

LIQUIDMETAL TECHNOLOGIES INC  
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January 29, 2014  
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As filed with the Securities and Exchange Commission on January 28, 2014

**Registration No. 333-192675**

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

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**AMENDMENT NO. 1**

**TO**

**FORM S-1**

**REGISTRATION STATEMENT**

**UNDER**

**THE SECURITIES ACT OF 1933**

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**LIQUIDMETAL TECHNOLOGIES, INC.**

(Exact name of registrant as specified in its charter)

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

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**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)

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**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)

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*Copies to:*

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**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.

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

**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.**

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**The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.**

**SUBJECT TO COMPLETION, DATED JANUARY 28 , 2014**

**LIQUIDMETAL TECHNOLOGIES, INC.**

**102,024,643 Shares**

**Common Stock**

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This prospectus relates to the resale of up to 102,024,643 shares of our common stock, \$0.001 par value per share, by the selling stockholders named in this prospectus, 96,555,893 of which may be offered from time to time by the holders of shares of our common stock (the “2013 Selling Stockholders”) issued and issuable pursuant to the Common Stock Purchase Agreement, dated November 8, 2013 (the “2013 Purchase Agreement”), with the 2013 Selling Stockholders, and 5,468,750 of which may be offered from time to time by certain holders of shares of our common stock (the “2012 Selling Stockholders”) issuable upon the exercise of the common stock purchase warrants (the “Warrants”) issued by us in a private placement by us that closed on July 2, 2012. For a description of the 2013 Purchase Agreement, see the section entitled “**DESCRIPTION OF 2013 COMMON STOCK PURCHASE AGREEMENT**” beginning on page 19 of this prospectus. For a description of our private placement that closed on July 2, 2012, see the section entitled “**DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS**” beginning on page 20 of this prospectus. For a description of the 2013 Selling Stockholders and the 2012 Selling Stockholders, see the section entitled “**SELLING STOCKHOLDERS**” beginning on page 21 of this prospectus.

We are registering these shares of our common stock for resale by the 2013 Selling Stockholders and the 2012 Selling Stockholders or their transferees, pledgees, donees or successors. We will not receive any proceeds from the sale of these shares by the selling stockholders, however, we may receive (i) gross proceeds of up to \$20.0 million from the sale of our common stock to the 2013 Selling Stockholders pursuant to the 2013 Purchase Agreement and (ii) proceeds from the 2012 Selling Stockholders upon their exercise of the Warrants, which Warrants have an exercise price equal to \$0.384 per share (subject to adjustment as described in the section entitled “**DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS**” beginning on page 20 of this prospectus). 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 76 of this prospectus. The 2013 Selling Stockholders are "underwriters" within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended.

**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 8.**

Our common stock is currently quoted on the OTC Bulletin Board under the symbol “LQMT.” On January 27, 2014, the last reported sales price of our common stock was \$0.39 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.

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**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 \_\_\_\_\_.

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





## 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 the information incorporated into this prospectus by reference.*

### 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.

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 (i) selling our bulk Liquidmetal alloy products, which include non-consumer electronic devices, aerospace parts, medical products, automotive components, oil and gas exploration, and sports and leisure goods, (ii) selling tooling and prototype parts such as demonstration parts and test samples for customers with

products in development, (iii) product licensing and royalty revenue, and (iv) research and development revenue.

## **Our Strategy**

The key elements of our strategy include:

Focusing our marketing activities on select products with optimized 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, (2) establishing Liquidmetal alloys as an enabling technology that will facilitate the creation of a broad range of commercially viable new products, and (3) engaging in various brand development strategies.

## **Applications for Liquidmetal Alloys**

We have focused our commercialization efforts for Liquidmetal alloys on four 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.

*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 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 aerospace components, medical devices, commercial imaging devices, automotive components and industrial machines.

*Aerospace and Defense.* We design and develop components for aerospace and defense customers to meet their requirements for complex, high strength parts with precision tolerances through our near net-shape molding process. Some of the parts we have developed cannot be made by any other conventional fabrication process, offering designers of high performance, mission critical systems unique alternatives.

*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.

