of Common Stock

(No Par Value Per Share)

PURCHASE AGREEMENT

-, 2002

MERRILL LYNCH & CO.

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

UBS Warburg LLC

Robert W. Baird & Co. Incorporated

c/o Merrill Lynch & Co.

Merrill Lynch, Pierce, Fenner & Smith
Incorporated

North Tower

World Financial Center

New York, New York 10281-1209

Ladies and Gentlemen:

Liquidmetal Technologies, a California corporation (the "Company"), confirms its agreement with Merrill Lynch & Co., Merrill Lynch, Pierce, Fenner & Smith Incorporated ("Merrill Lynch") and each of the other Underwriters named in Schedule A hereto (collectively, the "Underwriters," which term shall also include any underwriter substituted as hereinafter provided in Section 10 hereof), for whom Merrill Lynch, UBS Warburg LLC and Robert W. Baird & Co. Incorporated are acting as representatives (in such capacity, the "Representatives"), with respect to the issue and sale by the Company and the purchase by the Underwriters, acting severally and not jointly, of the respective numbers of shares of Common Stock, no par value, of the Company ("Common Stock") set forth in said Schedule A, and with respect to the grant by the Company to the Underwriters, acting severally and not jointly, of the option described in Section 2(b) hereof to purchase all or any part of 750,000 additional shares of Common Stock to cover overallocments, if any. The aforesaid 5,000,000 shares of Common Stock (the "Initial Securities") to be purchased by the Underwriters and all or any part of the 750,000 shares of Common Stock subject to the option described in Section 2(b) hereof (the "Option Securities") are hereinafter called, collectively, the "Securities."

The Company understands that the Underwriters propose to make a public offering of the Securities as soon as the Representatives deem advisable after this Agreement has been executed and delivered.

The Company and the Underwriters agree that up to 500,000 shares of the Initial Securities to be purchased by the Underwriters (the "Reserved Securities") shall be reserved for sale by the Underwriters to certain friends and individuals and entities having business relationships with the Company, as part of the distribution of the Securities by the Underwriters, subject to the terms of this Agreement, the applicable rules, regulations and interpretations of the National Association of Securities Dealers, Inc. (the "NASD") and all other applicable laws, rules and regulations. To the extent that such Reserved Securities are not orally confirmed for purchase by such eligible employees and persons having business relationships with the Company by the end of the first business day after the date of this Agreement, such Reserved Securities may be offered to the public as part of the public offering contemplated hereby.

The Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 (No. 333-73716) covering the registration of the Securities under the Securities Act of 1933, as amended (the "1933 Act"), including the related preliminary prospectus or prospectuses. Promptly after execution and delivery of this Agreement, the Company will either (i) prepare and file a prospectus in accordance with the provisions of Rule 430A ("Rule 430A") of the rules and regulations of the Commission under the 1933 Act (the "1933 Act Regulations") and paragraph (b) of Rule 424 ("Rule 424(b)") of the 1933 Act Regulations or (ii) if the Company has elected to rely upon Rule 434 ("Rule 434") of the 1933 Act Regulations, prepare and file a term sheet (a "Term Sheet") in accordance with the provisions of Rule 434 and Rule 424(b). The information included in any such prospectus or in any such Term Sheet, as the case may be, that was omitted from such registration statement at the time it became effective but that is deemed to be part of such registration statement at the time it became effective (a) pursuant to paragraph (b) of Rule 430A is referred to as "Rule 430A Information" or (b) pursuant to paragraph (d) of Rule 434 is referred to as "Rule 434 Information." Each prospectus used before such registration statement became effective, and any prospectus that omitted, as applicable, the Rule 430A Information or the Rule 434 Information, that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a "preliminary prospectus." Such registration statement, including the exhibits thereto and schedules thereto at the time it became effective and including the Rule 430A Information and the Rule 434 Information, as applicable, is herein called the "Registration Statement." Any registration statement filed pursuant to Rule 462(b) of the 1933 Act Regulations is herein referred to as the "Rule 462(b) Registration Statement," and after such filing the term "Registration Statement" shall include the Rule 462(b) Registration Statement. The prospectus in the form first furnished to the Underwriters for use in connection with the offering of the Securities is herein called the "Prospectus". If Rule 434 is relied on, the term "Prospectus" shall refer to the preliminary Prospectus dated May 1, 2002 together with the Term Sheet and all references in this Agreement to the date of such Prospectus shall mean the date of the Term Sheet. For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus, the Prospectus, or any Term Sheet or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system ("EDGAR").

SECTION 1. Representations and Warranties.

(a) Representations and Warranties by the Company. The Company represents and warrants to each Underwriter as of the date hereof, as of the Closing Time referred to in Section

2(c) hereof, and as of each Date of Delivery (if any) referred to in Section 2(b), hereof and agree with each Underwriter, as follows:

(i) Compliance with Registration Requirements. Each of the Registration Statement and any Rule 462(b) Registration Statement has become effective under the 1933 Act and no stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement has been issued under the 1933 Act and no proceedings for that purpose have been instituted or are pending or, to the knowledge of the Company, are contemplated by the Commission, and any request on the part of the Commission for additional information has been complied with.

At the respective times the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendments thereto became effective and at the Closing Time (and, if any Option Securities are purchased, at the Date of Delivery), the Registration Statement, the Rule 462(b) Registration Statement and any amendments and supplements thereto complied and will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations and did not and will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Prospectus, any preliminary prospectuses and any supplement thereto or prospectus wrapper prepared in connection therewith, at their respective times of issuance and at the Closing Time, complied and will comply in all material respects with any applicable laws or regulations of foreign jurisdictions in which the Prospectus and such preliminary prospectuses, as amended or supplemented, if applicable, are distributed in connection with the offer and sale of Reserved Securities. Neither the Prospectus nor any amendments or supplements thereto (including any prospectus wrapper), at the time the Prospectus or any amendment or supplement was issued and at the Closing Time (and, if any Option Securities are purchased, at the Date of Delivery), included or will include an untrue statement of a material fact or omitted or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. If Rule 434 is used, the Company will comply with the requirements of Rule 434 and the Prospectus shall not be "materially different," as such term is used in Rule 434, from the prospectus included in the Registration Statement at the time it became effective. The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement or the Prospectus made in reliance upon and in conformity with information furnished to the Company in writing by any Underwriter through Merrill Lynch expressly for use in the Registration Statement or the Prospectus.

Each preliminary prospectus and the prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the 1933 Act, complied when so filed in all material respects with the 1933 Act Regulations, except for any corrections to any preliminary prospectus that are made in the Prospectus (or any amendment or supplement thereto) and each preliminary prospectus and the Prospectus delivered to the Underwriters for use in connection with this offering was identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(ii) Independent Accountants. The accountants who certified the financial statements and supporting schedules included in the Registration Statement are independent public accountants as required by the 1933 Act and the 1933 Act Regulations.

