LIQUIDMETAL TECHNOLOGIES INC

Form S-1/A August 03, 2012

As filed with the Securities and Exchange Commission on August 3, 2012

Registration No. 333- 182729

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Amendment No. 1 to FORM S-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

LIQUIDMETAL TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 2800 (Primary Standard Industrial Classification Code Number) 33-0264467 (I.R.S. Employer Identification Number)

30452 Esperanza Rancho Santa Margarita, California 92688 (949) 635-2100

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

Thomas Steipp
President and Chief Executive Officer
Liquidmetal Technologies, Inc.
30452 Esperanza

Rancho Santa Margarita, California 92688

Phone: (949) 635-2100

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

Copies to:
Curt P. Creely, Esq.
Foley & Lardner LLP
100 North Tampa Street, Suite 2700
Tampa, Florida 33602
(813) 229-2300
(813) 221-4210—Fax

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement, as determined by the selling stockholders.

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. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please 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."

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer "	Accelerated filer "
Non-accelerated filer "	Smaller reporting company x

CALCULATION OF REGISTRATION FEE

		Proposed Maximum	Proposed Maximum	
Title of Each Class of	Amount to be	Offering Price	Aggregate	Amount of
Securities to be Registered	Registered	Per Share	Offering Price	Registration Fee
Common Stock issuable upon conversion				
of Senior Convertible Notes due on				
September 1, 2013(1)	51,136,370 shares	\$ 0.352 (2) \$ 18,000,003 (2	2) \$ 2,063
Common Stock issuable upon exercise of				
Common Stock Purchase Warrants(1)	28,125,000 shares	\$ 0.384 (3) \$ 10,800,000 (3	3) \$ 1,238
TOTAL	79.261.370 shares		\$ 28,800,003	\$ 3.301 (4)

- (1) Pursuant to Rule 416 under the Securities Act of 1933, the securities being registered hereunder also include such indeterminate number of additional shares of common stock as may be issuable as a result of stock splits, stock dividends, and similar transactions.
- (2) Pursuant to Rule 457(g) under the Securities Act of 1933, the proposed maximum offering price (and, accordingly, the amount of the registration fee) has been calculated based on the conversion price of the Senior Convertible Notes due on September 1, 2013.
- (3) Pursuant to Rule 457(g) under the Securities Act of 1933, the proposed maximum offering price (and, accordingly, the amount of the registration fee) has been calculated based on the exercise price of the Common Stock Purchase Warrants.

(4) Previously paid.

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.

SUBJECT TO COMPLETION, DATED AUGUST 3, 2012

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.

LIQUIDMETAL TECHNOLOGIES, INC.

79,261,370 Shares Common Stock

This prospectus covers an aggregate of up to 79,261,370 shares of our common stock, \$0.001 par value per share, that may be offered from time to time by the selling stockholders named in this prospectus. The shares being offered by this prospectus consist of:

up to 51,136,370 shares issuable upon the conversion of our Senior Convertible Notes due on September 1, 2013 issued by us in connection with a private placement in July 2012; and

up to 28,125,000 shares issuable upon the exercise of the common stock purchase warrants issued by us in our July 2012 private placement.

This prospectus also covers any additional shares of common stock that may become issuable upon any anti-dilution adjustment pursuant to the terms of the Senior Convertible Notes due on September 1, 2013 or the common stock purchase warrants issued to the selling stockholders by reason of stock splits, stock dividends, and other events described therein. The Senior Convertible Notes due on September 1, 2013 and common stock purchase warrants referred to above were acquired by the selling stockholders in a private placement by us that closed on July 2, 2012.

We are registering these shares of our common stock for resale by the selling stockholders named in this prospectus, or their transferees, pledgees, donees or successors. We will not receive any proceeds from the sale of these shares by the selling stockholders. These shares are being registered to permit the selling stockholders to sell shares from time to time, in amounts, at prices and on terms determined at the time of offering. The selling stockholders may sell this common stock through ordinary brokerage transactions, directly to market makers of our shares or through any other means described in the section entitled "PLAN OF DISTRIBUTION" beginning on page 68.

Before purchasing any of the shares covered by this prospectus, carefully read and consider the risk factors in the section entitled "RISK FACTORS" beginning on page 6.

Our common stock is currently quoted on the OTC Bulletin Board under the symbol "LQMT." On July 11, 2012, the last reported sales price of our common stock was \$0.281 per share.

Our principal executive offices are located at 30452 Esperanza, Rancho Santa Margarita, California 92688, and our telephone number at that address is (949) 635-2100.

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 date of this prospectus is	, 2012.	

TABLE OF CONTENTS

PROSPECTUS SUMMARY	2
RISK FACTORS	6
FORWARD-LOOKING STATEMENTS	15
SELLING STOCKHOLDERS	16
<u>USE OF PROCEEDS</u>	18
DIVIDEND POLICY	18
MARKET PRICE OF COMMON STOCK AND RELATED STOCKHOLDER MATTERS	18
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS	
OF OPERATIONS	22
CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND	
FINANCIAL DISCLOSURE	34
<u>BUSINESS</u>	35
<u>MANAGEMENT</u>	48
EXECUTIVE COMPENSATION	50
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS	56
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	57
DESCRIPTION OF SECURITIES	61
<u>PLAN OF DISTRIBUTION</u>	68
<u>LEGAL MATTERS</u>	69
<u>EXPERTS</u>	69
WHERE YOU CAN FIND MORE INFORMATION	70
INDEX TO DECEMBER 31, 2011 CONSOLIDATED FINANCIAL STATEMENTS	F-1
INDEX TO (UNAUDITED) MARCH 31, 2012 CONSOLIDATED FINANCIAL STATEMENTS	F-29
<u>SIGNATURES</u>	S-1

This prospectus is a part of the registration statement that we filed with the Securities and Exchange Commission. The selling stockholders named in this prospectus may from time to time sell the securities described in this prospectus.

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from the information contained in this prospectus. The common stock is not being offered in any jurisdiction where offers and sales are not permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of when this prospectus is delivered or when any sale of our securities occurs.

Table of Contents

PROSPECTUS SUMMARY

This summary highlights information that we present more fully in the rest of this prospectus and does not contain all of the information you should consider before investing in our securities. This summary contains forward-looking statements that involve risks and uncertainties, such as statements about our plans, objectives, expectations, assumptions or future events. 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. You should read the entire prospectus carefully, including the "Risk Factors" section and our consolidated financial statements and related notes.

Overview

Unless the context requires otherwise, as used in this prospectus, the terms "Liquidmetal," "Liquidmetal Technologies," "we," "us," "our," "the Company," "our Company," and similar references refer to Liquidmetal Technologies, Inc. and its subsidiaries. We have registered the following trademark, which is used in this prospectus: "Liquidmetal®."

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary bulk alloys and composites that utilize the advantages offered by amorphous alloy technology. We design, develop and sell products and components from bulk amorphous alloys to customers in various industries. We also partner with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products. We believe that our proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace.

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

Our revenues are derived from (1) selling our bulk Liquidmetal alloys products, which include non-consumer electronic devices, medical products, and sports and leisure goods, (2) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development, and (3) product licensing and royalty revenue from our licensees. We expect that these sources of revenue will continue to significantly change the character of our revenue mix.

Our Strategy

The key elements of our strategy include:

Focusing our marketing activities on select products with expected higher gross-margins;

Pursuing strategic partnerships in order to more rapidly develop and commercialize products; and

Advancing the Liquidmetal® Brand by (1) positioning Liquidmetal alloys as a superior substitute for materials currently used in a variety of products across a range of industries and (2) establishing Liquidmetal alloys as an enabling technology that will facilitate the creation of a broad range of commercially viable new products.

Applications for Liquidmetal Alloys

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

Table of Contents

Components for Non-Consumer Electronic Products. We design, develop and produce components for non-consumer electronic devices utilizing our bulk Liquidmetal alloys and believe that our alloys offer enhanced performance and design benefits for these components in certain applications. Our strategic focus is primarily on higher-margin parts that command a price commensurate with the performance advantages of our alloys. These product categories in the non-consumer electronics field include, but are not limited to, parts for high-end printers, commercial imaging devices, aerospace components, medical devices, and industrial machines.

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

Medical Devices. We are engaged in product development efforts relating to various medical devices that could be made from bulk Liquidmetal alloys. We believe that the unique properties of bulk Liquidmetal alloys provide a combination of performance and cost benefits that could make them a desirable replacement to incumbent materials, such as stainless steel and titanium, currently used in various medical device applications. Our ongoing emphasis has been on surgical instrument applications for Liquidmetal alloys.

Recent Developments

July 2012 Private Placement of Convertible Notes and Warrants. On July 2, 2012, the Company entered into definitive agreements relating to a private placement (the "Private Placement") of \$12.0 million in principal amount of Senior Convertible Notes due on September 1, 2013 (the "Convertible Notes") and Warrants to the purchasers of the Convertible Notes giving them the right to purchase up to an aggregate of 18,750,000 shares of the Company's common stock at an exercise price of \$0.384 per share (the "Warrants") (subject to adjustment as described below under "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus). The Convertible Notes are convertible at any time at the option of the holder into shares of the Company's common stock at \$0.352 per share (subject to adjustment as described below under "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus). The closing of the Private Placement occured on July 2, 2012. The Convertible Notes and the Warrants were issued pursuant to a Securities Purchase Agreement, dated July 2, 2012, among the Company and the purchasers of the Convertible Notes (the "Securities Purchase Agreement"). In addition, in connection with the Private Placement, the Company entered into a Registration Rights Agreement under which it agreed to file a registration statement with the Securities and Exchange Commission (the "SEC") covering the resale of the shares of the Company's common stock issuable pursuant to the Notes and Warrants. The purchasers of the Convertible Notes and the Warrants in the Private Placement are the selling stockholders described in this prospectus. See "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus.

June 2012 Transactions with Visser Precision Cast, LLC. On June 1, 2012, we entered into a master transaction agreement (the "Visser Master Transaction Agreement") with Visser Precision Cast, LLC ("Visser") relating to a strategic transaction for manufacturing services and financing (the "Visser Transaction"). Pursuant to the terms of the Visser Master Transaction Agreement, the Company and Visser have entered into a manufacturing services agreement (the "Visser Manufacturing Services Agreement"), a subscription agreement (the "Visser Subscription Agreement"), a security agreement, a registration rights agreement, and a sublicense agreement. Pursuant to the terms of the Visser Manufacturing Services Agreement, the Company agreed to engage Visser as the exclusive manufacturer of conventional products and components and licensed products and components, which are products and components using or incorporating any of the Company's intellectual property for all fields of use other than consumer electronic products and fields of use covered by exclusive licenses and sublicenses existing on the date of the Visser Manufacturing Services Agreement. Pursuant to the terms of the Visser Subscription Agreement, the Company agreed to issue and sell to Visser in a private placement transaction (i) up to 30,000,000 shares of common stock at a

purchase price of \$0.10 per share, (ii) warrants (the "Visser Warrants") to purchase up to 15,000,000 shares of common stock at an exercise price of \$0.22 per share and (iii) a secured convertible promissory note (the "Visser Promissory Note") in the aggregate principal amount of up to \$2,000,000, the principal of which is convertible into shares of common stock at a conversion rate of \$0.22 per share. All of the shares of common stock issuable pursuant to the Visser Subscription Agreement and upon exercise or conversion of the Visser Warrants and the Visser Promissory note, as the case may be, are subject to a lock-up period through December 31, 2016. On June 1, 2012, the Company issued and sold to Visser 20,000,000 shares of common stock and a warrant to purchase up to 11,250,000 shares of common stock for an aggregate purchase price of \$2,000,100 and also executed the Visser Promissory Note. On June 28, 2012, the Company issued and sold to Visser the remaining 10,000,000 shares of common stock and a warrant to purchase up to 3,750,000 shares of common stock for an aggregate purchase price of \$1,000,100. See "BUSINESS—Significant Transactions—June 2012 Transactions with Visser Precision Cast, LLC" beginning on page 39 of this prospectus.