### **2013 Common Stock Purchase Agreement**

On November 8, 2013, we entered into a Common Stock Purchase Agreement (the "2013 Purchase Agreement") with Kingsbrook Opportunities Master Fund LP, Tech Opportunities LLC, and Iroquois Master Fund Ltd. (each, a "2013 Selling Stockholder" and collectively, the "2013 Selling Stockholders"). The 2013 Purchase Agreement provides that, upon the terms and subject to the conditions set forth therein, each of the 2013 Selling Stockholders has committed to purchase such 2013 Selling Stockholders' pro rata portion of up to \$20.0 million (the "Total Commitment") worth of our common stock, \$0.001 par value (the "Shares"), over the 36-month term of the 2013 Purchase Agreement.

In consideration for the 2013 Selling Stockholders' execution and delivery of the 2013 Purchase Agreement, on November 8, 2013, we delivered irrevocable instructions to our transfer agent to issue to each 2013 Selling Stockholder, not later than 4:00 p.m. (New York City time) on the second trading day immediately following November 8, 2013, certificates representing such 2013 Selling Stockholder's pro rata portion of 2,666,667 shares of common stock (the "Commitment Shares"). The Commitment Shares are being registered for resale, together with the shares that may be purchased under the 2013 Purchase Agreement, on the registration statement of which this prospectus is a part.

From time to time over the term of the 2013 Purchase Agreement, commencing on the trading day immediately following the date on which this registration statement is declared effective by the Securities and Exchange Commission (the "SEC") as further discussed below, we may, in our sole discretion, provide each of the 2013 Selling Stockholders with draw down notices (each a "Draw Down Notice") to purchase a specified dollar amount of Shares (the "Draw Down Amount") over a five (5) consecutive trading day period commencing on the trading day specified in the applicable Draw Down Notice (the "Pricing Period") with each draw down subject to the limitations discussed below. The maximum amount of Shares requested to be purchased pursuant to any single Draw Down Notice cannot exceed a dollar amount equal to the lesser of (i) 300% of the average trading volume of our common stock during the

ten (10) trading days immediately preceding the date the applicable Draw Down Notice is delivered (the "Applicable Draw Down Exercise Date") multiplied by the lower of (A) the closing trade price of the our common stock on the trading day immediately preceding the Applicable Draw Down Exercise Date and (B) the average of the closing trade prices of our common stock for the three (3) trading days immediately preceding the Applicable Draw Down Exercise Date (such lower price, the "Reference Price"), and (ii) a specified dollar amount set forth in the 2013 Purchase Agreement based on the Reference Price as of the Applicable Draw Down Exercise Date.

Once presented with a Draw Down Notice, each of the 2013 Selling Stockholders is required to purchase such 2013 Selling Stockholder's pro rata portion of the applicable Draw Down Amount on each trading day during the applicable Pricing Period on which the daily volume weighted average price for our common stock (the "VWAP") equals or exceeds an applicable floor price equal to the product of (i) 0.775 and (ii) the Reference Price, subject to adjustment (the "Floor Price"), provided that in no event shall the Floor Price be less than \$0.03875. If the VWAP falls below the applicable Floor Price on any trading day during the applicable Pricing Period, the 2013 Purchase Agreement provides that the 2013 Selling Stockholders will not be required to purchase their pro rata portions of the applicable Draw Down Amount allocated to that trading day. The per share purchase price for the Shares subject to a Draw Down Notice shall be equal to 90% of the lowest daily VWAP that equals or exceeds the applicable Floor Price during the applicable Pricing Period. Each purchase pursuant to a draw down shall reduce, on a dollar-for-dollar basis, the Total Commitment under the 2013 Purchase Agreement.

We are prohibited from issuing a Draw Down Notice if (i) the amount requested in such Draw Down Notice exceeds the Maximum Draw Down Amount, (ii) the sale of Shares pursuant to such Draw Down Notice would cause us to issue or sell or the 2013 Selling Stockholders to acquire or purchase an aggregate dollar value of Shares that would exceed the Total Commitment, (iii) the sale of Shares pursuant to the Draw Down Notice would cause us to sell or the 2013 Selling Stockholders to purchase an aggregate number of shares of our common stock which would result in the collective beneficial ownership by the 2013 Selling Stockholders of more than 9.99% of our common stock (as calculated pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder), or (iv) the applicable Floor Price would be less than \$0.03875 on the Applicable Draw Down Exercise Date. We cannot make more than one draw down in any Pricing Period and must allow two (2) trading days to elapse between the completion of the settlement of any one draw down and the commencement of a Pricing Period for any other draw down.