(iii) Financial Statements. The financial statements included in the Registration Statement and the Prospectus, together with the related schedules and notes, present fairly the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its consolidated subsidiaries for the periods specified; said financial statements comply in all material respects as to form with the applicable accounting requirements of Regulation S-X under the 1933 Act and have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") applied on a consistent basis throughout the periods involved. The supporting schedules included in the Registration Statement present fairly in all material respects in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Prospectus present fairly in all material respects the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included in the Registration Statement.

(iv) No Material Adverse Change in Business. Since the respective dates as of which information is given in the Registration Statement and the Prospectus, except as otherwise stated therein, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company or any of its subsidiaries, other than those in the ordinary course of business, which are material with respect to the Company and its subsidiaries considered as one enterprise, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.

(v) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of California and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect.

(vi) Good Standing of Subsidiaries. Each "significant subsidiary" of the Company (as such term is defined in Rule 1-02 of Regulation S-X) and Liquidmetal Golf, Liquidmetal Golf (Europe) Limited and Amorphous Technologies International (Asia) PTE Ltd. (each a "Subsidiary" and, collectively, the "Subsidiaries") has been duly

organized and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Prospectus and is duly qualified as a foreign corporation to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect; except as otherwise disclosed in the Registration Statement, all of the issued and outstanding capital stock of each such Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity; none of the outstanding shares of capital stock of any Subsidiary was issued in violation of the preemptive or similar rights of any securityholder of such Subsidiary. The only subsidiaries of the Company are the subsidiaries listed on Exhibit 21.1 to the Registration Statement

(vii) Capitalization. The authorized, issued and outstanding capital stock of the Company is as set forth in the Prospectus in the column entitled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Prospectus or pursuant to the exercise of convertible securities or options referred to in the Prospectus). The shares of issued and outstanding capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable; none of the outstanding shares of capital stock of the Company was issued in violation of the preemptive or other similar rights of any securityholder of the Company.

(viii) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

(ix) Authorization and Description of Securities. The Securities have been duly authorized for issuance and sale to the Underwriters pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein will be validly issued, fully paid and non-assessable; the Common Stock conforms to all statements relating thereto contained in the Prospectus and such description conforms to the rights set forth in the instruments defining the same and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company.

(x) Absence of Defaults and Conflicts. Neither the Company nor any of its subsidiaries is in violation of its charter or by-laws or in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound, or to which any of the property or assets of the Company or any subsidiary is subject (collectively, "Agreements and Instruments") except for such defaults that would not result in a Material Adverse Effect; and the execution, delivery and performance of this Agreement and the consummation of the

transactions contemplated herein and in the Registration Statement (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described in the Prospectus under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any subsidiary pursuant to, the Agreements and Instruments (except for such conflicts, breaches or defaults or liens, charges or encumbrances that would not result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter or by-laws of the Company or any subsidiary or any applicable law, statute, rule, regulation, judgment, order, writ or decree of any government, government instrumentality or court, domestic or foreign, having jurisdiction over the Company or any subsidiary or any of their assets, properties or operations. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any subsidiary.

(xi) Absence of Labor Dispute. No labor dispute with the employees of the Company or any subsidiary exists or, to the knowledge of the Company, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or any subsidiary's principal suppliers, manufacturers, customers or contractors, which, in either case, may reasonably be expected to result in a Material Adverse Effect.

(xii) ERISA. The Company is in compliance in all material respects with all currently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder (herein called ERISA); no "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Company would have any liability; the Company has not incurred and does not currently expect to incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan" or (ii) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretation thereunder (herein called the Code); and each "pension plan" for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, that would cause the loss of such qualification.

(xiii) Absence of Proceedings. There is no action, suit, proceeding, inquiry or investigation before or brought by any court or governmental agency or body, domestic or foreign, now pending, or, to the knowledge of the Company, threatened, against or affecting the Company or any subsidiary, which is required to be disclosed in the Registration Statement (other than as disclosed therein), or which might reasonably be expected to result in a Material Adverse Effect, or which might reasonably be expected to

materially and adversely affect the properties or assets thereof or the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder; the aggregate of all pending legal or governmental proceedings to which the Company or any subsidiary is a party or of which any of their respective property or assets is the subject which are not described in the Registration Statement, including ordinary routine litigation incidental to the business, could not reasonably be expected to result in a Material Adverse Effect.

(xiv) Accuracy of Exhibits. There are no contracts or documents which are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits thereto which have not been so described and filed as required.

(xv) Possession of Intellectual Property. The Company and its subsidiaries own or possess, or can acquire on reasonable terms, adequate patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, trademark registrations, service marks, service mark registrations, trade names, rights or other intellectual property (collectively, "Intellectual Property") necessary to carry on the business now operated by them, and neither the Company nor any of its subsidiaries has received any notice or is otherwise aware of any infringement of or conflict with asserted rights of others with respect to any Intellectual Property or of any facts or circumstances which would render any Intellectual Property invalid or inadequate to protect the interest of the Company or any of its subsidiaries therein, and which infringement or conflict (if the subject of any unfavorable decision, ruling or finding) or invalidity or inadequacy, singly or in the aggregate, would result in a Material Adverse Effect. To the Company's knowledge after due inquiry, the business of the Company as now conducted and as proposed to be conducted as described in the Prospectus does not, and will not, infringe or conflict with any Intellectual Property rights or franchise right of any person.

(xvi) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any court or governmental authority or agency is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities hereunder or the consummation of the transactions contemplated by this Agreement, except (i) such as have been already obtained or as may be required under the 1933 Act or the 1933 Act Regulations or state securities laws or by the NASD and (ii) such as have been obtained under the laws and regulations of jurisdictions outside the United States, if any, in which the Reserved Securities are offered.

(xvii) Possession of Licenses and Permits. The Company and its subsidiaries possess such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Federal, state, local or foreign regulatory agencies or bodies necessary to conduct the business now operated by them, except where the failure to possess such permits, licenses, approvals, consents and other authorizations would not have a Material Adverse Effect; the Company and its subsidiaries are in compliance with the terms and conditions of all such Governmental

Licenses, except where the failure so to comply would not, singly or in the aggregate, have a Material Adverse Effect; all of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not have a Material Adverse Effect; and neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would result in a Material Adverse Effect.

(xviii) Title to Property. The Company and its subsidiaries have good and marketable title to all real property owned by the Company and its subsidiaries and good title to all other properties owned by them, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (a) are described in the Prospectus or (b) do not, singly or in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries; and all of the leases and subleases material to the business of the Company and its subsidiaries, considered as one enterprise, and under which the Company or any of its subsidiaries holds properties described in the Prospectus, are in full force and effect, and neither the Company nor any subsidiary has any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any subsidiary under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or such subsidiary to the continued possession of the leased or subleased premises under any such lease or sublease.

(xix) Accounting Controls. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(xx) Insurance. The Company carries, or is covered by, insurance with insurers of recognized reputability in such amounts and covering such risks as it believes is commercially reasonable in light of the business presently conducted by the Company, all of which insurance is in full force and effect, and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers at a cost, that would not, single or in the aggregate, have a Material Adverse Effect, and there are no claims by the Company of any material amount under any such policy as to which any insurer is denying liability or defending under a reservation of rights claim and the Company has not received notice from any insurer or agent of such insurer that substantial capital improvements or other material expenditures will have to be made in order to continue such insurance.