Table of Contents

Corporate Information

We were originally incorporated in California in 1987, and we reincorporated in Delaware in May 2003. Our principal executive office is located at 30452 Esperanza, Rancho Santa Margarita, California 92688. Our telephone number at that address is (949) 635-2100. Our Internet website address is www.liquidmetal.com and all of our filings with the Securities and Exchange Commission ("SEC") are available free of charge on our website. Information contained on our website is not incorporated by reference into this prospectus, and such information should not be considered to be part of this prospectus.

The Offering

Common stock offered

Up to 79,261,370 shares of our common stock are being offered by the selling stockholders. These shares consist of:

up to 51,136,370 shares issuable upon the conversion of our Senior Convertible Notes due on September 1, 2013 (the "Convertible Notes") at a conversion price of \$0.352 per share (subject to adjustment as described below under "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus), which Convertible Notes were issued by us to various selling stockholders in a private placement on July 2, 2012; and

up to 28,125,000 shares are issuable to various selling stockholders upon the exercise of outstanding common stock purchase warrants (the "Warrants") issued by us to the purchasers of the Convertible Notes in the July 2, 2012 private placement, which Warrants have an exercise price of \$0.384 per share (subject to adjustment as described below under "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus).

Shares of common stock outstanding after the

offering 271,114,276 shares of common stock

Use of proceeds We will not receive any proceeds from the sale of the shares offered by the selling

stockholders. Any proceeds we receive from the selling stockholders upon their exercise

of the Warrants will be used for general working capital.

Risk factors See "RISK FACTORS" and other information included in this prospectus for a discussion

of factors you should carefully consider before deciding to invest in the shares.

OTC Bulletin Board symbol LQMT

We are registering the shares being offered under this prospectus pursuant to the registration rights agreement that we entered into with the selling stockholders described below under "BUSINESS—Significant Transactions—July 2012 Private

Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus. See also "DESCRIPTION OF SECURITIES—Registration Rights" beginning on page 64 of this prospectus. We entered into the registration rights agreement in connection with a private placement (which closed on July 2, 2012) in which we offered and sold to the selling stockholders \$12.0 million in principal amount of the Convertible Notes (with a conversion price of \$0.352 per share, subject to adjustment as described below under "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus) together with Warrants to purchase up to 18,750,000 shares of our common stock at an exercise price of \$0.384 per share (subject to adjustment as described below under "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus).

Table of Contents

The number of shares of common stock that will be outstanding immediately after this offering is based on the 191,852,906 shares of our common stock outstanding as of July 2, 2012 and assumes the full conversion of the Convertible Notes and full exercise of the Warrants identified above. There is no guarantee that the Convertible Notes will be converted into common stock or that the Warrants will be exercised. The number of shares of common stock that will be outstanding immediately after this offering does not include:

44,779,557 shares of common stock issuable upon the exercise of warrants outstanding as of July 2, 2012, at a weighted average exercise price of \$0.40 per share;

4,171,800 shares of common stock issuable upon the exercise of options outstanding as of July 2, 2012, at a weighted average exercise price of \$0.42 per share;

16,896,073 shares of common stock issuable upon the conversion of the Series A-1 and A-2 Preferred Stock outstanding as of July 2, 2012, at prices of \$0.10 and \$0.22, respectively; and

30,000,000 shares of common stock reserved for future grant or issuance as of July 2, 2012 under our 2012 Equity Incentive Plan.

Table of Contents

RISK FACTORS

An investment in our securities involves a high degree of risk and many uncertainties. You should carefully consider the specific factors listed below together with the other information included in this prospectus before purchasing our securities in this offering. If any of the possibilities described as risks below actually occurs, our operating results and financial condition would likely suffer and the trading price of our securities could fall, causing you to lose some or all of your investment in the securities being offered. The risks described below are not the only ones facing us. Additional risks not currently known to us or that we currently believe are immaterial also may impair our business, operations, liquidity and stock price materially and adversely. The following is a description of what we consider the key challenges and material risks to our business and an investment in our securities.

We have limited funding to support our current operations.

We anticipate that our current capital resources will be sufficient to fund our operations through at least the end of 2013. After 2013, we may require additional funding in order to continue operations as a going concern. We have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, Visser's ability to produce our products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of its control, including the nature and design of the component, the customer's specifications, and required delivery timelines. Such factors may require that we raise additional funds to support our operations beyond 2013. There can be no assurance that we will be successful in securing needed financing at acceptable terms, if at all. If funding is insufficient at any time in the future, we may be required to alter or reduce the scope of our operations. If we are successful in procuring additional financing when required it will most likely result in our issuing additional shares and/or rights to acquire shares of our capital stock. Accordingly, our access to additional financing when needed is anticipated to be dilutive to existing shareholders.

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

In a private placement completed on July 2, 2012, we issued an aggregate of \$12 million in principal amount of senior convertible notes. The notes are payable in twelve equal monthly installments beginning in October 2012. Although the notes are payable through the issuance of shares of our common stock to holders of the notes, the ability to issue stock in satisfaction of the note payments is subject to various conditions (including trading volume conditions) that we may not be able to meet. In such event, we could be required to use cash to repay some or all of a portion of the notes, and we may not have the funds to make such payments when due. Even if we do have the funds to make such cash payments, the payments may adversely affect our ability to fund our operations. Additionally, the notes issued in July 2012 impose certain restrictive covenants on us that may impede our ability to operate our company. For example, the notes prevent us from incurring additional debt, with certain exceptions, while the notes are still outstanding. Even if we have the right to satisfy the notes by issuing shares of our common stock, the shares issued to the holders of the notes could be highly dilutive to our shareholders.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our consolidated operating results, our ability to operate our business and our stock price.

We determined that we had a material weakness with respect to warrant recognition, resulting in a restatement of our financial statements for the year ended December 31, 2010 and for the quarters ended March 30, 2011, June 30, 2011 and September 30, 2011. We also determined that we had a material weakness with respect to earnings per share disclosure, resulting in a restatement of our financial statements for the year ended December 31, 2010.

As of December 31, 2011, our chief executive officer and our chief financial officer concluded that our disclosure controls and procedures were not effective. Since the restatement, we have implemented new processes and procedures to improve our internal control over financial reporting. We believe that these actions will help to remediate the identified material weaknesses and internal control deficiencies.

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

We have experienced significant cumulative operating losses since our inception. Our operating loss for the fiscal year ended December 31, 2011 was \$6.5 million while our operating income for the fiscal year ended December 31, 2010 was \$11.9 million. We had an accumulated deficit of approximately \$175.9 million at December 31, 2011. Of this accumulated deficit, \$52.1 million was attributable to losses generated by our discontinued parts manufacturing and coatings businesses. We anticipate that we may continue to incur operating losses for the foreseeable future. Consequently, it is possible that we may never achieve positive earnings and, if we do achieve positive earnings, we may not be able to achieve them on a sustainable basis.

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

We have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, our supplier's ability to produce our products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of its control, including the nature and design of the component, the customer's specifications, and required delivery timelines.

Table of Contents

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

We have made assumptions regarding the market size for, and the manufacturing requirements of, our products and components based in part on information we received from third parties and also from our limited history. If these assumptions prove to be incorrect, we may not achieve anticipated market penetration revenue targets or profitability.

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

As a result of our limited history of developing and marketing bulk amorphous alloy components and products, as well as our new manufacturing strategy of partnering with contract manufacturers and alloy producers, our historical results of operations may not be indicative of our future results.

We have entered into an exclusive manufacturing arrangement with Visser Precision Cast, LLC.

Pursuant to the terms of a manufacturing services agreement dated June 1, 2012 (the "Visser Manufacturing Services Agreement") between the Company and Visser Precision Cast, LLC ("Visser"), we have engaged Visser as our exclusive manufacturer of conventional products and components and licensed products and components, which are products and components using or incorporating any of our intellectual property for all fields of use other than consumer electronic products and fields of use covered by exclusive licenses and sublicenses existing on the date of the Visser Manufacturing Services Agreement (such intellectual property, the "LMT Technology"). We have further agreed that we will not, directly or indirectly, conduct manufacturing operations, subcontract for the manufacture of products or components or grant a license to any other party to conduct manufacturing operations using the LMT Technology, except for certain limited exceptions. The term of the Visser Manufacturing Services Agreement is perpetual. Pursuant to the terms of a sublicense agreement dated June 1, 2012 between our company and Visser, we agreed to sublicense to Visser, on a fully-paid up, royalty-free, irrevocable, perpetual, worldwide basis, all rights held by us in the LMT Technology. In addition, Visser has a right of first refusal over any proposed transfer by us of LMT Technology pursuant to any license, sublicense, sale or other transfer, other than a license to a machine or alloy vendor.

A disruption of the operations of Visser could cause significant delays in shipments of our products and may adversely affect our revenue, cost of goods sold and results of operations. Furthermore, Visser's ability to produce our products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of its control, including the nature and design of the component, the customer's specifications, and required delivery timelines.

In addition to the exclusive manufacturing arrangement with Visser Precision Cast, LLC, we rely on sole source suppliers for mold making, manufacturing and alloying of our bulk amorphous alloy and parts, as well as the manufacturing of our bulk amorphous alloy production machines.

We currently have one supplier who fulfills the mold making and manufacturing of our bulk amorphous alloy parts. Our supplier may allocate its limited capacity to fulfill the production requirements of its other customers. In the event of a disruption of the operations of our supplier, we may not have a secondary manufacturing source immediately available. Such an event could cause significant delays in shipments and may adversely affect our revenue, cost of goods sold and results of operations.

We currently have one supplier who fulfills our alloying/manufacturing of bulk amorphous alloys. In the event of a disruption of the operations of our alloy supplier, we may not have a secondary alloying source immediately available. Such an event could cause significant delays in shipments and may adversely affect our revenue, cost of goods sold

and results of operations.

Our bulk amorphous alloy production machines are manufactured by one supplier. Orders for additional machines are estimated to be built with a 26-week lead time. If our bulk alloy parts supplier requires more production machines to manufacture customer parts due to an unexpected demand, we may experience delays in shipment, increased cost of goods sold or loss in revenues. Additionally, in the event of a disruption in the operations of our production machine supplier, our bulk alloy parts supplier may not have a secondary machine manufacturer immediately available. Such an event could cause significant delays in fulfilling customers' orders and may adversely affect our revenue, cost of goods sold and results of operations.

Table of Contents

We rely on a supplier that has limited experience in manufacturing our products, and our supplier may encounter manufacturing problems or delays or may be unable to produce high-quality products at acceptable costs.

We rely on our supplier to manufacture all of our Liquidmetal alloy products, including products that we develop in conjunction with our customers. Our supplier has 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 our supplier will be able to meet all of our manufacturing needs. We also cannot assure you that our supplier's will be able to produce the intended products with the production yields, quality controls, and production costs that we currently assume.

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

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

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

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

identify a potential customer and introduce the customer to Liquidmetal alloys;

work with the customer to select and design the parts to be fabricated from Liquidmetal alloys;

make the molds and tooling to be used to produce the selected part;

make prototypes and samples for customer testing;

work with our customers to test and analyze prototypes and samples; and

with respect to some types of products, such as medical devices, obtain regulatory approvals.