Each of the 2013 Selling Stockholders has agreed that during the term of the 2013 Purchase Agreement, neither such 2013 Selling Stockholder nor any of its affiliates will, directly or indirectly, engage in any short sales involving our securities or grant any option to purchase, or acquire any right to dispose of or otherwise dispose for value of, any shares of our common stock or any securities convertible into or exercisable or exchangeable for any shares of our common stock, or enter into any swap, hedge or other similar agreement that transfers, in whole or in part, the economic risk of ownership of any shares of our common stock. The 2013 Selling Stockholders will not be prohibited from selling any of the shares of our common stock that they are obligated to purchase under a pending Draw Down Notice.

The 2013 Purchase Agreement contains customary representations, warranties and covenants by, among and for the benefit of the parties. The 2013 Purchase Agreement may be terminated at any time by the mutual written consent of the parties. Unless earlier terminated, the 2013 Purchase Agreement will terminate automatically on the earliest to occur of (i) the first day of the month next following the 36-month anniversary of the first trading day immediately following the date on which this registration statement is declared effective by the SEC, (ii) the date on which the 2013 Selling Stockholders have purchased the Total Commitment worth of common stock under the 2013 Purchase Agreement, or (iii) the date on which our common stock has failed to be listed or quoted on a Trading Market (as defined in the 2013 Purchase Agreement). Under certain circumstances set forth in the 2013 Purchase Agreement, (I) any of the 2013 Selling Stockholders may terminate the 2013 Purchase Agreement on one trading day's prior written notice to us and the other 2013 Selling Stockholders, and (II) we may terminate the 2013 Purchase Agreement on one trading day's prior written notice to each of the 2013 Selling Stockholders. The 2013 Selling Stockholders may not assign their rights or obligations under the 2013 Purchase Agreement.

If we issue a Draw Down Notice and fail to deliver the Shares to any 2013 Selling Stockholder on the applicable settlement date or within two (2) trading days thereafter by crediting such 2013 Selling Stockholder's or its designee's account at DTC, then we have agreed to pay such 2013 Selling Stockholder, in addition to all other remedies available to such 2013 Selling Stockholder under the 2013 Purchase Agreement, an amount in cash equal to 2% of the purchase price of such Shares for the initial 30-day period following the applicable settlement date until the Shares have been delivered, and an additional 2% for each additional 30-day period thereafter until the Shares have been delivered. In addition, if we fail to transfer all of the Shares subject to a Draw Down Notice to any 2013 Selling Stockholder on the applicable settlement date by crediting such 2013 Selling Stockholder's or its designee's account at DTC, and if on or

after such applicable settlement date such 2013 Selling Stockholder purchases, in an open market transaction or otherwise, shares of common stock necessary to make delivery by such 2013 Selling Stockholder in satisfaction of a sale by such 2013 Selling Stockholder of Shares that such 2013 Selling Stockholder anticipated receiving from us in connection with such draw down, then we have agreed to pay to such 2013 Selling Stockholder, in addition to any other amounts due to such 2013 Selling Stockholder pursuant to the 2013 Purchase Agreement, within three trading days after such 2013 Selling Stockholder's request, an amount, in cash, equal to such 2013 Selling Stockholder's total purchase price (including brokerage commissions, if any) for the Shares so purchased, at which point our obligation to credit such 2013 Selling Stockholder's or its designee's account at DTC for such Shares will terminate.

The 2013 Purchase Agreement also provides for indemnification of each of the 2013 Selling Stockholders and its affiliates in the event that such 2013 Selling Stockholder or its affiliates incur losses, liabilities, obligations, claims, contingencies, damages, costs or expenses relating to a breach by us of any of our representations and warranties under the 2013 Purchase Agreement or the other related transaction documents or any action instituted against a 2013 Selling Stockholder or its affiliates due to the transactions contemplated by the 2013 Purchase Agreement or other transaction documents, subject to certain limitations.

#### *2013 Registration Rights Agreement*

In connection with the execution of the 2013 Purchase Agreement, on November 8, 2013, we and the 2013 Selling Stockholders also entered into a Registration Rights Agreement (the "2013 Registration Rights Agreement"). Pursuant to the 2013 Registration Rights Agreement, we have agreed to (i) file the registration statement of which this prospectus is a part (this "Registration Statement") with the SEC to register 96,555,893 shares (the "Equity Transaction Registered Shares") on or prior to December 23, 2013 (the "Filing Deadline") and (ii) use our commercially reasonable efforts to have it declared effective as soon as practicable, but in no event later than the earlier of (A) the 90th calendar day after November 8, 2013 and (B) the fifth business day after the date we are notified by the SEC that this Registration Statement will not be reviewed or will not be subject to further review (the "Effectiveness Deadline").