(xxi) Investment Company Act. The Company is not, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Prospectus will not be, an "investment company" or an entity "controlled" by an "investment company" as such terms are defined in the Investment Company Act of 1940, as amended (the "1940 Act").

(xxii) Environmental Laws. Except as described in the Registration Statement and except as would not, singly or in the aggregate, result in a Material Adverse Effect, (A) neither the Company nor any of its subsidiaries is in violation of any Federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (C) there are no pending or, to the Company's knowledge threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (D) there are no events or circumstances that might reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or governmental body or agency, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

(xxiii) Registration Rights. There are no persons with registration rights or other similar rights to have any securities registered pursuant to the Registration Statement or otherwise registered by the Company under the 1933 Act, except such rights disclosed in the Prospectus.

(xxiv) Sales of Securities. All sales of the Company's securities listed in Item 15 to the Registration Statement were exempt from the registration requirements of the Securities Act and applicable foreign and state securities laws.

(xxv) Contracts and Purchase Orders. The statements relating to the contracts and purchase orders of the Company specifically identified in the Prospectus under the heading "Business" are true and correct in all material respects.

(b) Officers' Certificates. Any certificate signed by any officer of the Company or any of its subsidiaries delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

SECTION 2. Sale and Delivery to Underwriters; Closing.

(a) Initial Securities. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to each Underwriter, severally and not jointly, and each Underwriter, severally and not jointly, agrees to purchase from the Company, at the price per share set forth in Schedule B, the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Initial Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 10 hereof.

(b) Option Securities. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the Underwriters, severally and not jointly, to purchase up to an additional 750,000 shares of Common Stock at the price per share set forth in Schedule B, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities. The option hereby granted will expire 30 days after the date hereof and may be exercised in whole or in part from time to time only for the purpose of covering overallocments which may be made in connection with the offering and distribution of the Initial Securities upon notice by the Representatives to the Company setting forth the number of Option Securities as to which the several Underwriters are then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a "Date of Delivery") shall be determined by the Representatives, but shall not be later than seven full business days after the exercise of said option, nor in any event prior to the Closing Time, as hereinafter defined. If the option is exercised as to all or any portion of the Option Securities, each of the Underwriters, acting severally and not jointly, will purchase that proportion of the total number of Option Securities then being purchased which the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter bears to the total number of Initial Securities, subject in each case to such adjustments as the Representatives in their discretion shall make to eliminate any sales or purchases of fractional shares.

(c) Payment. Payment of the purchase price for, and delivery of certificates for, the Initial Securities shall be made at the offices of Sidley Austin Brown & Wood LLP, 875 Third Avenue, New York, New York 10022 or at such other place as shall be agreed upon by the Representatives and the Company, at 10:00 A.M. (Eastern time) on the third (fourth, if the pricing occurs after 4:30 P.M. (Eastern time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 10), or such other time not later than ten business days after such date as shall be agreed upon by the Representatives and the Company (such time and date of payment and delivery being herein called "Closing Time").

In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price for, and delivery of certificates for, such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Representatives and the Company, on each Date of Delivery as specified in the notice from the Representatives to the Company.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company, against delivery to the Representatives for the respective accounts of the Underwriters of certificates for the Securities to be purchased by them. It is understood that each Underwriter has authorized the Representatives, for its account, to accept delivery of, receipt for, and make payment of the purchase price for, the Initial Securities and the Option Securities, if any, which it has agreed to purchase. Merrill Lynch, individually and not as representative of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Initial Securities or the Option Securities, if any, to be purchased by any Underwriter whose funds have not been received by the Closing Time or the relevant Date of Delivery, as the case may be, but such payment shall not relieve such Underwriter from its obligations hereunder.

(d) Denominations; Registration. Certificates for the Initial Securities and the Option Securities, if any, shall be in such denominations and registered in such names as the Representatives may request in writing at least one full business day before the Closing Time or the relevant Date of Delivery, as the case may be. The certificates for the Initial Securities and the Option Securities, if any, will be made available for examination and packaging by the Representatives in The City of New York not later than 10:00 A.M. (Eastern time) on the business day prior to the Closing Time or the relevant Date of Delivery, as the case may be.

SECTION 3. Covenants of the Company. The Company covenants with each Underwriter as follows:

(a) Compliance with Securities Regulations and Commission Requests. The Company, subject to Section 3(b), will comply with the requirements of Rule 430A or Rule 434, as applicable, and will notify the Representatives immediately, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement shall become effective, or any supplement to the Prospectus or any amended Prospectus shall have been filed, (ii) of the receipt of any comments from the Commission relating to the Registration Statement, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or for additional information, and (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any order preventing or suspending the use of any preliminary prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes. The Company will promptly effect the filings necessary pursuant to Rule 424(b) and will take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will make every reasonable effort to prevent the issuance of any stop order and, if any stop order is issued, to obtain the lifting thereof at the earliest possible moment.

(b) Filing of Amendments. The Company will give the Representatives notice of its intention to file or prepare any amendment to the Registration Statement (including any filing under Rule 462(b)), any Term Sheet or any amendment, supplement or revision to either the prospectus included in the Registration Statement at the time it became effective or to the Prospectus, will furnish the Representatives with copies of any such documents a reasonable

amount of time prior to such proposed filing or use, as the case may be, and will not file or use any such document to which the Representatives or counsel for the Underwriters shall object.

(c) Delivery of Registration Statements. The Company has furnished or will deliver to the Representatives and counsel for the Underwriters, without charge, signed copies of the Registration Statement as originally filed and of each amendment thereto (including exhibits filed therewith or incorporated by reference therein) and signed copies of all consents and certificates of experts, and will also deliver to the Representatives, without charge, a conformed copy of the Registration Statement as originally filed and of each amendment thereto (without exhibits) for each of the Underwriters. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(d) Delivery of Prospectus. The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the 1933 Act. The Company will furnish to each Underwriter, without charge, during the period when the Prospectus is required to be delivered under the 1933 Act or the Securities Exchange Act of 1934 (the "1934 Act"), such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(e) Continued Compliance with Securities Laws. The Company will comply with the 1933 Act and the 1933 Act Regulations so as to permit the completion of the distribution of the Securities as contemplated herein and in the Prospectus. If at any time when a prospectus is required by the 1933 Act to be delivered in connection with sales of the Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to amend the Registration Statement or amend or supplement any Prospectus in order that the Prospectus will not include any untrue statements of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser, or if it shall be necessary, in the opinion of such counsel, at any such time to amend the Registration Statement or amend or supplement any Prospectus in order to comply with the requirements of the 1933 Act or the 1933 Act Regulations, the Company will promptly prepare and file with the Commission, subject to Section 3(b), such amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement or the Prospectus comply with such requirements, and the Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request.

(f) Blue Sky Qualifications. The Company will use its best efforts, in cooperation with the Underwriters, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representatives may designate and to maintain such qualifications in effect for a period of not less than one year

from the later of the effective date of the Registration Statement and any Rule 462(b) Registration Statement; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject. In each jurisdiction in which the Securities have been so qualified, the Company will file such statements and reports as may be required by the laws of such jurisdiction to continue such qualification in effect for a period of not less than one year from the effective date of the Registration Statement and any Rule 462(b) Registration Statement.