We believe that our average sales cycle (the time we deliver a proposal to a customer until the time our customer fully integrates our Liquidmetal alloys into its product) could be a significant period of time. Our history to date has demonstrated that the sales cycle could extend significantly longer than we anticipate. The time it takes to transition a customer from limited production to full-scale production runs will depend upon the nature of the processes and products into which our Liquidmetal alloys are integrated. Moreover, we have found that customers often proceed very cautiously and slowly before incorporating a fundamentally new and unique type of material into their products.

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

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

Table of Contents

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

For the near future, we expect that a significant portion of our revenue may be concentrated in a limited number of customers. A reduction, delay, or cancellation of orders from one or more of these customers or the loss of one or more customer relationships could significantly reduce our revenue and harm our business. Unless we establish long-term sales arrangements with these customers, they will have the ability to reduce or discontinue their purchases of our products on short notice.

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

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

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

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

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

The future growth and success of our Liquidmetal alloy business will depend in part on our ability to establish and retain a technological advantage over other materials for our targeted applications. For many of our targeted applications, we will compete with manufacturers of similar products that use different materials, many of which have substantially greater financial and other resources than we do. These different materials may include plastics, titanium alloys, or stainless steel, among others, and we will compete directly with suppliers of the incumbent material. In addition, in each of our targeted markets, our success will depend in part on the ability of our customers to compete successfully in their respective markets. Thus, even if we are successful in replacing an incumbent material in a finished product, we will remain subject to the risk that our customer will not compete successfully in its own market.

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

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

applications, and developing and improving new bulk amorphous alloy compositions. Our failure to further expand our technology base could limit our growth opportunities and hamper our commercialization efforts.

Future advances in materials science could render Liquidmetal alloys obsolete.

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

Table of Contents

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

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

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

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

We may derive some portion of our revenue from sales outside the United States which may expose the Company to foreign commerce risks.

We may sell a portion of our products to customers outside of the United States, and our operations and revenue may be subject to risks associated with foreign commerce, including transportation delays and foreign tax/legal compliance. Moreover, customers may sell finished goods that incorporate our components and products outside of the United States, which exposes us indirectly to additional foreign commerce risks.

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

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

Our business could be subject to the potential adverse consequences of exchange rate fluctuations.

We expect to conduct business in various foreign currencies and will be exposed to market risk from changes in foreign currency exchange rates and interest rates. Fluctuations in exchange rates between the U.S. dollar and such foreign currencies may have a material adverse effect on our business, results of operations, and financial condition and could specifically result in foreign exchange gains and losses. The impact of future exchange rate fluctuations on our operations cannot be accurately predicted. To the extent that the percentage of our non-U.S. dollar revenue derived from international sales increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates will increase further.

Table of Contents

Our inability to protect our licenses, patents, and proprietary rights in the United States and foreign countries could harm our business.

We own several patents relating to amorphous alloy technology, and we have other rights to amorphous alloy patents through an exclusive license from the California Institute of Technology ("Caltech"). Our success depends in part on our ability to obtain and maintain patent and other proprietary right protection for our technologies and products in the United States and other countries. If we are unable to obtain or maintain these protections, we may not be able to prevent third parties from using our proprietary rights. Specifically, we must:

protect and enforce our owned and licensed patents and intellectual property;

exploit our owned and licensed patented technology; and

operate our business without infringing on the intellectual property rights of third parties.

Our licensed technology is comprised of 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. Those patents have expiration dates between 2013 and 2028. 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.

In August 2010, we entered into a license transaction with Apple Inc. ("Apple") pursuant to which (i) we contributed substantially all of our intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, called Crucible Intellectual Property, LLC ("CIP"), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, and (iii) CIP granted back to us a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use. In connection with this transaction, our ongoing obligations to Apple (including the obligation to transfer new intellectual property to CIP) are secured through August 2012 by a security interest in substantially all of our assets, and if we are unable to comply with these obligations, Apple may be entitled to foreclose on such assets.

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

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

Our success depends, in part, on our ability to operate without infringing on valid, enforceable patents or proprietary rights of third parties and without breaching any licenses that may relate to our technologies 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.

Table of Contents

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

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

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

We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

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

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

In addition, the processing of beryllium, a minor constituent element of some of our alloys, can result in the release of beryllium into the workplace and the environment and in the creation of beryllium oxide as a by-product. Beryllium is classified as a hazardous air pollutant, a toxic substance, a hazardous substance, and a probable human carcinogen under environmental, safety, and health laws, and various acute and chronic health effects may result from exposure to beryllium. While we are not required to obtain a permit from the U.S. Environmental Protection Agency or other government agencies to process beryllium, our failure to comply with other present or future governmental regulations related to the processing of beryllium could result in suspension of manufacturing operations and substantial fines or

criminal penalties.

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

The existence of minority stockholders in our Liquidmetal Golf subsidiary creates potential for conflicts of interest.

We directly own 79% of the outstanding capital stock of Liquidmetal Golf, our subsidiary that has the exclusive right to commercialize our technology in the golf market. The remaining 21% of the Liquidmetal Golf stock is owned by approximately 95 stockholders of record. As a result, conflicts of interest may develop between us and the minority stockholders of Liquidmetal Golf. To the extent that our officers and directors are also officers or directors of Liquidmetal Golf, matters may arise that place the fiduciary duties of these individuals in conflicting positions.

Table of Contents

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

As of July 2, 2012, our executive officers, directors and insiders and entities affiliated with them will, in the aggregate, beneficially own approximately 41% of our common stock and 63% of our preferred stock. 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.

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

During 2011, the highest bid price for our common stock was \$0.84 per share, while the lowest bid price during that period was \$0.12 per share. During the first six months of 2012, the highest bid price for our common stock was \$0.63 per share, while the lowest bid price during that period was \$0.12 per share. The trading price of our common stock could continue to fluctuate widely due to:

limited current liquidity and the possible need to raise additional capital;

quarter-to-quarter variations in results of operations;

announcements of technological innovations by us or our potential competitors;

changes in or our failure to meet the expectations of securities analysts;

new products offered by us or our competitors;

announcements of strategic relationships or strategic partnerships;

future sales of common stock, or securities convertible into or exercisable for common stock;

adverse judgments or settlements obligating us to pay damages;

future issuances of common stock in connection with acquisitions or other transactions;

acts of war, terrorism, or natural disasters;

industry, domestic and international market and economic conditions, including the global macroeconomic downturn over the last three years and related sovereign debt issues in certain parts of the world;

low trading volume in our stock;

developments relating to patents or property rights;

government regulatory changes; or

other events or factors that may be beyond our control.

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

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. In the event that we propose to register additional shares of common stock under the Securities Act of 1933 for our own account, certain 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.

Table of Contents

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

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

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

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

authorize our board of directors, without stockholder approval, to issue up to 10,000,000 shares of "blank check" preferred stock that could be issued by our board of directors to increase the number of outstanding shares and prevent a takeover attempt;

limit stockholders' ability to call a special meeting of our stockholders; and

establish advance notice requirements to nominate directors for election to our board of directors or to propose matters that can be acted on by stockholders at stockholder meetings.

The provisions described above, as well as other provisions in our certificate of incorporation, our bylaws, and Delaware law could delay or make more difficult transactions involving a change in control of us or our management.

Table of Contents

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," "in "may," "will," "should," "could," and similar expressions. Examples of forward-looking statements include, without limitation

statements regarding our strategies, results of operations or liquidity;

statements concerning projections, predictions, expectations, estimates or forecasts as to our business, financial and operational results and future economic performance;

statements of management's goals and objectives;

projections of revenue, earnings, capital structure and other financial items;

assumptions underlying statements regarding us or our business; and

other similar expressions concerning matters that are not historical facts.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved. Forward-looking statements are based on information available at the time those statements are made or management's good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to, factors discussed under the headings "RISK FACTORS," "MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS," and "BUSINESS."

Forward-looking 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. These risks include, but are not limited to, those listed below and those discussed in greater detail under the heading "RISK FACTORS" above:

our ability to fund our operations in the short and long term through financing transactions on terms acceptable to us, or at all;

our history of operating losses and the uncertainty surrounding our ability to achieve or sustain profitability;

our limited history of developing and selling products made from our bulk amorphous alloys;

lengthy customer adoption cycles and unpredictable customer adoption practices; our ability to identify, develop, and commercialize new product applications for our technology; competition from current suppliers of incumbent materials or producers of competing products;

our ability to identify, consummate, and/or integrate strategic partnerships;

the potential for manufacturing problems or delays;

potential difficulties associated with protecting or expanding our intellectual property position;

the volatility of our stock price; and

the unpredictability of the market for our common stock.

Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition or operating results.

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. Consequently, you should not place undue reliance on forward-looking statements.

Table of Contents

SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders are those issuable to the selling stockholders pursuant to the terms of the Convertible Notes and upon exercise of the Warrants. For additional information regarding the issuance of those Convertible Notes and Warrants, see "BUSINESS—Significant Transactions—July 2012 Private Placement of Convertible Notes and Warrants" beginning on page 39 of this prospectus. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the Convertible Notes and the Warrants issued pursuant to the Securities Purchase Agreement, the selling stockholders have not had any material relationship with us or our affiliates within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the Convertible Notes and Warrants, as of July 2, 2012, assuming conversion of all Convertible Notes and exercise of the Warrants held by the selling stockholders on that date, without regard to any limitations on conversions, amortizations, redemptions or exercises.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholders.

In accordance with the terms of a registration rights agreement with the selling stockholders, this prospectus generally covers the resale of at least 150% of the sum of (i) the maximum number of shares of common stock issuable pursuant to the Convertible Notes as of the trading day immediately preceding the date the registration statement is initially filed with the SEC, and (ii) the maximum number of shares of common stock issuable upon exercise of the related Warrants as of the trading day immediately preceding the date the registration statement is initially filed with the SEC, all subject to adjustment as provided in the registration rights agreement and in each case without regard to any limitations on conversion, amortization and/or redemption of the Convertible Notes or exercise of the Warrants. Because the conversion price of the Convertible Notes and the exercise price of the Warrants may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

Under the terms of the Convertible Notes and the Warrants, a selling stockholder may not convert the Convertible Notes or exercise the Warrants to the extent such conversion or exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding shares of common stock following such conversion or exercise, excluding for purposes of such determination shares of common stock issuable upon conversion of the Convertible Notes which have not been converted and upon exercise of the Warrants which have not been exercised. The number of shares in the second column does not reflect this limitation (the "Maximum Percentage"). The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

Name of Selling Stockholder	Number of Shares of Common Stock Owned Prior to Offering	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus	Number of Shares of Common Stock Owned After Offering
Kingsbrook Opportunities Master Fund LP (1)	12,784,091 (2)	29,723,014	0
Hudson Bay Master Fund Ltd. (3)	5,681,819 (4)	13,210,229	0

Edgar Filing: LIQUIDMETAL TECHNOLOGIES INC - Form S-1/A

Empery Asset Master Ltd. (5)	3,267,046 (6)	7,595,882	0
Hartz Capital Investments, LLC (7)	6,676,137 (8)	15,522,018	0
-			
Iroquois Master Fund Ltd. (9)	5,681,819 (10)	13,210,229	0

(1) Kingsbrook Partners LP ("Kingsbrook Partners") is the investment manager of Kingsbrook Opportunities Master Fund LP ("Kingsbrook Opportunities") and consequently has voting control and investment discretion over securities held by Kingsbrook Opportunities. Kingsbrook Opportunities GP LLC ("Opportunities GP") is the general partner of Kingsbrook Opportunities and may be considered the beneficial owner of any securities deemed to be beneficially owned by Kingsbrook Opportunities. KB GP LLC ("GP LLC") is the general partner of Kingsbrook Partners and may be considered the beneficial owner of any securities deemed to be beneficially owned by Kingsbrook Partners. Ari J. Storch, Adam J. Chill and Scott M. Wallace are the sole managing members of Opportunities GP and GP LLC and as a result may be considered beneficial owners of any securities deemed beneficially owned by Opportunities GP and GP LLC. Each of Kingsbrook Partners, Opportunities GP, GP LLC and Messrs. Storch, Chill and Wallace disclaim beneficial ownership of these securities.