If at any time all of the Registrable Securities (as defined in the 2013 Registration Rights Agreement) are not covered by this Registration Statement, we have agreed to file with the SEC one or more additional registration statements so as to cover all of the Registrable Securities not covered by this Registration Statement, in each case, as soon as practicable, but in no event later than the applicable filing deadline for such additional registration statements as provided in the 2013 Registration Rights Agreement.

## 2012 Private Placement of Convertible Notes and Warrants

On July 2, 2012, we entered into definitive agreements relating to a private placement (the “2012 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 our common stock at an exercise price of \$0.384 per share (the “Warrants”) (subject to adjustment as described below under “**DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS**” beginning on page 20 of this prospectus). The Convertible Notes were convertible at any time at the option of the holder into shares of our common stock at \$0.352 per share (subject to adjustment). The closing of the 2012 Private Placement occurred on July 2, 2012. The Convertible Notes and the Warrants were issued pursuant to a Securities Purchase Agreement, dated July 2, 2012, with the purchasers of the Convertible Notes (the “2012 Purchase Agreement”). On July 17, 2013, we and each of the holders of the Convertible Notes agreed to cause all remaining principal and interest under the Convertible Notes to be converted into an aggregate of 18,679,584 shares of our common stock in full satisfaction of the Convertible Notes. As a result of such conversion, the Convertible Notes were paid off in full and are no longer outstanding.

### *2012 Registration Rights Agreement*

In connection with the 2012 Private Placement, on July 2, 2012 we and the purchasers of the Convertible Notes entered into a Registration Rights Agreement (the “2012 Registration Rights Agreement”) under which we agreed to file a registration statement with the SEC covering the resale of the shares of our common stock issuable pursuant to the Convertible Notes and Warrants. See “**DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS**” beginning on page 20 of this prospectus. On August 23, 2012, we filed a registration statement covering the resale of the shares of our common stock issuable pursuant to the Convertible Notes. Pursuant to the 2012 Registration Rights Agreement, certain of the holders of the Warrants waived their registration rights under the 2012 Registration Rights Agreement. This Registration Statement covers the resale of the shares of our common stock issuable upon the exercise of the Warrants by those holders of the Warrants that did not waive their registration rights under the 2012 Registration Rights Agreement (the “2012 Selling Stockholders”). See “**SELLING STOCKHOLDERS – 2012 Selling Stockholders**” beginning on page 23 of this prospectus.

## 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](http://www.liquidmetal.com) and all of our filings with the 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

Issuer	Liquidmetal Technologies, Inc.
Securities offered for resale	<p>Up to 102,024,643 shares of our common stock, consisting of:</p> <p>96,555,893 shares of our common stock issued and issuable to the 2013 Selling Stockholders pursuant to the 2013 Purchase Agreement (see the section entitled “<b>DESCRIPTION OF 2013 COMMON STOCK PURCHASE AGREEMENT</b>” beginning on page 19 of this prospectus); and</p> <p>5,468,750 shares of our common stock issuable upon the exercise of the Warrants by the 2012 Selling Stockholders, which Warrants have an exercise price of \$0.384 per share (subject to adjustment as described below under “<b>DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS</b>” beginning on page 20 of this prospectus).</p>
Shares of common stock outstanding before the offering	375,707,190 shares of common stock
Shares of common stock outstanding after the offering assuming all of the Warrants are exercised and all of the Equity Transaction Registered Shares are sold	477,731,833 shares of common stock
Use of proceeds	<p>We will not receive any proceeds from the sale of the shares offered by the 2013 Selling Stockholders or the 2012 Selling Stockholders. However, we will receive proceeds from the sale of Shares to the 2013 Selling Stockholders pursuant to the 2013 Purchase Agreement and from the 2012 Selling Stockholders upon the exercise of the Warrants. Any net proceeds received from the sale of Shares to the 2013 Selling Stockholders under the 2013 Purchase Agreement and from the 2012 Selling Stockholders upon the exercise of the Warrants will be used for general working capital purposes.</p>
Risk factors	<p>See “<b>RISK FACTORS</b>” and other information included in this prospectus and incorporated by reference into this prospectus for a discussion of factors you should carefully consider before deciding to invest in the shares.</p>
OTC Bulletin Board symbol	LQMT