(g) Rule 158. The Company will timely file such reports pursuant to the 1934 Act as are necessary in order to make generally available to its securityholders as soon as practicable an earnings statement for the purposes of, and to provide the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

(h) Use of Proceeds. The Company will use the net proceeds received by it from the sale of the Securities in the manner specified in the Prospectus under "Use of Proceeds."

(i) Listing. The Company will use its best efforts to effect and maintain the quotation of the Securities on the Nasdaq National Market and will file with the Nasdaq National Market all documents and notices required by the Nasdaq National Market of companies that have securities that are traded in the over-the-counter market and quotations for which are reported by the Nasdaq National Market.

(j) Restriction on Sale of Securities. During a period of 180 days from the date of the Prospectus, the Company will not, without the prior written consent of Merrill Lynch, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any share of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or file any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof and referred to in the Prospectus, (C) any shares of Common Stock issued or options to purchase Common Stock granted pursuant to existing employee benefit plans of the Company referred to in the Prospectus, (D) any shares of Common Stock issued pursuant to any non-employee director stock plan or dividend reinvestment plan or (E) up to 10,000 shares of Common Stock issued in connection with the licensing of technology.

(k) Reporting Requirements. The Company, during the period when the Prospectus is required to be delivered under the 1933 Act or the 1934 Act, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods required by the 1934 Act and the rules and regulations of the Commission thereunder.

(l) Compliance with NASD Rules. The Company hereby agrees that it will ensure that the Reserved Securities will be restricted as required by the NASD or the NASD rules from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of this Agreement. The Underwriters will notify the Company as to which persons will need to be so restricted. At the request of the Underwriters, the Company will direct the transfer agent to place a stop transfer restriction upon such securities for such period of time. Should the Company release, or seek to release, from such restrictions any of the Reserved Securities, the Company agrees to reimburse the Underwriters for any reasonable expenses (including, without limitation, legal expenses) they incur in connection with such release.

(m) Compliance with Rule 463. The Company will comply with Rule 463 of the 1933 Act Regulations.

SECTION 4. Payment of Expenses.

(a) Expenses. The Company will pay all expenses incident to the performance of its obligations hereunder, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and of each amendment thereto, (ii) the preparation, printing and delivery to the Underwriters of this Agreement, any Agreement among Underwriters and such other documents as may be required in connection with the offering, purchase, sale, issuance or delivery of the Securities, (iii) the preparation, issuance and delivery of the certificates for the Securities to the Underwriters, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Securities to the Underwriters, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(f) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto, (vi) the printing and delivery to the Underwriters of copies of each preliminary prospectus, any Term Sheets and of the Prospectus and any amendments or supplements thereto, (vii) the preparation, printing and delivery to the Underwriters of copies of the Blue Sky Survey and any supplement thereto, (viii) the fees and expenses of any transfer agent or registrar for the Securities, (ix) the filing fees incident to, and the reasonable fees and disbursements of counsel to the Underwriters in connection with, the review by the NASD of the terms of the sale of the Securities, (x) the fees and expenses incurred in connection with the inclusion of the Securities in the Nasdaq National Market and (xi) all costs and expenses of the Underwriters, including the fees and disbursements of counsel for the Underwriters, in connection with matters related to the Reserved Securities which are designated by the Company for sale to certain friends and individuals and entities having a business relationship with the Company.

(b) Termination of Agreement. If this Agreement is terminated by the Representatives in accordance with the provisions of Section 5 or Section 9(a)(i) hereof, the Company shall reimburse the Underwriters for all of their out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Underwriters.

SECTION 5. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy of the representations and warranties of the

Company contained in Section 1 hereof or in certificates of any officer of the Company or any subsidiary of the Company delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder, and to the following further conditions:

(a) Effectiveness of Registration Statement. The Registration Statement, including any Rule 462(b) Registration Statement, has become effective and at Closing Time no stop order suspending the effectiveness of the Registration Statement shall have been issued under the 1933 Act or proceedings therefor initiated or threatened by the Commission, and any request on the part of the Commission for additional information shall have been complied with to the reasonable satisfaction of counsel to the Underwriters. A prospectus containing the Rule 430A Information shall have been filed with the Commission in accordance with Rule 424(b) (or a post-effective amendment providing such information shall have been filed and declared effective in accordance with the requirements of Rule 430A) or, if the Company has elected to rely upon Rule 434, a Term Sheet shall have been filed with the Commission in accordance with Rule 424(b).

(b) Opinion of Counsel for Company. At Closing Time, the Representatives shall have received the favorable opinion, dated as of Closing Time, of Foley & Lardner, counsel for the Company, in form and substance satisfactory to counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters to the effect set forth in Exhibit A hereto.

(c) Opinion of Patent Counsel for Company. At the Closing Time, the Representatives shall have received the favorable opinion, dated as of the Closing Time, of Christie, Parker & Hale, LLP, patent counsel for the Company, in the form and substance satisfactory to counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters to the effect set forth in Exhibit B.

(d) Opinion of Counsel for Underwriters. At Closing Time, the Representatives shall have received the favorable opinion, dated as of Closing Time, of Sidley Austin Brown & Wood LLP, counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters with respect to the matters set forth in clauses (i), (ii), (v), (vi) (solely as to preemptive or other similar rights arising by operation of law or under the charter or by-laws of the Company), (viii) through (x), inclusive, (xii), (xiv) (solely as to the information in the Prospectus under "Description of Capital Stock-Common Stock") and the penultimate paragraph of Exhibit A hereto. In giving such opinion such counsel may rely, as to all matters governed by the laws of jurisdictions other than the law of the State of New York and the Federal law of the United States, upon the opinions of counsel satisfactory to the Representatives. Such counsel may also state that, insofar as such opinion involves factual matters, they have relied, to the extent they deem proper, upon certificates of officers of the Company and its subsidiaries and certificates of public officials.

(e) Officers' Certificate. At Closing Time, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise,

whether or not arising in the ordinary course of business, and the Representatives shall have received a certificate of the President or a Vice President of the Company and of the chief financial or chief accounting officer of the Company, dated as of Closing Time, to the effect that (i) there has been no such material adverse change, (ii) the representations and warranties in Section 1(a) hereof are true and correct with the same force and effect as though expressly made at and as of Closing Time, (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to Closing Time, and (iv) no stop order suspending the effectiveness of the Registration Statement has been issued and no proceedings for that purpose have been instituted or are pending or are contemplated by the Commission.

(f) Accountant's Comfort Letter. At the time of the execution of this Agreement, the Representatives shall have received from Deloitte & Touche LLP a letter dated such date, in form and substance satisfactory to the Representatives, together with signed or reproduced copies of such letter for each of the other Underwriters containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the Prospectus.

(g) Bring-down Comfort Letter. At Closing Time, the Representatives shall have received from Deloitte & Touche LLP a letter, dated as of Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (f) of this Section, except that the specified date referred to shall be a date not more than three business days prior to Closing Time.