Table of Contents

- (2) Represents 12,784,091 shares of Common Stock issuable pursuant to the terms of the Convertible Notes without regard to the Maximum Percentage. Does not include the shares of Common Stock issuable upon exercise of the Warrants, since the Warrants are not exerciable until six (6) months after the date of issuance.
- (3) Hudson Bay Capital Management LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Sander Gerber disclaims beneficial ownership over these securities.
- (4) Represents 5,681,819 shares of Common Stock issuable pursuant to the terms of the Convertible Notes without regard to the Maximum Percentage. Does not include the shares of Common Stock issuable upon exercise of the Warrants, since the Warrants are not exerciable until six (6) months after the date of issuance.
- (5) Empery Asset Management LP, the authorized agent of Empery Asset Master Ltd ("EAM"), has discretionary authority to vote and dispose of the shares held by EAM and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by EAM. Mr. Hoe and Mr. Lane disclaim any beneficial ownership of these shares.
- (6) Represents 3,267,046 shares of Common Stock issuable pursuant to the terms of the Convertible Notes without regard to the Maximum Percentage. Does not include the shares of Common Stock issuable upon exercise of the Warrants, since the Warrants are not exerciable until six (6) months after the date of issuance.
- (7) Empery Asset Management LP, the authorized agent of Hartz Capital Investments, LLC ("HCI"), has discretionary authority to vote and dispose of the shares held by HCI and may be deemed to be the beneficial owner of these shares. Martin Hoe and Ryan Lane, in their capacity as investment managers of Empery Asset Management LP, may also be deemed to have investment discretion and voting power over the shares held by HCI. Mr. Hoe and Mr. Lane disclaim any beneficial ownership of these shares.
- (8) Represents 6,676,137 shares of Common Stock issuable pursuant to the terms of the Convertible Notes without regard to the Maximum Percentage. Does not include the shares of Common Stock issuable upon exercise of the Warrants, since the Warrants are not exerciable until six (6) months after the date of issuance.
- (9) Iroquois Capital Management L.LC. ("Iroquois Capital") is the investment manager of Iroquois Master Fund, Ltd ("IMF"). Consequently, Iroquois Capital has voting control and investment discretion over securities held by IMF. As managing members of Iroquois Capital, Joshua Silverman and Richard Abbe make voting and investment decisions on behalf of Iroquois Capital in its capacity as investment manager to IMF. As a result of the foregoing, Mr. Silverman and Mr. Abbe may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended) of the securities held by IMF. Notwithstanding the foregoing, Mr. Silverman and Mr. Abbe disclaim such beneficial ownership.
- (10) Represents 5,681,819 shares of Common Stock issuable pursuant to the terms of the Convertible Notes without regard to the Maximum Percentage. Does not include the shares of Common Stock issuable upon exercise of the Warrants, since the Warrants are not exerciable until six (6) months after the date of issuance.

Table of Contents

USE OF PROCEEDS

The selling stockholders will receive all of the proceeds from the sale of the common stock offered by this prospectus. We will not receive any of the proceeds from the sale of common stock by the selling stockholders, although we may receive proceeds from the exercise of the Warrants by the selling stockholders, if exercised. We cannot guarantee that the selling stockholders will exercise the Warrants. Any proceeds we receive from the selling stockholders upon their exercise of the Warrants will be used for general working capital.

DIVIDEND POLICY

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

MARKET PRICE OF COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Market for Our Common Stock

Our common stock is currently quoted on the OTC Bulletin Board under the symbol "LQMT." On July 11, 2012, the last reported sales price of our common stock was \$0.281 per share.

Number of Common Shareholders

As of July 2, 2012, we had 214 active record holders of our common stock.

Quarterly High/Low Bid Quotations

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

		High		Low	
Year Ended December 31, 2010:					
First Quarter	\$	0.16	\$	0.08	
Second Quarter	\$	0.40	\$	0.08	
Third Quarter	\$	1.76	\$	0.11	
Fourth Quarter	\$	0.85	\$	0.33	
Year Ended December 31, 2011:					
First Quarter	\$	0.84	\$	0.42	
Second Quarter	\$	0.63	\$	0.41	
Third Quarter	\$	0.51	\$	0.17	
Fourth Quarter	\$	0.23	\$	0.12	
Year Ending December 31, 2012:					
First Quarter	\$	0.35	\$	0.12	
Second Quarter	\$	0.63	\$	0.15	

Table of Contents

Equity Compensation Plan Information

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

The following table provides information regarding the securities authorized for issuance under our equity compensation plans as of December 31, 2011:

Plan Catagory	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted-average exercise price of outstanding options, warrants, and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column [a])
Plan Category	[a]	[b]	[c]
Equity compensation plans approved by stockholders	4,679,807	\$ 0.42	6,221,419
Equity compensation plans not approved by stockholders			
Total	4,679,807		6,221,419

The number of securities and types of plans available for future issuances of stock options as of December 31, 2011 were as follows:

Options and Warrants for Common Shares

Plan Name

	Authorized	Exercised	Outstanding	Available
1996 Stock Option Plan	12,903,226	1,974,365	3,226	
2002 Equity Incentive Plan	10,000,000	102,000	4,676,581	5,221,419
2002 Non-employee Director Stock				
Option Plan	1,000,000			1,000,000
Total Stock Options	23,903,226	2,076,365	4,679,807	6,221,419

1996 Stock Option Plan

Our 1996 Stock Option Plan (the "1996 Plan") provides for the grant of stock options to employees, directors, and consultants of our company and its affiliates. The purpose of the 1996 Plan is to retain the services of existing employees, directors, and consultants; to secure and retain the services of new employees, directors, and consultants; and to provide incentives for such persons to exert maximum efforts for our success. The 1996 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 Plan on April 4, 2002. The termination will not affect any outstanding options under the 1996 Plan, and all such options will continue to remain outstanding and be governed by the 1996 Plan.

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

As of December 31, 2011, options to purchase 3,226 shares of common stock were outstanding and exercisable at a weighted average price of \$15.00 per share under the 1996 Plan. As of December 31, 2011, options to purchase 1,974,365 shares had been issued upon exercise of options under the 1996 Plan.

Table of Contents

2002 Equity Incentive Plan

Our 2002 Equity Incentive Plan (the "2002 Plan"), which was adopted by our board of directors and approved by our stockholders in April 2002, provides for the grant of stock options to officers, employees, consultants, and directors of our company and its subsidiaries. The purpose of the 2002 plan is to advance the interests of our stockholders by enhancing our ability to attract, retain, and motivate persons who make or are expected to make important contributions to our company and its subsidiaries by providing such persons with equity ownership opportunities and performance-based incentives, thereby better aligning their interests with those of our stockholders. The 2002 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 2002 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 2002 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 2002 Plan. Subject to the limitations set forth in the 2002 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 non-statutory 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 2002 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 2002 Plan vest at the rate specified in the option agreement. However, in no event may an option be exercised later than the earlier of the expiration of the term of the option or 10 years from the date of the grant of the option, or when an optionee owns stock representing more than 10% of the voting power, five years from the date of the grant of the option in the case of incentive stock options.

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

There were 4,676,581 outstanding options or stock awards at a weighted average price of \$0.41 under the 2002 Plan as of December 31, 2011. There were 2,157,681 options exercisable and 102,000 shares had been issued upon exercise of options under the 2002 Plan as of December 31, 2011.

The 2002 Plan expired by its terms in April 2012. The 2002 Plan will remain in effect only with respect to the equity awards that have been granted under the 2002 Plan prior to its expiration.

2002 Non-employee Director Stock Option Plan

Our 2002 Non-employee Director Stock Option Plan (the "2002 Non-Employee Director Plan") was adopted by our board of directors and by our stockholders in April 2002. We have reserved a total of one million shares of our common stock for issuance under the 2002 Non-Employee Director Plan. The option grants under the 2002 Non-Employee Director 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 2002 Non-Employee Director Plan. The 2002 Non-Employee Director 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.

Table of Contents

The term of the options granted under the 2002 Non-Employee Director Plan is 10 years, but the options expire 12 months after the termination of the optionee's status as a director or three months if the termination is due to the voluntary resignation of the optionee. The option grants will vest and become exercisable as to one-fifth of the shares on the date that is one year after the date of grant and an additional one-fifth of the shares subject to the option on a cumulative basis will vest and become exercisable annually thereafter.

As of December 31, 2011, there were no options outstanding under the 2002 Non-Employee Director Plan.

The 2002 Non-Employee Director Plan expired by its terms in April 2012. The 2002 Non-Employee Director Plan will remain in effect only with respect to the equity awards that have been granted under the 2002 Non-Employee Director Plan prior to its expiration.

2012 Equity Incentive Plan

On June 28, 2012, at our annual meeting of stockholders, our stockholders approved our 2012 Equity Incentive Plan.

Table of Contents

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 the 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. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons set forth herein, including the factors described below and in "RISK FACTORS."

OVERVIEW

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary bulk alloys and composites that utilize the advantages offered by amorphous alloy technology. We design, develop and sell products and components from bulk amorphous alloys to customers in various industries. We also partner with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products. We believe that our proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace.

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

Our revenues are derived from (1) selling our bulk Liquidmetal alloy products, which include non-consumer electronic devices, medical products, and sports and leisure goods, (2) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development, and (3) product licensing and royalty revenue from our licensees. We expect that these sources of revenue will continue to significantly change the character of our revenue mix.

Our cost of sales consists primarily of the costs of outsourcing our manufacturing to third parties. Selling, general, and administrative expenses currently consist primarily of salaries and related benefits, travel, consulting and professional fees, depreciation and amortization, insurance, office and administrative expenses, and other expenses related to our operations.

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

SIGNIFICANT TRANSACTIONS

July 2012 Private Placement of Convertible Notes and Warrants

On July 2, 2012, the Company entered into definitive agreements relating to a private placement (the "Private Placement") of \$12.0 million in principal amount of Senior Convertible Notes due on September 1, 2013 (the "Convertible Notes") and Warrants to the purchasers of the Convertible Notes giving them the right to purchase up to an aggregate of 18,750,000 shares of the Company's common stock at an exercise price of \$0.384 per share (the "Warrants"). The closing of the Private Placement occured on July 2, 2012. The Convertible Notes and the Warrants were issued pursuant to a Securities Purchase Agreement, dated July 2, 2012, among the Company and the purchasers of the Convertible Notes (the "Securities Purchase Agreement"). The purchasers of the Convertible Notes and the Warrants in the Private Placement are the selling stockholders described in this prospectus.

Table of Contents

The Convertible Notes are convertible at any time at the option of the holder into shares of the Company's common stock at \$0.352 per share, subject to adjustment for stock splits, stock dividends, and the like. In the event that the Company issues or sells shares of the Company's common stock, rights to purchase shares of the Company's common stock, or securities convertible into shares of the Company's common stock for a price per share that is less than the conversion price then in effect, the conversion price then in effect will be decreased to equal such lower price. The foregoing adjustments to the conversion price for future stock issues will not apply to certain exempt issuances, including issuances pursuant to certain employee benefit plans. In addition, the conversion price is subject to adjustment upon stock splits, reverse stock splits, and similar capital changes.