We are registering the shares being offered under this prospectus pursuant to the 2013 Registration Rights Agreement that we entered into with the 2013 Selling Stockholders described below under “**DESCRIPTION OF 2013 COMMON STOCK PURCHASE AGREEMENT**” beginning on page 19 of this prospectus and the 2012 Registration Rights Agreement that we entered into with the 2012 Selling Stockholders described below under “**DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS**” beginning on page 20 of this prospectus.

The number of shares of common stock that will be outstanding immediately after this offering is based on the 375,707,190 shares of our common stock outstanding as of January 15, 2014 and assumes the 2013 Selling Stockholders purchase all of the Equity Transaction Registered Shares pursuant to the 2013 Purchase Agreement and the 2012 Selling Stockholders exercise all Warrants issued to them in the 2012 Private Placement. There is no guarantee that the Equity Transaction Registered Shares will be purchased or that all Warrants will be exercised. The number of shares of common stock that will be outstanding immediately after this offering does not include:

67,092,382 shares of common stock issuable upon the exercise of warrants outstanding as of January 15, 2014, at a weighted average exercise price of \$0.37 per share;

14,984,500 shares of common stock issuable upon the exercise of options outstanding as of January 15, 2014, at a weighted average exercise price of \$0.11 per share; or

16,872,500 shares of common stock reserved for future grant or issuance as of January 15, 2014 under our 2012 Equity Incentive Plan.

## **RISK FACTORS**

*Investing 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 funds to support our current operations.**

We anticipate that our current capital resources, when considering expected losses from operations, will be sufficient to fund our operations through the end of the first quarter of 2014. 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 will likely require that we raise additional funds to support our operations beyond the first quarter of 2014. There is no assurance that we will be able to raise such additional funds on acceptable terms, if at all. If we raise additional funds by issuing securities, existing stockholders may be diluted. If funding is insufficient at any time in the future, we may be required to alter or reduce the scope of our operations or to cease operations entirely. Uncertainty as to the outcome of these factors raises substantial doubt about our ability to continue as a going concern.

### **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, 2012 was \$11.8 million while our operating loss for the fiscal year ended December 31, 2011 was \$6.5 million. Our operating loss for the nine-months ended September 30, 2013 was \$4.4 million. We had an accumulated deficit of approximately \$189.9 million at December 31, 2012 and approximately \$202.0 million at September 30, 2013. 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.

**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, and that arrangement is currently the subject of a dispute.**

Pursuant to the terms of a manufacturing services agreement dated June 1, 2012 (the “Visser Manufacturing Services Agreement”) between us 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 us 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. The Visser Manufacturing Services Agreement and the sublicense agreement with Visser were entered into pursuant to a Master Transaction Agreement with Visser, dated June 1, 2012 (the “Visser MTA”).

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 November 2013, we entered into arbitration proceedings with Visser to resolve disputes associated with the Visser MTA. In general, we filed claims for damages against Visser for fraudulently inducing us to enter into the Visser MTA and harm inflicted on us for its failure to perform under the manufacturing component of the Visser MTA. In addition, we are seeking reformation and/or termination of parts of the Visser MTA in order to free us from the exclusive manufacturing arrangement with Visser and allow us to seek other manufacturing partners. Visser has also filed claims for damages against us alleging several violations of the Visser MTA, including fraudulent contract inducement and securities fraud through alleged misrepresentations regarding our future capitalization, breach of several components of the Visser MTA through alleged inappropriate sharing of intellectual property with other business partners, as well as the lack of a qualified sales force in marketing our technology and related production efforts of Visser. Visser also requests equitable relief in the form of orders increasing its stock ownership in our company and requiring us to honor its asserted rights of first refusal with respect to our technology. While we believe that the claims by Visser are without merit and intend to defend ourselves vigorously and to forcefully pursue our claims for fraudulent inducement, breach of contract and other causes of action against Visser, we can make no predictions regarding the outcome of this arbitration. The pendency of the dispute and the arbitration could have a material, adverse effect on us and our results of operations and financial condition, as well as upon the market price of our common stock held by our stockholders.