(h) Approval of Listing. At Closing Time, the Securities shall have been approved for inclusion in the Nasdaq National Market, subject only to official notice of issuance.

(i) No Objection. The NASD has confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and arrangements.

(j) Lock-up Agreements. At the date of this Agreement, the Representatives shall have received an agreement substantially in the form of Exhibit C hereto signed by the persons listed on Schedule C hereto.

(k) Conditions to Purchase of Option Securities. In the event that the Underwriters exercise their option provided in Section 2(b) hereof to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company or any subsidiary of the Company hereunder shall be true and correct as of each Date of Delivery and, at the relevant Date of Delivery, the Representatives shall have received:

(i) Officers' Certificate. A certificate, dated such Date of Delivery, of the President or a Vice President of the Company and of the chief financial or chief accounting officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(e) hereof remains true and correct as of such Date of Delivery.

(ii) Opinion of Counsel for Company. The favorable opinion of Foley & Lardner, counsel for the Company, in form and substance satisfactory to counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(b) hereof.

(iii) Opinion of Patent Counsel. The favorable opinion of Christie, Parker, & hale, LLP, patent counsel to the Company, dated such Date of Delivery relating to Option Securities to be purchased on such Date of Delivery and concerning the same matters as the opinion required by Section 5(c) hereof and to such further effect as counsel for the Underwriters may reasonably request.

(iv) Opinion of Counsel for Underwriters. The favorable opinion of Sidley Austin Brown & Wood LLP, counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(d) hereof.

(v) Bring-down Comfort Letter. A letter from Deloitte & Touche LLP, in form and substance satisfactory to the Representatives and dated such Date of Delivery, substantially in the same form and substance as the letter furnished to the Representatives pursuant to Section 5(g) hereof, except that the "specified date" in the letter furnished pursuant to this paragraph shall be a date not more than five days prior to such Date of Delivery.

(l) Additional Documents. for the Underwriters shall have been furnished with such documents and opinions as they may require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be satisfactory in form and substance to the Representatives and counsel for the Underwriters.

(m) Termination of Agreement. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Time, the obligations of the several Underwriters to purchase the relevant Option Securities, may be terminated by the Representatives by notice to the Company at any time at or prior to Closing Time or such Date of Delivery, as the case may be, and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 6, 7 and 8 shall survive any such termination and remain in full force and effect.

SECTION 6. Indemnification.

(a) Indemnification of Underwriters. The Company agrees to indemnify and hold harmless each Underwriter and each person, if any, who controls any Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the Rule 430A Information and the Rule 434 Information, if applicable, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included in any preliminary prospectus or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of (A) the violation of any applicable laws or regulations of foreign jurisdictions where Reserved Securities have been offered and (B) any untrue statement or alleged untrue statement of a material fact included in the supplement or prospectus wrapper material distributed in connection with the reservation and sale of the Reserved Securities to certain friends and individuals and entities having a business relationship with the Company or the omission or alleged omission therefrom of a material fact necessary to make the statements therein, when considered in conjunction with the Prospectus or preliminary prospectus, not misleading;

(iii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission or in connection with any violation of the nature referred to in Section 6(a)(ii)(A) hereof; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company; and

(iv) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel chosen by Merrill Lynch), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission or in connection with any violation of the nature referred to in Section 6(a)(ii)(A) hereof, to the extent that any such expense is not paid under (i), (ii) or (iii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through Merrill Lynch expressly for use in the Registration Statement (or any amendment thereto), including the Rule 430A Information and the Rule 434 Information, if applicable, or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto); and, provided further, that this indemnity agreement shall not apply with respect to any preliminary prospectus to the extent that any loss, liability, claim,

damage or expense resulted from the fact that such Underwriter, in contravention of a requirement of this Agreement or applicable law, sold Securities to a person to whom such Underwriter failed to send or give, at or prior to the Closing Time, a copy of the Prospectus, as then amended or supplemented if: (i) the Company has previously furnished copies thereof, in accordance with Section 3(d) of this Agreement at least 48 hours prior to the Closing Time, to the Underwriters and the loss, liability, claim, damage or expense of such Underwriter resulted from an untrue statement or omission of a material fact contained in or omitted from the preliminary prospectus which was corrected in the Prospectus as, if applicable, amended or supplemented prior to the Closing Time, and such Prospectus was required by law to be delivered at or prior to the written confirmation of sale to such person and (ii) sending or giving such Prospectus by the Closing Time to the party or parties asserting such loss, liability, claim, damage or expense would have cured the defect giving rise to such loss, liability, claim, damage or expense.

(b) Indemnification of Company, Directors and Officers. Each Underwriter severally agrees to indemnify and hold harmless the Company, its directors, each of its officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including the Rule 430A Information and the Rule 434 Information, if applicable, or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information furnished to the Company by such Underwriter through the Representatives expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto).

(c) Actions against Parties; Notification. Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 6(a) above, counsel to the indemnified parties shall be selected by Merrill Lynch, and, in the case of parties indemnified pursuant to Section 6(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which

indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) Settlement without Consent if Failure to Reimburse. If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(iii) effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

(e) Indemnification for Reserved Securities. In connection with the offer and sale of the Reserved Securities, the Company agrees, promptly upon a request, in writing to indemnify and hold harmless the Underwriters from and against any and all losses, liabilities, claims, damages and expenses incurred by them as a result of the failure of eligible friends and individuals and entities having a business relationship with the Company to pay for and accept delivery of Reserved Securities which, by the end of the first business day following the date of this Agreement, were subject to a properly confirmed agreement to purchase.

SECTION 7. Contribution. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions, or in connection with any violation of the nature referred to in Section 6(a)(ii)(A) hereof, which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities pursuant to this Agreement (before deducting expenses) received by the Company and the total underwriting discount received by the Underwriters, in each case as set forth on the cover of the Prospectus, or, if Rule 434 is used, the corresponding location on the Term Sheet, bear to the aggregate initial public offering price of the Securities as set forth on such cover.

The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission or any violation of the nature referred to in Section 6(a)(ii)(A) hereof.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of any such untrue or alleged untrue statement or omission or alleged omission.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 7, each person, if any, who controls an Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Underwriters' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Initial Securities set forth opposite their respective names in Schedule A hereto and not joint.

SECTION 8. Representations, Warranties and Agreements to Survive Delivery. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company or any of its subsidiaries submitted pursuant hereto, shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or controlling person, or by or on behalf of the Company, and shall survive delivery of the Securities to the Underwriters.

SECTION 9. Termination of Agreement.

(f) Termination; General. The Representatives may terminate this Agreement, by notice to the Company, at any time at or prior to Closing Time (i) if there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Representatives, impracticable or inadvisable to market the Securities or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or the Nasdaq National Market, or if trading generally on the American Stock Exchange or the New York Stock Exchange or in the Nasdaq National Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by such system or by order of the Commission, the NASD or any other governmental authority, or a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, or (iv) if a banking moratorium has been declared by either Federal or New York authorities.

(g) Liabilities. If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 6, 7 and 8 shall survive such termination and remain in full force and effect.