On the first business day of each month beginning on October 1, 2012 through and including September 1, 2013 (the "Installment Dates"), the Company will pay to each holder of a Convertible Note an amount equal to (i) one-twelfth (1/12th) of the original principal amount of such holder's Convertible Note (or the principal outstanding on the Installment Date, if less) plus (ii) the accrued and unpaid interest with respect to such principal plus (iii) the accrued and unpaid late charges (if any) with respect to such principal and interest. Prior to maturity, the Convertible Notes will bear interest at 8% per annum (or 15% per annum during an event of default) with interest payable monthly in arrears on the Installment Dates and on conversion dates.

Each monthly payment may be made in cash, in shares of the Company's common stock, or in a combination of cash and shares of the Company's common stock. The Company's ability to make such payments with shares of the Company's common stock will be subject to various conditions, including the existence of an effective registration statement covering the resale of the shares issued in payment (or, in the alternative, the eligibility of the shares issuable pursuant to the Convertible Notes and the Warrants (as defined below) for sale without restriction under Rule 144 and without the need for registration) and certain minimum trading volumes in the stock to be issued. Such shares will be valued, as of the date on which notice is given by the Company that payment will be made in shares, at the lower of (1) the then applicable conversion price and (2) a price that is 87.5% of the arithmetic average of the ten (or in some cases fewer) lowest weighted average prices of the Company's common stock during the twenty trading day period ending two trading days before the applicable determination date (the "Measurement Period"). The Company's right to pay monthly payments in shares will depend on the following trading volume requirements in the Company's common stock: a minimum of \$250,000 in average daily trading volume during the Measurement Period, and a minimum of \$150,000 in daily trading volume during the Measurement Period, with certain exceptions.

Upon the occurrence of an event of default under the Convertible Notes, a holder of a Convertible Note may (so long as the event of default is continuing) require the Company to redeem all or a portion of its Convertible Note. Each portion of the Convertible Note subject to such redemption must be redeemed by the Company, in cash, at a price equal to the greater of (1) 125% of the sum of (a) the amount being redeemed (including principal, accrued and unpaid interest, and accrued and unpaid late charges) and (b) the amount of interest that would have accrued with respect to the amount being redeemed from the applicable redemption date through the applicable Installment Date, and (2) the sum of (x) the product of (I) the amount being redeemed and (II) the quotient determined by dividing (A) the greatest closing sale price of the shares of common stock during the period beginning on the date immediately preceding the event of default and ending on the date the holder delivers a redemption notice to the Company, by (B) the lowest conversion price in effect during such period and (y) the amount of interest that would have accrued with respect to the amount being redeemed from the applicable redemption date through the applicable Installment Date.

Subject to certain conditions, a holder of a Convertible Note may also require the Company to redeem all or a portion of its Convertible Note in connection with a transaction that results in a Change of Control (as defined in the Convertible Notes). Each portion of the Convertible Note subject to such redemption must be redeemed by the Company, in cash, at a price equal to the greater of (1) 125% of the sum of (a) the amount being redeemed (including principal, accrued and unpaid interest, and accrued and unpaid late charges) and (b) the amount of interest that would

have accrued with respect to the amount being redeemed from the applicable redemption date through the applicable Installment Date, and (2) the sum of (x) the product of (I) the amount being redeemed and (II) the quotient determined by dividing (A) the greatest closing sale price of the shares of common stock during the period beginning on the date immediately preceding the earlier to occur of (i) the consummation of the Change of Control and (ii) the public announcement of such Change of Control and ending on the date the holder delivers a redemption notice to the Company, by (B) the lowest conversion price in effect during such period and (y) the amount of interest that would have accrued with respect to the amount being redeemed from the applicable redemption date through the applicable Installment Date.

The Warrants are exercisable on or after the date that is six (6) months after the date of the issuance of the Warrants, and the exercise prices for the Warrants are subject to adjustment for stock splits, stock dividends, and the like. In the event that the Company issues or sells shares of the Company's common stock, rights to purchase shares of the Company's common stock, or securities convertible into shares of the Company's common stock for a price per share that is less than the exercise price then in effect, the exercise price of the Warrant will be reduced based on a weighted-average formula. The foregoing adjustments to the exercise price for future stock issues will not apply to certain exempt issuances, including issuances pursuant to certain employee benefit plans. In addition, on the two year anniversary of the issuance date (the "Reset Date"), the then applicable exercise price will be reset to equal the lesser of (1) the then current exercise price and (2) 87.5% of the arithmetic average of the ten lowest weighted average prices of the common stock during the twenty trading day period ending two trading days immediately preceding the Reset Date. All of the Warrants will expire on the fifth (5th) anniversary of the date they first become exercisable.

Table of Contents

If, during the period beginning on the date that all Registrable Securities (as defined in the Registration Rights Agreement) are registered pursuant to an effective registration statement and ending on the twenty-first (21st) month following the date of the closing of the Private Placement, the Company offers, sells, grants any option to purchase, or otherwise disposes of any of its or it subsidiaries' equity or equity equivalent securities (a "Subsequent Placement"), the Company must first notify each purchaser of the Convertible Notes of its intent to effect a Subsequent Placement. If a purchaser of the Convertible Notes wishes to review the details of a Subsequent Placement, the Company must provide such details to such purchaser along with an offer to issue and sell to or exchange with all such purchasers 30% of the securities being offered in the Subsequent Placement, initially allocated among such purchasers on a pro rata basis.

The Private Placement resulted in gross proceeds of \$12.0 million before placement agent fees and other expenses associated with the transaction. The proceeds will be used for general corporate purposes and for purposes of satisfying the \$1.7 million promissory note payable by the Company to Saga S.P.A.

In connection with the Private Placement, the Company and the selling stockholders entered into a Registration Rights Agreement (the "Registration Rights Agreement) under which the Company is required, on or before thirty (30) days after the closing of the Private Placement, to file a registration statement with the Securities and Exchange Commission (the "SEC") covering the resale of the shares of the Company's common stock issuable pursuant to the Convertible Notes and Warrants and to use its best efforts to have the registration declared effective as soon as practicable (but in no event later than 75 days after the closing of the Private Placement if the registration statement is not subject to a full review by the SEC, or 105 days after the closing of the Private Placement if the registration statement is subject to a full review by the SEC). The Company will be subject to certain monetary penalties, as set forth in the Registration Rights Agreement, if the registration statement is not filed, does not become effective on a timely basis, or does not remain available for the resale of the Registrable Securities (as defined in the Registration Rights Agreement). We are registering the shares being offered under this prospectus pursuant to the Registration Rights Agreement.

June 2012 Transactions with Visser Precision Cast, LLC

On June 1, 2012, we entered into a master transaction agreement (the "Visser Master Transaction Agreement") with Visser Precision Cast, LLC ("Visser") relating to a strategic transaction for manufacturing services and financing (the "Visser Transaction"). Pursuant to the terms of the Visser Master Transaction Agreement, the Company and Visser have entered into a manufacturing services agreement (the "Visser Manufacturing Services Agreement"), a subscription agreement (the "Visser Subscription Agreement"), a security agreement (the "Visser Security Agreement"), a registration rights agreement (the "Visser Registration Rights Agreement"), and a sublicense agreement (the "Visser Sublicense Agreement").

Pursuant to the terms of the Visser Manufacturing Services Agreement, the Company agreed to engage Visser as the exclusive manufacturer of conventional products and components and licensed products and components, which are products and components using or incorporating any of the Company's intellectual property for all fields of use other than consumer electronic products and fields of use covered by exclusive licenses and sublicenses existing on the date of the Visser Manufacturing Services Agreement (such intellectual property, the "LMT Technology"). The Company has further agreed that it will not, directly or indirectly, conduct manufacturing operations, subcontract for the manufacture of products or components or grant a license to any other party to conduct manufacturing operations using the LMT Technology, except for certain limited exceptions. The term of the Visser Manufacturing Services Agreement is perpetual.

Pursuant to the Visser Sublicense Agreement, the Company agreed to sublicense to Visser, on a fully-paid up, royalty-free, irrevocable, perpetual, worldwide basis, all rights held by the Company in the LMT Technology. In

addition, Visser has a right of first refusal over any proposed transfer by the Company of LMT Technology pursuant to any license, sublicense, sale or other transfer, other than a license to a machine or alloy vendor.

Table of Contents

Pursuant to the terms of the Visser Subscription Agreement, the Company agreed to issue and sell to Visser in a private placement transaction (i) up to 30,000,000 shares (the "Visser Shares") of common stock at a purchase price of \$0.10 per share, (ii) warrants (the "Visser Warrants") to purchase up to 15,000,000 shares of common stock at an exercise price of \$0.22 per share and (iii) a secured convertible promissory note (the "Visser Promissory Note") in the aggregate principal amount of up to \$2,000,000, the principal of which is convertible into shares of common stock at a conversion rate of \$0.22 per share. The issuance and sale of the shares of common stock and Visser Warrants occured in two closings. All of the shares of common stock issuable pursuant to the Visser Subscription Agreement and upon exercise or conversion of the Visser Warrants and the Visser Promissory note, as the case may be, are subject to a lock-up period through December 31, 2016.

The Company negotiated the transactions contemplated by the Visser Master Transaction Agreement beginning in December 2011. Although many of the material terms of the transactions remained unresolved until just prior to the initial closing of the transaction, the Company negotiated the purchase price of the common stock to be sold to Visser pursuant to the Visser Subscription Agreement, and the exercise and conversion prices of the Visser Warrants and the Visser Promissory Notes, respectively, at the time the negotiations commenced, when the trading price of the Company's common stock was between approximately \$0.12 and \$0.19.

On June 1, 2012, the Company issued and sold to Visser 20,000,000 shares of common stock and a warrant to purchase up to 11,250,000 shares of common stock for an aggregate purchase price of \$2,000,100 and also executed the Visser Promissory Note. A portion of the purchase price was paid by cancellation of outstanding promissory notes issued by the Company to Visser in the aggregate principal amount of \$1,050,000 plus accrued and unpaid interest. On June 28, 2012, the Company issued and sold to Visser the remaining 10,000,000 shares of common stock and a warrant to purchase up to 3,750,000 shares of common stock for an aggregate purchase price of \$1,000,100.

The exercise price per share of common stock purchasable upon exercise of the Visser Warrants is \$0.22 and is subject to appropriate adjustment for certain dilutive issuances of common stock and changes in the Company's capital structure, such as stock dividends, stock splits, reorganizations or similar events. The Visser Warrants are exercisable immediately upon issuance and expire on June 1, 2017. The Visser Warrants include a cashless exercise feature and all shares of common stock issuable upon exercise of the Visser Warrants are subject to a lock-up period through December 31, 2016. The holders of Visser Warrants are entitled to five days' notice before the record date for certain distributions to holders of common stock and other corporate events. In addition, if certain "fundamental transactions" occur, such as a merger, consolidation, sale of substantially all of the Company's assets, tender offer or exchange offer with respect to the common stock or reclassification of the common stock, the holders of Visser Warrants will be entitled to receive thereafter, in lieu of common stock, the consideration (if different from common stock) that the holders of Visser Warrants would have been entitled to receive upon the occurrence of the "fundamental transaction" as if the Visser Warrants had been exercised immediately before the "fundamental transaction." If any holder of common stock is given a choice of consideration to be received in the "fundamental transaction," then the holders of Visser Warrants shall be given the same choice upon the exercise of the Visser Warrants following the "fundamental transaction." In addition, in the event of a "fundamental transaction" that is an all cash transaction pursuant to which holders of common stock are entitled to receive cash consideration only, then the Visser Warrants will automatically terminate and the holders of the Visser Warrants will receive an amount of cash equal to the greater of (i) the product of (a) the number of shares of common stock representing the unexercised portion of the Visser Warrants and (b) the difference between (x) the per share consideration to be received by holders of common stock in the all-cash "fundamental transaction" and (y) the current exercise price per share of the Visser Warrants and (ii) the Black-Scholes value of the remaining unexercised portion of the Visser Warrants, which will be calculated using variables defined in the Visser Warrants.