**We primarily 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 limited suppliers. Orders for additional machines are estimated to be built with a 13 to 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.

**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 sufficient, 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 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 beyond two years. 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.

**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, zinc, 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.

**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 us 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.

**Our inability to protect our licenses, patents, trademarks 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, method of manufacturing, and applications and use 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 2032. 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.

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 or individuals 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.

**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, new SEC regulations and International Financial Reporting Standards (IFRS) 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. We are required to comply with certain regulatory requirements and to obtain a permit from the U.S. Environmental Protection Agency or other government agencies to process beryllium. Our failure to comply with present or future governmental regulations related to the processing of beryllium could result in suspension of manufacturing operations and substantial fines or criminal penalties.

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

**The existence of minority stockholders in our Liquidmetal 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.

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

During 2012, the highest bid price for our common stock was \$0.63 per share, while the lowest bid price during that period was \$0.10 per share. During 2013, the highest bid price for our common stock was \$0.23 per share, while the lowest bid price during that period was \$0.05 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.

**A limited public trading market exists for our common stock, which makes it more difficult for our stockholders to sell their common stock in the public markets.**

Our common stock is currently traded under the symbol “LQMT” and currently trades at a low volume, based on quotations on the “Over-the-Counter Bulletin Board,” meaning that the number of persons interested in purchasing our common stock at or near bid prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company which is still relatively unknown to stock analysts, stock brokers, institutional investors, and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven company such as ours or purchase or recommend the purchase of our stock until such time as we became more viable. Additionally, many brokerage firms may not be willing to effect transactions in the securities. As a consequence, there may be periods of several days or more when trading activity in our stock is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give you any assurance that a broader or more active public trading market for our common stock will develop or be sustained, or that trading levels will be sustained.

**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.

**FINRA sales practice requirements may also limit a shareholder’s ability to buy and sell our stock.**

The Financial Industry Regulatory Authority (“FINRA”) has adopted rules that require in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low priced securities will not be suitable for at least some customers. The FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our stock and have an adverse effect on the market for our shares.

**Antitakeover provisions of our amended and restated 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 amended and restated 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 amended and restated 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.

**Funding from our 2013 Purchase Agreement may be limited or insufficient to fund our operations or to implement our strategy.**

Under our 2013 Purchase Agreement with the 2013 Selling Stockholders, upon effectiveness of the registration statement of which this prospectus is a part, and subject to other conditions, we may direct the 2013 Selling Stockholders to purchase up to \$20.0 million (the “Total Commitment”) worth of our shares of common stock over a 36-month period. Although the 2013 Purchase Agreement provides that we may sell up to \$20.0 million of our common stock to the 2013 Selling Stockholders, only 96,555,893, shares of our common stock are being offered under this prospectus, which represents (i) 2,666,667 shares of common stock that we issued to the 2013 Selling Stockholders as Commitment Shares and (ii) 93,889,226 shares of our common stock that we may issue to the 2013 Selling Stockholders pursuant to draw downs under the 2013 Purchase Agreement.

Our stock price could decline to prior levels and thereby limit the amount of funding we could receive under the 2013 Purchase Agreement. For example, at an assumed purchase price of \$0.126 per share (equal to 90% of the closing

price of our common stock of \$0.14 on November 15, 2013), and assuming the sale by us to the 2013 Selling Stockholders of all of the 96,555,893 shares being registered hereunder pursuant to draw downs under the 2013 Purchase Agreement, we would receive only approximately \$12,166,043 in gross proceeds. If we elect to issue and sell more than the 96,555,893 shares offered under this prospectus to the 2013 Selling Stockholders, which we have the right, but not the obligation, to do, we must first register for resale under the Securities Act any such additional shares of our common stock, which could cause additional substantial dilution to our stockholders. Based on the above assumptions, we would be required to register an additional approximately 62,174,266 shares of our common stock to obtain the balance of \$20.0 million of the Total Commitment that would be available to us under the 2013 Purchase Agreement. We and the 2013 Selling Stockholders selected \$20.0 million as the Total Commitment amount because our board of directors determined we may be able to potentially utilize as much as \$20.0 million in furtherance of our company's working capital needs and disclosed business strategy over the next three-years. However, we do not believe that will likely sell the entire amount of the Total Commitment and will likely only sell up to the number of shares being registered hereunder, unless there is an increase in the trading price of our common stock that would enable us to draw down the Total Commitment with the number of shares being registered hereunder.