SECTION 10. Default by One or More of the Underwriters. If one or more of the Underwriters shall fail at Closing Time or a Date of Delivery to purchase the Securities which it or they are obligated to purchase under this Agreement (the "Defaulted Securities"), the Representatives shall have the right, within 24 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase all, but not less than all, of the Defaulted Securities in such amounts as may be agreed upon and upon the terms herein set forth; if, however, the Representatives shall not have completed such arrangements within such 24-hour period, then:

(a) if the number of Defaulted Securities does not exceed 10% of the number of Securities to be purchased on such date, each of the non-defaulting Underwriters shall be obligated, severally and not jointly, to purchase the full amount thereof in the proportions that their respective underwriting obligations hereunder bear to the underwriting obligations of all non-defaulting Underwriters, or

(b) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, this Agreement or, with respect to any Date of Delivery which occurs after the Closing Time, the obligation of the Underwriters to purchase and of the Company to sell the Option Securities to be purchased and sold on such Date of Delivery shall terminate without liability on the part of any non-defaulting Underwriter.

No action taken pursuant to this Section shall relieve any defaulting Underwriter from liability in respect of its default.

In the event of any such default which does not result in a termination of this Agreement or, in the case of a Date of Delivery which is after the Closing Time, which does not result in a termination of the obligation of the Underwriters to purchase and the Company to sell the relevant Option Securities, as the case may be, either the Representatives or the Company shall have the right to postpone Closing Time or the relevant Date of Delivery, as the case may be, for a period not exceeding seven days in order to effect any required changes in the Registration Statement or Prospectus or in any other documents or arrangements. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 10.

SECTION 11. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be directed to the Representatives at North Tower, World Financial Center, New York, New York 10281-1201, attention of Brian Hogan, and notices to the Company shall be directed to it at 400 North Ashley Plaza, Suite 1930, Tampa, Florida 33602, attention of Brian McDougall.

SECTION 12. Parties. This Agreement shall each inure to the benefit of and be binding upon the Underwriters and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Underwriters and the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 6 and 7 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Underwriters and the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

SECTION 13. GOVERNING LAW AND TIME. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK. SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

SECTION 14. Effect of Headings. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement between the Underwriters and the Company in accordance with its terms.

Very truly yours,

LIQUIDMETAL TECHNOLOGIES

By _____
Name:
Title:

CONFIRMED AND ACCEPTED,
as of the date first above written:

MERRILL LYNCH & CO.
MERRILL LYNCH, PIERCE, FENNER & SMITH
INCORPORATED

UBS Warburg LLC
Robert W. Baird & Co. Incorporated

By: MERRILL LYNCH, PIERCE, FENNER & SMITH
INCORPORATED

By _____
Authorized Signatory

For themselves and as Representatives of the
other Underwriters named in Schedule A hereto.

SCHEDULE A

Name of Underwriter -----	Number of Initial Securities -----	-----
Merrill Lynch, Pierce, Fenner & Smith Incorporated		
UBS Warburg LLC Robert W. Baird & Co. Incorporated		
Total	5,000,000 =====	

SCHEDULE B

LIQUIDMETAL TECHNOLOGIES

5,000,000 Shares of Common Stock

(No Par Value)

1. The initial public offering price per share for the Securities, determined as provided in said Section 2, shall be \$-.

2. The purchase price per share for the Securities to be paid by the several Underwriters shall be \$-, being an amount equal to the initial public offering price set forth above less \$- per share; provided that the purchase price per share for any Option Securities purchased upon the exercise of the overallotment option described in Section 2(b) shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities.

Sch B - 1

SCHEDULE C

List of persons and entities
subject to lock-up

Prakash M. Achrekar
Roanld A. and Rise N. Alpert
Seung Yong Back
Thomas B. and Debra H. Bain
Kenneth Barnett, Manager, Synapse Fund I, LLC
Christopher R. Bentley
Cornelia A. Bentley
James Mathew Bentley
Jill M. Bentley
Matthew A. Bentley
Theodore C. Bentley
Theordore C. and Katherine F. Bentley
Bentley Trust "C" - Theodore C. Bentley, Co Trustee, Christopher R. Bentley,
Co Trustee
James W. Bentley, for the Bently Family 1995 Trust
Zeki Bilmen
Bruce C. Bird
Heidi Brousse
David M. Browne
Soo Buchanan
Jack Chitayat
Jay Chitins
Om Chitnis
Shashank Chitnis
Shekhar Chitnis
S.R. Chitnis, Father of Minor - Kaunteya Chitnis
S.R. Chitnis, Father of Minor - Santala Chitnis
Bae Ho Choi
Haein Choi-Yim
Yong Choo
Richard M. Cocchiaru
Patricia E. Colmenares
Nick F. Colmenares, Sr.
Robert Dale Connor
Jin-Sung Cook
David Croopnick
Gerald A. Croopnick
David Croopnick Father of Jordan Croopnick
Roseli and David Croopnick
Bruce and Shirley Crosswhite
Richard Dandlirer
C. Rees and Patricia S. Dean
Robert J.DiNunzio

Ronnie E. and Ann W. Duncan
David L. Dunkel
Marvin F. Essenhacner
Louise Ferguson
Joyce D. Flaschen and Robert J. Miller
Joyce D. Flaschen, Trustee Robert J. Miller
Lawrence Gilbert
Thomas Gregg
Laurence S. Grundy
Craig and Tami Harter
S. Gaye Hoeflich
Sung J. Hong
Sung Jae Hong
Sung Taek Hong
Sungwoon Hong
Wonpyo Hong
Paul L. and Kimberly L. Huey
Hewey E. Jackson
Jean K. Jackson
Doo Jong Jin, Yeonwoo Industry Co., Ltd.
Martha M. Johnson
Melvin C. Johnson
William L. Johnson
James Kang
Jimmy Kang
John Kang
Katie Kang
Megan Kang
Tai H. Kang
Rex Keggem
Michael L. Keller
Andy Kerr
Makoto Kikuchi
Chang Duk Kim
Jack W. Kirkland, Jr.
F. Bruce and Barbara J. Lauer
Robert P. Learnard
Yong J. Lee (aka James Y. Lee)
Hanako Levy
Amrat S. Lhowdhary
Xianghong Lin
Cynthia C. Lome
Leon G. Lome
Angelina G. Lopez
Oewana Marilyn Lowe
Charles G. Luton