Pursuant to the terms of the Visser Promissory Note, the Company may request an advance of up to \$1,000,000 on September 15, 2012 and an additional advance of up to \$1,000,000 on November 15, 2012, for an aggregate principal

amount of all advances under the Visser Promissory Note of \$2,000,000. Visser's obligation to fund the advances is subject to the satisfaction of customary closing conditions and no Event of Default (as described below) under the Visser Promissory Note. The Visser Promissory Note will rank senior to all other indebtedness of the Company, other than outstanding indebtedness to Apple, Inc. ("Apple"), and is secured by assets of the Company pursuant to the Visser Security Agreement. The Visser Promissory Note will bear interest at the rate of 6% per annum and is due and payable on September 15, 2015, if not sooner repaid or converted. The Company may prepay the Visser Promissory Note without premium or penalty by providing 30 days' prior written notice to the holder of the Visser Promissory Note. The outstanding principal and accrued but unpaid interest (and any related penalties thereon) under the Visser Promissory Note can be converted into shares of common stock at the option of the holder at the rate of \$0.22 per share. The conversion price is subject to appropriate adjustment for certain dilutive issuances of common stock and changes in the Company's capital structure, such as stock dividends, stock splits, reorganizations or similar events. All shares of common stock issuable upon conversion of the Visser Promissory Note are subject to a lock-up period through December 31, 2016. Upon the occurrence of an "Event of Default," such as the Company's failure to pay any amount due under the Visser Promissory Note as and when due, any default under certain of the Company's other indebtedness that is not cured within applicable time periods or any voluntary or involuntary bankruptcy, general assignment for the benefit of creditors or liquidation, the holder of the Visser Promissory Note will have the right to cause the Company to redeem all or any portion of the Visser Promissory Note at a price equal to the greater of (i) the outstanding principal and accrued but unpaid interest (and any related penalties thereon) under the Visser Promissory Note and (ii) the product of (a) the total number of shares of common stock into which the Visser Promissory Note is convertible and (b) the closing sale price of the common stock on the trading day immediately preceding the "Event of Default." Upon the occurrence of a "Change in Control," such as a merger, consolidation, sale of substantially all of the Company's assets, tender offer or exchange offer with respect to the common stock or reclassification of the common stock, the holder of the Visser Promissory Note will have the right to cause the Company to redeem the Visser Promissory Note for an amount of cash equal to (i) the outstanding principal and accrued but unpaid interest (and any related penalties thereon) plus (ii) the Black-Scholes value of the holder's right to convert the outstanding principal and accrued but unpaid interest (and any related penalties thereon) into shares of common stock, which will be calculated using variables defined in the Visser Warrants, In addition, in the event of a "Change in Control" that is an all cash transaction pursuant to which holders of common stock are entitled to receive cash consideration only, then the Visser Promissory Note will automatically terminate and the holder will receive the amount of cash described in the preceding sentence.

Table of Contents

Pursuant to the terms of the Visser Security Agreement and in order to secure the Company's obligations under the Visser Promissory note, the Company has granted to Visser a security interest over all of the Company's assets that are not covered by the Company's existing security agreements with Apple, excluding the Company's membership interests in Crucible Intellectual Property, LLC, a subsidiary of the Company.

Pursuant to the terms of the Visser Registration Rights Agreement, the Company is required to file, upon the request of Visser at any time after June 1, 2017, a registration statement with the SEC covering the resale of the shares of common stock issuable pursuant to the Visser Subscription Agreement and upon exercise or conversion of the Visser Warrants and the Visser Promissory Note, as the case may be. Pursuant to the terms of the Visser Registration Rights Agreement, the Company is required to file the registration statement on or prior to 90 days after the Company's receipt of the request to effect such registration (the "Visser Filing Date") and to use its reasonable commercial efforts to have the registration statement declared effective (i) on or prior to 60 days following the Visser Filing Deadline in the case of a registration statement on Form S-3 (120 days in the case of a "full review" by the SEC) or (ii) on or prior to 90 days following the Visser Filing Deadline in the case of a registration statement on Form S-1 (120 days in the case of a "full review" by the SEC). The Company will be subject to certain monetary penalties if the registration statement is not filed or does not become effective in a timely manner. The monetary penalties will accrue monthly and will be payable at the rate of 1% of the aggregate purchase price paid by Visser pursuant to the Visser Subscription Agreement for any unregistered shares of common stock, subject to maximum monetary penalties of 12%. In addition, the Visser Registration Rights Agreement provides Visser with piggyback registration rights on certain registration statements filed by the Company relating to an offering for its own account.

Other Significant Transactions

On January 17, 2012, February 27, 2012, March 28, 2012 and April 25, 2012, we issued 8% unsecured, bridge promissory notes to Visser that were due upon demand in the amount of \$0.2 million, \$0.2 million, \$0.35 million and \$0.3 million, respectively. The aggregate principal amount of \$1.05 million and all accrued interest under the bridge promissory notes were all paid off on June 1, 2012 by utilizing a portion of the proceeds received under the Visser Master Transaction Agreement.

On December 20, 2011, our former majority owned subsidiary, Liquidmetal Coatings, LLC ("LMC"), entered into a transaction pursuant to which LMC issued and sold additional membership interests to a related party and to third party investors for an aggregate purchase price of \$3.0 million (the "LMC Investment"). The LMC Investment was entered into pursuant to a Membership Interest Purchase Agreement between the investors and LMC (the "LMC Purchase Agreement"). The investors in the LMC Investment were Rockwall Holdings, Inc. ("Rockwall"), C3 Capital Partners, L.P. and C3 Capital Partners II, L.P. (the "C3 Entities"). The C3 Entities were minority investors in LMC prior to the transaction, and Rockwall is a company controlled by John Kang, our former Chief Executive Officer and Chairman. As of July 2, 2011, Mr. Kang beneficially owned 3.1% of our common stock.

The transactions contemplated by the LMC Purchase Agreement were deemed to be effective as of November 30, 2011. In connection with the LMC Investment, our Company and the C3 Entities agreed to terminate a letter agreement, dated July 30, 2010, under which we would have been obligated to contribute additional capital to LMC if requested by LMC. As a result of the LMC Investment and the termination of such letter agreement, we no longer have any contingent obligation to contribute additional capital to LMC. As a result of the LMC Investment, our equity interest in LMC was reduced from approximately 72.86% to 0.667%. However, we did not sell any of our membership interests in LMC in the transaction. LMC represented approximately 42% of the net book value of our assets and 64% of the net book value of our liabilities as of November 30, 2011, and LMC represented approximately 92% of our revenue and operating income that reduced our operating loss by 33% for the eleven months ended November 30, 2011. As a result of the reduction in our percentage interest in LMC, we will no longer consolidate LMC's financial results with our financial statements and the previous results of operations for LMC are reclassified as

discontinued operations in the financial statements included in this prospectus for all periods presented. However, Ricardo Salas, our Executive Vice President, will continue to serve as a member of LMC's board of directors.

Table of Contents

In connection with the LMC Investment, we entered into a Second Amended and Restated Operating Agreement with LMC and other members of LMC, and we also entered into a Second Amended and Restated License and Technical Support Agreement with LMC terminating certain technology cross-licenses between LMC and us and continuing LMC's right to use the Liquidmetal trademark in connection with LMC's business.

On December 1, 2011, we entered into a Share Purchase Agreement (the "LMTK Share Purchase Agreement") with LMTK Holdings, Inc. ("LMTK Holdings") to sell our former Korean subsidiary and manufacturing facility, Liquidmetal Technologies Korea ("LMTK"), that was discontinued in November 2010. Under the LMTK Share Purchase Agreement, we sold all of LMTK's shares of common stock to LMTK Holdings for an aggregate purchase price of one hundred dollars. The results of operations of LMTK have been previously included as discontinued operations in our financial statements, and as a result of the transaction, we will no longer consolidate LMTK's financial results with our financial statements.

In June 2010, we created a wholly owned subsidiary, Advanced Metals Materials ("AMM"), in Weihei China as a holding company for certain assets that were acquired in China. During the first quarter of 2011, AMM started production and manufacturing of certain bulk Liquidmetal alloy parts. On August 5, 2011, we sold all of the stock of Advanced Metals Materials ("AMM") to Innovative Materials Group, which is majority owned by John Kang, our former Chief Executive Officer and Chairman, for \$720 thousand of which \$200 thousand was paid in the form of a promissory note due August 5, 2012, bearing an interest rate of 8% per annum.

On August 6, 2010, SAGA, SpA in Padova, Italy ("SAGA"), a specialist parts manufacturer, filed a litigation case against us claiming damages of \$3.2 million for payment on an alleged loan and for alleged breach of contract in connection with the formation of joint venture agreement called Liquidmetal SAGA Italy, Srl ("LSI"). On April 6, 2011 (the "SAGA Effective Date"), we entered into a Settlement and Equity Interest Purchase Agreement with SAGA pursuant to which (i) the joint venture between SAGA and us was terminated, (ii) SAGA and we both agreed to cause certain pending legal action against each other to be dismissed with prejudice, (iii) we paid SAGA \$2.8 million in the form of 4,496,429 restricted shares ("Settlement Shares") of our common stock in exchange for SAGA's equity interest in LSI, and (iv) the Liquidmetal technology license to LSI was terminated.

The number of Settlement Shares issued to SAGA on the SAGA Effective Date was based on the 30 day trailing, volume weighted average price of our common stock as of the SAGA Effective Date. An additional provision of the SAGA settlement and Equity Interest Purchase Agreement was the obligation for us to issue a promissory note to compensate for a decrease in the market price of our common stock over a six month period from the SAGA Effective Date. On October 10, 2011, we issued to SAGA a promissory note in the principal amount of \$1.7 million due October 10, 2012 bearing interest of 8% per annum to account for the decrease in the market price of our common stock. On July 11, 2012, we paid SAGA \$1,742,630.97 to payoff all amounts owed under the SAGA promissory note.

On August 5, 2010, we entered into a license transaction with Apple Inc. ("Apple") pursuant to which (i) we contributed substantially all of our intellectual property assets to a newly organized special-purpose, wholly-owned subsidiary, called Crucible Intellectual Property, LLC ("CIP"), (ii) CIP granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in the field of consumer electronic products, as defined in the license agreement, in exchange for a license fee, and (iii) CIP granted back to us a perpetual, worldwide, fully-paid, exclusive license to commercialize such intellectual property in all other fields of use. Additionally, in connection with the license transaction, Apple required us to complete a statement of work related to the exchange of Liquidmetal intellectual property information. The Company recognized a portion of the one-time license fee upon receipt of the initial payment and completion of the foregoing requirements under the license transaction. The remaining portion of the one-time license fee was recognized at the completion of the required statement of work.

Under the agreements relating to the license transaction, we were obligated to contribute all intellectual property that we developed through February 2012 to CIP. In addition, we are obligated to refrain from encumbering any assets subject to the Apple security interest through August 2012 and are obligated to refrain from granting any security in our interest in CIP at any time. We are also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction. If we are unable to comply with these obligations, Apple may be entitled to foreclose on our assets.

Table of Contents

RESULTS OF OPERATIONS

Comparison of the years ended December 31, 2011 and 2010

	For the year ended December 31, 2011 (in thousands)	Percentage of Product Revenue	For the year ended December 31, 2010 (in thousands)	Percentage of Product Revenue
Revenue:				
Products	\$ 572		\$ 567	
Licensing and royalties	400		20,000	
Total revenue	972		20,567	
Cost of sales	373	65%	262	46%
Selling, general and administrative expenses	4,243	742%	4,498	793%
Research and development expenses	1,120	196%	1,132	200%
Settlement expense	1,713	299%	2,800	494%
Change in value of warrants, gain (loss)	1,328	232%	(23,341)	(4,117)%
Change in value of conversion feature, gain	-	0%	444	78%
Other income	26	5%	70	12%
Interest expense	90	16%	4,018	709%
Interest income	22	4%	6	1%
Gain on disposal of subsidiary	12,109	2,117%	-	0%
Loss from discontinued operations, net	(763)	(133%)	(2,679)	(472)%

The following analysis, other than the revenue analytic, is based on expenses as a percentage of product revenue. One-time licensing and royalties revenues are excluded from the analysis as their inclusion would distort the percentage calculation.

Revenue. Total Revenue decreased by \$19.6 million to \$972 thousand for the year ended December 31, 2011 from \$20.6 million for the year ended December 31, 2010. The decrease is primarily in the licensing and royalties revenue category due to a one-time licensing fee that occurred during 2010.

Cost of Sales. Cost of sales was \$373 thousand, or 65% of product revenue, for the year ended December 31, 2011 from \$262 thousand, or 46% of product revenue, for the year ended December 31, 2010. The cost to manufacture parts from our bulk Liquidmetal alloys is variable and differs based on the unique design of each product. In addition, much of our current product mix consists of prototype parts which have variable cost percentages relative to revenue. As we begin increasing our revenues with shipments of routine commercial parts through our third party contract manufacturer, we expect our cost of sales to stabilize and be more predictable.

Selling, General, and Administrative Expenses. Selling, general, and administrative expenses decreased by \$255 thousand to \$4.2 million, or 742% of product revenue, for the year ended December 31, 2011 from \$4.5 million, or 793% of product revenue, for the year ended December 31, 2010. The decrease was primarily the result of a one-time director consulting fee of \$275 thousand.

Research and Development Expenses. Research and development expenses remained flat at \$1.1 million for both of the years ended December 31, 2011 and 2010. We continue to devote significant resources to improving our processing capabilities, developing new manufacturing techniques and contracting with consultants to advance the development of Liquidmetal alloys.

Settlement Expense. Settlement expense was \$1.7 million for the year ended December 31, 2011 and \$2.8 million for the year ended December 31, 2010. Both amounts are related to a settlement with SAGA, SpA. See "Business-Legal Proceedings" in this prospectus for more information regarding this settlement.

Table of Contents

Change in Value of Warrants. The change in value of warrants was a gain of \$1.3 million, for the year ended December 31, 2011, which resulted from periodic valuation adjustments for warrants issued in connection with convertible and subordinated notes. The significant gain during the year ended December 31, 2011 compared to the loss of \$23.3 million, during the year ended December 31, 2010, was primarily due to the decrease in our stock price and the expiration of certain warrants during 2011. Changes in the value of our warrants are non-cash and do not affect the operations of our business.

Change in Value of Conversion Feature. There was no gain or loss related to the change in value of conversion feature for the year ended December 31, 2011 due to the retirement of our convertible notes in 2010. The \$444 thousand gain related to change in value of conversion feature during the year ended December 31, 2010 was due to the decrease in our stock price.

Other Income. Other income was \$26 thousand, or five percent of product revenue, for the year ended December 31, 2011, and \$70 thousand, or 12% of product revenue, for the year ended December 31, 2010. Other income is primarily due to gains on settlements on accounts payable for less than face value.

Interest Expense. Interest expense was \$90 thousand, or 16% of revenue, for the year ended December 31, 2011 and was \$4 million, or 709% of revenue, for the year ended December 31, 2010. Interest expense for the year ended December 31, 2010 consisted primarily of debt amortization and interest accrued on convertible and subordinated notes and borrowings under a factoring, loan, and security agreement, which were all retired during 2010. Interest expense for the year ended December 31, 2011 consisted of interest accrued on an outstanding promissory note.

Interest Income. Interest income was \$22 thousand and \$6 thousand for the year ended December 31, 2011 and 2010, respectively, from interest earned on cash deposits.

Gain on disposal of subsidiaries. Gain on disposal of subsidiaries of \$12.1 million, for the year ended December 31, 2011 was due to the sale of Advanced Metals Materials ("AMM"), our China subsidiary, the sale of Liquidmetal Technologies, Korea ("LMTK"), our Korea subsidiary, and the divestment of Liquidmetal Coatings ("LMC"), our Coatings subsidiary. The gain on disposal was mainly attributed to the write-off of net liabilities of \$10.7 million related to LMC upon deconsolidation and \$2.9 million net write-off of investments in AMM and LMC and foreign exchange translation related to LMTK offset by a \$1.4 million of loss from write-off of investment and net assets in LMTK. Our gains on disposals of our subsidiaries were mainly the result of write-offs of assets and liability accounts and did not impact our cash position.

Loss from discontinued operations. Loss from discontinued operations of \$763 thousand, for the year ended December 31, 2011 and loss of \$2.7 million, for the year ended December 31, 2010 consisted of the losses from operations of our discontinued subsidiaries, AMM, LMTK, and LMC. Our losses from discontinued operations did not impact our cash position, and these entities are no longer consolidated into our financial statements as of December 31, 2011.

Our operating and net income from continuing operations is mainly dependent on generating revenues by identifying customers who have a need for the technological advantages being offered by bulk amorphous alloys, as well as utilizing the existing technology with the right strategic partners to quickly fulfill those needs.

Table of Contents

Comparison of the three months ended March 31, 2012 and 2011

	For the three months Percen ended of March 31, Product 2012 Revent		et	For the three months ended March 31, 2011		Percentage of Product Revenue
	(in			(in		
D.	thousands	s)		thous	ands)	
Revenue:						
Products	\$ 1	83		\$	123	
Licensing and royalties		13			381	
Total revenue	1	96			504	
Cost of sales		81	44%		106	86%
Selling, marketing general and administrative	9	59	524%		1,026	834%
Research and development	1	88	103%		324	263%
Change in value of warrants, loss		-	0%		(11)	-9%
Other income		-	0%		5	4%
Interest expense	(39)	-21%		(15)	-12%
Interest income		4	2%		8	7%
Loss from operations of discontinued operations		-	0%		(429)	-349%

The following analysis contains percentage information that is based on expenses as a percentage of "Products" revenue. "Licensing and royalties" revenue is excluded from the analysis as their inclusion would distort the percentage calculations.

Revenue. Revenue decreased by \$308 thousand to \$196 thousand for the three months ended March 31, 2012 from \$504 thousand for the three months ended March 31, 2011. The decrease was primarily attributable to a one time license fee of \$381 thousand from a Liquidmetal alloy license agreement recognized in 2011, partially offset by an increase in product revenue in 2012.

Cost of Sales. Cost of sales decreased to \$81 thousand, or 44% of revenue, for the three months ended March 31, 2012 from \$106 thousand, or 86% of revenue, for the three months ended March 31, 2011. The cost to manufacture parts from our bulk Liquidmetal alloys is variable and differs based on the unique design of each product. In addition, much of our current product mix consists of prototype parts which have variable cost percentages relative to revenue. If we are able to increase our revenues with shipments of routine commercial parts through our third party contract manufacturer, we expect our cost of sales to stabilize and be more predictable.

Selling, Marketing, General, and Administrative. Selling, marketing, general, and administrative expenses decreased slightly to \$959 thousand, or 524% of revenue, for the three months ended March 31, 2012 from \$1.0 million, or 834% of revenue, for the three months ended March 31, 2011. The decrease was primarily due to an overall decrease in general and administrative expenses in line with our efforts to reduce costs.

Research and Development. Research and development expenses were \$188 thousand, or 103% of revenue, for the three months ended March 31, 2012 and \$324 thousand, or 263% of revenue, for the three months ended March 31, 2011. We spent less in production supplies and consulting services resulting in the decrease in this expense category, but we continue to perform research and development of new Liquidmetal alloys and related processing capabilities,

develop new manufacturing techniques, and contract with consultants to advance the development of Liquidmetal alloys.

Change in Value of Warrants. Change in value of warrants was a loss of \$11 thousand for the three months ended March 31, 2011. The change in value of warrants is primarily due to change in the valuation of our warrant liability as a result of fluctuations in our stock price. There was no change in the value of warrants for the three months ended March 31, 2012 because Warrants Liabilities was \$0 for both March 31, 2012 and December 31, 2011.

Table of Contents

Other Income. Other income consisted of \$5 thousand dollars of miscellaneous refunds for the three months ended March 31, 2011.

Interest Expense. Interest expense was \$39 thousand, or 21% of revenue, for the three months ended March 31, 2012 and was \$15 thousand, or 12% of revenue, for the three months ended March 31, 2011. Interest expense incurred during the first quarter of 2012 relates to the bridge notes issued to Visser and the promissory note issued to SAGA (see Significant Transactions). Interest expense incurred during the first quarter of 2011 consisted of deferred issue cost amortization on outstanding convertible and subordinated notes that have been fully amortized in 2011 in connection to the disposal of our discontinued operations.

Interest Income. Interest income relates to interest from our Related Party Notes Receivable and was \$4 thousand for the three months ended March 31, 2012. Interest income of \$8 thousand for the three months ended March 31, 2011 was for interest earned on cash deposits.

Loss from operations of discontinued operations. Loss from operations of discontinued operations was \$429 thousand for the three months ended March 31, 2011 for the losses incurred on our discontinued subsidiaries. Our discontinued subsidiaries were either sold or de-consolidated as of December 31, 2011.

LIQUIDITY AND CAPITAL RESOURCES

Our cash used by continuing operating activities was \$5.1 million for the year ended December 31, 2011, while cash provided by continuing activities was \$12.2 million for the year ended December 31, 2010. Our cash used in investing activities of continuing operations was \$0.2 million for the year ended December 31, 2011 primarily from purchase of property and equipment. Our cash provided by financing activities of continuing operations was \$13 thousand for the year ended December 31, 2011 primarily from stock options exercises.

For the three months ended March 31, 2012, our cash used in operating activities was \$540 thousand, our cash used in investing activities was \$35 thousand for continued investment in our trademarks, and our cash provided by financing activities was \$750 thousand related to the issuance of 8% unsecured, bridge promissory notes that are due on demand by Visser.

On July 2, 2012, we entered into definitive agreements relating to a private placement of \$12.0 million in principal amount of Senior Convertible Notes due on September 1, 2013 and Warrants to the purchasers of such Convertible Notes giving them the right to purchase up to an aggregate of 18,750,000 shares of the Company's common stock at an exercise price of \$0.384 per share (See Significant Transactions).

On June 1, 2012, we entered into a master transaction agreement with Visser Precision Cast, LLC ("Visser") relating to a strategic transaction for manufacturing services and financing, pursuant to which the Company and Visser have entered into a manufacturing services agreement, a subscription agreement, a security agreement, a registration rights agreement, and a sublicense agreement (See Significant Transactions).