Ian J. and Shirley A. Chowelhary Macdonald
Richard MaGraw-Wells
Satoshi Matsumuro
Carol Matthews
Brian McDougall
Austin McGhie
Thad L. McNulty, Spirit Fund, Ltd.
Thad L. McNulty, Trinity Fund, Ltd.
Uri Mermelstein
Lee Mi Sook
Arlene Mihaylo
Ilsoo Moon, Chairman, YIMI Limited
Makoto Morinaga
Bruce H. Murphy
Henry J. O'Keefe
June O'Keefe Schring
Roger Overby
Roger Overby
Susan S. Paik
Paul E. Parish
Paul Jeffrey Parish
Paul Jeffrey Parish Parent & Guardian of Carey Parish
Paul Jeffrey Parish Parent & Guardian of Christopher Parish
Paul Jeffrey Parish Parent & Guardian of Dorothy Parish
Paul Jeffrey Parish Parent & Guardian of Sarah Parish
Pyung Yong Park
Jeong Seo Park, CEO & Chairman, Growell Metal Inc.
James D. Patterson
Atakan Peker
R.C. Phillips
John H. and Martha L. Pieper
Martha L. Pieper, Trustee Walter H. Lewis Generation Skipping Trust FBO
Katherine P. White
Martha L. Pieper, Trustee Walter H. Lewis Generation Skipping Trust FBO
Scott C. Pieper
Martha L. Pieper, Trustee, Walter H. Lewis Marital Trust
Dr. Franz M. Pucher, Director, Notara Anstalt
Daniel Rafferty
Steven C. Richards
Douglas and Kathleen Rothschild
Ricardo A. Salas
Ricardo A. Salas, VP Cook Street, LLC
Ricardo A. Salas, VP J. Holdsworth Capital Ltd
Ricardo A. Salas, VP, ATI Holdings, LLC
William G. and Cindy M. Sanders
David M. Scruggs
Linda J. Scruggs
Ha Yun Song

Gary Starkman
John D. Start f/b/o Andalusian Partners, LLC
R. Stewart, RKCS, Ltd
Dean Tanella
Dean Tanella, Managing Member of Safe Harbor Fund I, LP
Henri Tchen, Manager, Synapse Fund II, LLC
Duane Teller
Mustafa Emre Tengunie
Michael A. Tenhover
The Geneva Trust
Thomas Yuen Family Trust
Peter Henry Thomson-Smith
John K. and Shirley A. Thorne, Co-Trustees of Thorne Family Trust
Ty Trayner
Eddy Valdespino
Neil Ward
David E. Ward, Jr.
Carolyn G. Wheeler
Jereld K. Wheeler
Thomas L. Wheeler III
Kenneth C. Whitten
Richard A. Wilson, III
Richard A. Wilson, III, Trustee of Joshua Tai Kang Irrevocable Trust
Richard A. Wilson, III, Trustee of Samuel Ho Kang Irrevocable Trust
Winvest Venture Partners, Inc.
Richmond Wolf
Connie Yuen
Jennifer Yuen
John M. Zabsky
Ehrich R.A. and Cornelia Zappey

FORM OF OPINION OF COMPANY'S COUNSEL
TO BE DELIVERED PURSUANT TO
SECTION 5(b)

(i) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of California.

(ii) The Company has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Prospectus and to enter into and perform its obligations under the Purchase Agreement.

(iii) The Company is duly qualified as a foreign corporation to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect.

(iv) The authorized, issued and outstanding capital stock of the Company is as set forth in the Prospectus in the column entitled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to the Purchase Agreement or pursuant to reservations, agreements or employee benefit plans referred to in the Prospectus or pursuant to the exercise of convertible securities or options referred to in the Prospectus); the shares of issued and outstanding capital stock have been duly authorized and validly issued and are fully paid and non-assessable; and none of the outstanding shares of capital stock of the Company was issued in violation of the preemptive or other similar rights of any securityholder of the Company under the Company's Articles of Incorporation or bylaws, or, to our knowledge, under any agreement to which the Company is bound.

(v) The Securities have been duly authorized for issuance and sale to the Underwriters pursuant to the Purchase Agreement and, when issued and delivered by the Company pursuant to the Purchase Agreement against payment of the consideration set forth in the Purchase Agreement, will be validly issued and fully paid and non-assessable, and no holder of the Securities is or will be subject to personal liability by reason of being such a holder.

(vi) The issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company under the Company's Articles of Incorporation or bylaws or, to our knowledge, under any agreement to which the Company is bound.

(vii) Each Subsidiary has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Prospectus and is duly qualified as a foreign corporation to transact business and

is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect; except as otherwise disclosed in the Registration Statement, all of the issued and outstanding capital stock of each Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and, to the best of our knowledge is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity; and none of the outstanding shares of capital stock of any Subsidiary was issued in violation of the preemptive or similar rights of any securityholder of such Subsidiary under the Company's Articles of Incorporation or bylaws, or, to our knowledge, under any agreement to which the Company is bound.

(viii) The Purchase Agreement has been duly authorized, executed and delivered by the Company.

(ix) The Registration Statement, including any Rule 462(b) Registration Statement, has been declared effective under the 1933 Act; any required filing of the Prospectus pursuant to Rule 424(b) has been made in the manner and within the time period required by Rule 424(b); and, to the best of our knowledge, (i) no stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement has been issued under the 1933 Act and (ii) no proceedings for that purpose have been instituted or are pending or threatened by the Commission.

(x) The Registration Statement, including any Rule 462(b) Registration Statement, the Rule 430A Information and the Rule 434 Information, as applicable, the Prospectus and each amendment or supplement to the Registration Statement and the Prospectus as of their respective effective or issue dates (other than the financial statements and supporting schedules included therein or omitted therefrom, as to which we need express no opinion) complied as to form in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations.

(xi) If Rule 434 has been relied upon, the Prospectus is not "materially different," as such term is used in Rule 434, from the prospectus included in the Registration Statement at the time it became effective.

(xii) The form of certificate used to evidence the Common Stock complies in all material respects with all applicable statutory requirements, with any applicable requirements of the charter and by-laws of the Company and the requirements of the Nasdaq National Market.

(xiii) To the best of our knowledge, there is not pending or threatened any action, suit, proceeding, inquiry or investigation, to which the Company or any subsidiary is a party, or to which the property of the Company or any subsidiary is subject, before or brought by any court or governmental agency or body, domestic or foreign, which might reasonably be expected to result in a Material Adverse Effect, or which might reasonably be expected to materially and adversely affect the consummation of the transactions contemplated in the Purchase Agreement or the performance by the Company of its obligations thereunder.

(xiv) The information in the Prospectus under "Risk Factors - 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," "Business-Government Regulation," "Description of Capital Stock" and "Shares Eligible for Future Sale" and in the Registration Statement under Item 14, to the extent that it constitutes matters of law, summaries of legal matters, the Company's charter and bylaws or legal proceedings, or legal conclusions, has been reviewed by us and is correct in all material respects.

(xv) To the best of our knowledge, there are no statutes or regulations that are required to be described in the Prospectus that are not described as required.

(xvi) All descriptions in the Prospectus of contracts and other documents to which the Company or its subsidiaries are accurate in all material respects; to the best of our knowledge there are no franchises, contracts, indentures, mortgages, loan agreements, notes, leases or other instruments required to be described or referred to in the Registration Statement or to be filed as exhibits thereto other than those described or referred to therein or filed or incorporated by reference as exhibits thereto and the descriptions thereof or reference thereto are correct in all material respects.

(xvii) To the best of our knowledge, neither the Company nor any subsidiary is in violation of its charter or by-laws and no default by the Company or any subsidiary exists in the due performance or observance of any material obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, loan agreement, note, lease or other agreement or instrument that is described or referred to in the Registration Statement or the Prospectus or filed or incorporated by reference as an exhibit to the Registration Statement.