On April 25, 2012, we issued an 8% unsecured, bridge promissory note to Visser due upon demand in the amount of \$300 thousand (See Significant Transactions).

We anticipate that our current capital resources will be sufficient to fund our operations through the end of 2013. We have a relatively limited history of producing bulk amorphous alloy components and products on a mass-production scale. Furthermore, Visser's ability to produce our products in desired quantities and at commercially reasonable prices is uncertain and is dependent on a variety of factors that are outside of our control, including the nature and design of the component, the customer's specifications, and required delivery timelines. Such factors may require that

we raise additional funds to support our operations beyond 2013. There is no assurance that we'll be able to raise such additional funds on acceptable terms, if at all. If funding is insufficient at any time in the future, we may be required to alter or reduce the scope of our operations. As a result of these and other factors, our independent registered public accounting firm has indicated, in their audit opinion on our 2011 consolidated financial statements that there is substantial doubt about our ability to continue as a going concern.

OFF-BALANCE SHEET ARRANGEMENTS

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

Table of Contents

As of March 31, 2012, the Company did not have any off-balance sheet arrangements.

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 recognize revenue pursuant to applicable accounting standards including FASB ASC Topic 605 ("ASC 605"), Revenue Recognition. ASC 605 summarize certain points of the SEC staff's views in applying generally accepted accounting principles to revenue recognition in financial statements and provide guidance on revenue recognition issues in the absence of authoritative literature addressing a specific arrangement or a specific industry.

Our revenue recognition policy complies with the requirements of ASC 605. Revenue is recognized when i) persuasive evidence of an arrangement exists, ii) delivery has occurred, iii) the sales price is fixed or determinable, iv) collection is probable and v) all obligations have been substantially performed pursuant to the terms of the arrangement. Revenues primarily consist of the sales and prototyping of Liquidmetal mold and bulk alloys, licensing and royalties for the use of the Liquidmetal brand and bulk Liquidmetal alloys. Revenue is deferred and included in liabilities when the Company receives cash in advance for goods not yet delivered or if the licensing term has not begun.

License revenue arrangements in general provide for the grant of certain intellectual property rights for patented technologies owned or controlled by the Company. These rights typically include the grant of an exclusive or non-exclusive right to manufacture and/or sell products covered by patented technologies owned or controlled by us. The intellectual property rights granted may be perpetual in nature, extending until the expiration of the related patents, or can be granted for a defined period of time.

Licensing revenues that are one time fees upon the granting of the license are recognized when i) the license term begins in a manner consistent with the nature of the transaction and the earnings process, ii) when collectability is reasonably assured or upon receipt of an upfront fee, and iii) when all other revenue recognition criteria have been met. Pursuant to the terms of these agreements, we have no further obligation with respect to the grant of the license. Licensing revenues that are related to royalties are recognized as the royalties are earned over the related period.

We value our long-lived assets at lower of cost or fair market value. Management 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. We recognized \$0 and \$966 during the years ended December 31, 2011 and 2010, respectively, for impairment of long-lived assets.

We record valuation allowances to reduce our deferred tax assets to the amounts estimated to be realized. While we consider taxable income in assessing the need for a valuation allowance, in the event we determine we would be able to realize our deferred tax assets in the future in excess of the net recorded amount, an adjustment would be

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

We account for our outstanding warrants and the embedded conversion feature of our senior convertible notes as derivatives in accordance with FASB ASC 815-10, Derivatives and Hedging, and FASB ASC 815-40, Contracts in Entity's Own Equity. Fair values of warrants and embedded conversion features are measured at each period end using Black-Scholes pricing models and changes in fair value during the period are reported in our earnings.

We record an allowance for doubtful accounts as a contra-asset to our trade receivables for estimated uncollectible accounts. Management estimates the amount of potentially uncollectible accounts by reviewing significantly past due customer balances relative to historical information available for those customers. In the event, in future periods, actual uncollectible accounts exceed the estimate for uncollectible accounts, an adjustment would be made and income would decrease in the period of such determination. Likewise, in the event, in future periods, actual uncollectible accounts are lower than the estimate for uncollectible accounts, an adjustment would be made and income would increase in the period of such determination.

Table of Contents

We account for share-based compensation in accordance with the fair value recognition provisions of FASB ASC Topic 718, Share-based Payment, which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the consolidated financial statements based on their fair values. The fair value of stock options is calculated by using the Black-Scholes option pricing formula that requires estimates for expected volatility, expected dividends, the risk-free interest rate and the term of the option. If any of the assumptions used in the Black-Scholes model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 2011, the FASB, issued guidance regarding the presentation of comprehensive income. The new guidance eliminates the current option to report other comprehensive income and its components in the statement of changes in equity. Instead, an entity will be required to present either a continuous statement of net income and other comprehensive income or in two separate but consecutive statements of net income. The updated guidance is effective on a retrospective basis for financial statements issued for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2011. We adopted the guidance beginning on January 1, 2012.

In May 2011, the FASB issued additional guidance on fair value measurements that clarifies the application of existing guidance and disclosure requirements, changes certain fair value measurement principles and requires additional disclosures about fair value measurements. The updated guidance is effective on a prospective basis for financial statements issued for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2011. We adopted the guidance beginning on January 1, 2012.

In April 2010, the FASB codified the consensus reached in Emerging Issues Task Force Issue No. 08-09, "Milestone Method of Revenue Recognition." FASB ASU No. 2010-17 "Revenue Recognition – Milestone Method (Topic 605)" provides guidance on defining a milestone and determining when it may be appropriate to apply the milestone method of revenue recognition for research and development transactions. FASB ASU No. 2010 – 17 is effective on a prospective basis for milestones achieved after the adoption date. Our adoption of this guidance on January 1, 2011 did not have a significant impact on our consolidated financial statements.

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

Table of Contents

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

On December 7, 2011, Choi, Kim, Park, LLP ("CKP"), resigned as our independent registered public accounting firm. The decision to accept CKP's resignation was approved by the audit committee of our board of directors.

CKP's reports on the consolidated financial statements of the Company for the years ended December 31, 2010 and 2009 did not contain any adverse opinion or disclaimer of opinion, nor were such reports qualified or modified as to uncertainty, audit scope, or accounting principles, except that each of CKP's reports for the years ended December 31, 2010 and 2009 expressly assumed the Company would continue as a going concern and stated that the Company's significant operating losses and working capital deficit raise substantial doubt about its ability to continue as a going concern.

During the years ended December 31, 2010 and 2009, and through December 7, 2011, there were no disagreements (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions to Item 304 of Regulation S-K) with CKP on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of CKP, would have caused CKP to make reference to the subject matter of the disagreement in its report on the consolidated financial statements for such year. During the years ended December 31, 2010 and 2009, and through December 7, 2011, there were no reportable events (as defined in Item 304(a)(1)(v) of Regulation S-K).

The Company has provided CKP with a copy of the above disclosures, and CKP has furnished the Company with a letter addressed to the SEC stating it agrees with the statements made above. A copy of CKP's letter dated December 8, 2011 is attached as Exhibit 16.1 to the Current Report on Form 8-K filed by the Company with the SEC on December 8, 2011.

On December 2, 2011, our board of directors, upon recommendation of the audit committee of our board of directors, approved the engagement of SingerLewak LLP ("Singer") to serve as the Company's independent registered public accounting firm. Singer was formally engaged by the Company on December 8, 2011. At our annual meeting of stockholders on June 28, 2012, our stockholders ratified the appointment of Singer as our independent registered public accounting firm for fiscal year 2012.

During the years ended December 31, 2010 and 2009, and through December 8, 2011, neither the Company nor anyone on its behalf has consulted with Singer with respect to either (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company's consolidated financial statements, and neither written nor oral advice was provided to the Company that Singer concluded was an important factor considered by the Company in reaching a decision as to any accounting, auditing or financial reporting issue; or (ii) any matter that was either the subject of disagreement (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions to Item 304 of Regulation S-K) with CKP or a reportable event (as defined in Item 304(a)(1)(v) of Regulation S-K).

Table of Contents

BUSINESS

Overview

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary bulk alloys and composites that utilize the advantages offered by amorphous alloy technology. We design, develop and sell products and components from bulk amorphous alloys to customers in various industries. We also partner with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products. We believe that our proprietary bulk alloys are the only commercially viable bulk amorphous alloys currently available in the marketplace.

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

General Corporate Information

We were originally incorporated in California in 1987, and we reincorporated in Delaware in May 2003. Our principal executive office is located at 30452 Esperanza, Rancho Santa Margarita, California 92688. Our telephone number at that address is (949) 635-2100. Our Internet website address is www.liquidmetal.com and all of our filings with the Securities and Exchange Commission ("SEC") are available free of charge on our website. Information contained on our website is not incorporated by reference into this prospectus, and such information should not be considered to be part of this prospectus.

Our Technology

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

Unique Atomic Structure

The atomic structure of Liquidmetal alloys is the fundamental feature that differentiates them from other alloys and metals. In the molten state, the atomic particles of all alloys and metals have an amorphous atomic structure, which means that the atomic particles appear in a completely random structure with no discernible patterns. However, when non-amorphous alloys and metals are cooled to a solid state, their atoms bond together in a repeating pattern of regular and predictable shapes or crystalline grains. This process is analogous to the way ice forms when water freezes and crystallizes. In non-amorphous metals and alloys, the individual crystalline grains contain naturally occurring structural defects that limit the potential strength and performance characteristics of the material. These defects, known as dislocations, consist of discontinuities or inconsistencies in the patterned atomic structure of each grain.

Unlike other alloys and metals, bulk Liquidmetal alloys can retain their amorphous atomic structure throughout the solidification process and therefore do not develop crystalline grains and the associated dislocations. Consequently, bulk Liquidmetal alloys exhibit superior strength and other superior performance characteristics compared to their crystalline counterparts.

Prior to 1993, commercially viable amorphous alloys could be created only in thin forms, such as coatings, films, or ribbons. However, in 1993, researchers at the California Institute of Technology (Caltech) developed the first commercially viable amorphous alloy in a bulk form. Today, bulk Liquidmetal alloys can be formed into objects that are up to one inch thick, and we are not aware of any other commercially available amorphous alloys that can achieve this thickness. We obtained the exclusive right to commercialize the bulk amorphous alloy through a license agreement with Caltech and have developed the technology to enable the commercialization of the bulk amorphous alloys.

Table of Contents

Proprietary Material Composition

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

Advantages of Liquidmetal Alloys

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

Performance Advantages

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

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

Processing Advantages

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

Bulk Liquidmetal alloys also permit the creation of composite materials that cannot be created with most non-amorphous metals and alloys. A composite is a material that is made from two or more different types of

materials. In general, the ability to create composites is beneficial because constituent materials can be combined with one another to optimize the composite's performance characteristics for different applications. In other metals and alloys, the high temperatures required for processing could damage some of the composite's constituent materials and therefore limit their utility. However, the relatively low melting temperatures of bulk Liquidmetal alloys allow mild processing conditions that eliminate or limit damage to the constituent materials when creating composites. In addition to composites, we believe that the processing advantages of Liquidmetal alloys will ultimately allow for a variety of other finished forms, including sheets and extrusions.

Notwithstanding the foregoing advantages, our bulk Liquidmetal alloys possess certain limitations relative to processing. The beneficial processing features of our bulk alloys are made possible in part by the alloys' relatively low melting temperatures. Although a lower melting temperature is a beneficial characteristic for processing purposes, it renders certain bulk alloy compositions unsuitable for certain high-temperature applications, such as jet engine exhaust components. Additionally, the current one-