(xviii) No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any court or governmental authority or agency, domestic or foreign (other than under the 1933 Act and the 1933 Act Regulations, which have been obtained, or as may be required under the securities or blue sky laws of the various states or as may be required by the NASD, as to which we need express no opinion) is necessary or required in connection with the due authorization, execution and delivery of the Purchase Agreement or for the offering, issuance, sale or delivery of the Securities.

(xix) The execution, delivery and performance of the Purchase Agreement and the consummation of the transactions contemplated in the Purchase Agreement and in the Registration Statement, the issuance and sale of the Securities as contemplated by the Purchase Agreement, the compliance by the Company with its obligations under the Purchase Agreement, the use of the proceeds from the sale of the Securities as described in the Prospectus and the performance by the Company of its obligations under the Purchase Agreement do not and will not, whether with or without the giving of notice or lapse of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined in Section 1(a)(x) of the Purchase Agreement) under or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any subsidiary pursuant to any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or any other

agreement or instrument to which the Company or any subsidiary is a party or by which it or any of them may be bound and which is filed as an exhibit to the Registration Statement, or to which any of the property or assets of the Company or any subsidiary is subject (except for such conflicts, breaches or defaults or liens, charges or encumbrances that would not have a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter or by-laws of the Company or any subsidiary, or any applicable law, statute, rule, regulation, judgment, order, writ or decree, known to us, of any government, government instrumentality or court, domestic or foreign, having jurisdiction over the Company or any subsidiary or any of their respective properties, assets or operations.

(xx) To the best of our knowledge, there are no persons with registration rights or other similar rights to have any securities registered pursuant to the Registration Statement or otherwise registered by the Company under the 1933 Act.

(xxi) The Company is not an "investment company" or an entity "controlled" by an "investment company," as such terms are defined in the 1940 Act.

During the course of the preparation of the Registration Statement, we participated in conferences with officers and other representatives of the Company, representatives of the Underwriters and representatives of the Company's certified public accountants, at which conferences, the contents of the Registration Statement were discussed. We have not independently verified or determined the accuracy, completeness, or fairness of the statements contained in the Registration Statement and the Prospectus and we take no responsibility therefor (except, to the extent specifically set forth herein). On the basis of the foregoing, during the course of the preparation of the Registration Statement and Prospectus (and any amendment or supplement thereto), nothing has come to our attention that would lead us to believe that the Registration Statement or any amendment thereto, including the Rule 430A Information and Rule 434 Information (if applicable), (except for financial statements and related notes and schedules thereto and other financial data included therein or omitted therefrom, as to which we need make no statement), at the time such Registration Statement or any such amendment became effective, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading or that the Prospectus or any amendment or supplement thereto (except for financial statements and related notes and schedules thereto and other financial data included therein or omitted therefrom, as to which we need make no statement), at the time the Prospectus was issued, at the time any such amended or supplemented prospectus was issued or at the Closing Time, included or includes an untrue statement of a material fact or omitted or omits to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

FORM OF OPINION OF COMPANY'S PATENT COUNSEL
TO BE DELIVERED PURSUANT TO
SECTION 5(c)

(i) The information in the Prospectus under "Business - Our Intellectual Property," to the extent that it constitutes matters of law, summaries of legal matters, legal proceedings or legal conclusions, has been reviewed by us and is correct in all material respects.

(ii) To the best of our knowledge, there are no pending legal or government proceedings relating to patents, patent applications or intellectual property rights covering technology of the Company described in the Prospectus to which the Company is a party or to which any patents, patent applications or intellectual property rights covering technology of the Company described in the Prospectus are subject, which might reasonably be expected to result in a Material Adverse Effect, and we do not know of any such proceedings which are threatened or contemplated by governmental authorities or others.

(iii) We are unaware of any basis for a finding that the Company does not have clear title or valid license rights to the patents or patent applications referenced in the Prospectus as being owned by or licensed to the Company and covering the Company's technology, and on the basis of facts we have, we are not aware that any such patents are invalid or unenforceable.

(iv) Based solely upon our review of the Caltech License Agreement (as defined below), all Licensed Patent Rights and Amorphous Alloy Technology (as such terms are defined in the Caltech License Agreement) of the California Institute of Technology have been effectively licensed to the Company in accordance with the terms and conditions of the Caltech License Agreement, subject to (i) the effect of any bankruptcy, insolvency, reorganization, fraudulent conveyance, bulk sale, preference, equitable subordination moratorium, marshaling or similar law affecting the enforcement of creditors' rights generally, or (ii) the effect of general principles of equity, including without limitation, concepts of materiality, reasonableness, good faith and fair dealing, and the possible unavailability of specific performance or injunctive relief. For purposes hereof, "Caltech License Agreement" shall mean that certain Amended and Restated License Agreement, dated September 1, 2001, between the California Institute of Technology and the Company, as attached to this opinion as Exhibit A.

(v) Based on our review of the patent files in our possession or brought to our attention by the Company, we are unaware of any United States patent containing any valid claim that is or would be infringed, either literally or under the doctrine of

equivalents, by the activities of the Company described in the Prospectus.

Very truly yours,

B-2

-, 2002

MERRILL LYNCH & CO.
Merrill Lynch, Pierce, Fenner & Smith
Incorporated

as Representatives of the several
Underwriters to be named in the
within-mentioned Purchase Agreement

c/o Merrill Lynch & Co.
Merrill Lynch, Pierce, Fenner & Smith
Incorporated

North Tower
World Financial Center
New York, New York 10281-1209

Re: Proposed Public Offering by Liquidmetal Technologies

Dear Sirs:

The undersigned, a shareholder [and an officer and/or director] of Liquidmetal Technologies, a California corporation (the "Company"), understands that Merrill Lynch & Co., Merrill Lynch, Pierce, Fenner & Smith Incorporated ("Merrill Lynch"), UBS Warburg LLC and Robert W. Baird & Co. Incorporated propose to enter into a Purchase Agreement (the "Purchase Agreement") with the Company providing for the public offering of shares of the Company's common stock, no par value per share (the "Common Stock"). In recognition of the benefit that such an offering will confer upon the undersigned as a stockholder [and an officer and/or director] of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each underwriter to be named in the Purchase Agreement that, during a period of 180 days from the date of the Purchase Agreement, the undersigned will not, without the prior written consent of Merrill Lynch, directly or indirectly, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant for the sale of, or otherwise dispose of or transfer any shares of the Company's Common Stock or any securities convertible into or exchangeable or exercisable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition, or file any registration statement under the Securities Act of 1933, as amended, with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise.

Very truly yours,

C-1

Signature: -----
Print Name: -----

C-2

INDEPENDENT AUDITORS' CONSENT

We consent to the use in this Amendment No. 4 to Registration Statement No. 333-73716 on Form S-1 of Liquidmetal Technologies of our report dated April 4, 2002, appearing in the Prospectus, which is a part of such Registration Statement, and to the reference to us under the heading "Experts" in such Prospectus.

/s/ Deloitte & Touche LLP
Tampa, Florida
May 1, 2002