We currently have authorized and available for issuance 700,000,000 shares of our common stock pursuant to our charter, and as of November 15, 2013 we had 375,707,190 shares of common stock issued and outstanding. Depending on the price at which Shares are ultimately sold, we may have to increase the number of our authorized shares in order to issue shares to the 2013 Selling Stockholders.

There can be no assurance that we will be able to receive all or any of the Total Commitment from the 2013 Selling Stockholders because the 2013 Purchase Agreement contains certain limitations, restrictions, requirements, conditions and other provisions that could limit our ability to cause the 2013 Selling Stockholders to buy common stock from us. For instance, we are prohibited from issuing a Draw Down Notice if the amount requested in such Draw Down Notice exceeds the Maximum Draw Down Amount or the sale of Shares pursuant to the Draw Down Notice would cause us to sell or the 2013 Selling Stockholders to purchase an aggregate number of shares of our common stock which would result in beneficial ownership by the 2013 Selling Stockholders of more than 9.99% of our common stock (as calculated pursuant to Section 13(d) of the Exchange Act and the rules and regulations thereunder). Moreover, we cannot make more than one draw down in any Pricing Period and must allow two days to elapse between the completion of the settlement of any one draw down and the commencement of a Pricing Period for any other draw down. Also, as discussed above, there must be an effective registration statement covering the resale of any Shares to be issued pursuant to any draw down under the 2013 Purchase Agreement, including the registration statement of which this prospectus is a part. Registration statements may be subject to review and comment by the staff of the SEC, and will require the consent of our independent registered public accounting firm. Therefore, the timing of effectiveness of registration statements cannot be assured.

The extent to which we rely on the 2013 Selling Stockholders as a source of funding will depend on a number of factors, including the amount of working capital needed, the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. If obtaining sufficient funding from the 2013 Selling Stockholders were to prove unavailable or prohibitively dilutive, we would need to secure another source of funding. Even if we sell all \$20.0 million worth of common stock under the 2013 Purchase Agreement, we may still need additional capital to fully implement our current business, operating plans and development plans.

**The sale or issuance of our common stock to the 2013 Selling Stockholders at a discount may cause dilution and the resale of the shares of common stock by the 2013 Selling Stockholders into the public market, or the perception that such sales may occur, could cause the price of our common stock to fall.**

Under the 2013 Purchase Agreement, upon effectiveness of the registration statement of which this prospectus is a part, and subject to other conditions, we may direct the 2013 Selling Stockholders to purchase up to \$20.0 million worth of our shares of common stock over a 36-month period. We are registering an aggregate of 96,555,893 shares of our common stock in the registration statement of which this prospectus is a part pursuant to the 2013 Registration Rights Agreement. Notwithstanding the 2013 Selling Stockholders' beneficial ownership limitations set forth in the 2013 Purchase Agreement, if all of the 96,555,893 shares offered under this prospectus pursuant to the 2013 Registration Rights Agreement were issued and outstanding as of January 15, 2014, such shares would represent approximately 26% of the total number of shares of our common stock outstanding and approximately 31% of the total number of outstanding shares of our common stock held by non-affiliates, in each case as of January 15, 2014. The number of shares ultimately offered for sale by the 2013 Selling Stockholders under this prospectus is dependent upon the number of shares ultimately purchased by the 2013 Selling Stockholders under the 2013 Purchase Agreement. Additionally, because the per share purchase price for the Shares subject to a Draw Down Notice will be equal to 90% of the lowest daily VWAP that equals or exceeds the applicable Floor Price during the applicable Pricing Period as set forth in the 2013 Purchase Agreement, the 2013 Selling Stockholders will pay less than the then-prevailing market price for our common stock, and the actual purchase price for the Shares that we may sell to the 2013 Selling Stockholders will fluctuate based on the VWAP of our common stock during the term of the 2013 Purchase Agreement. Depending on market liquidity at the time, the sale of a substantial number of shares of our common stock to the 2013 Selling Stockholders at a discount to the then-prevailing market price for our common stock under the 2013 Purchase Agreement, and the resale of such shares by the 2013 Selling Stockholders into the public market, or the perception that such sales may occur, could cause the trading price of our common stock to decline, result in substantial dilution to existing stockholders and make it more difficult for us to sell equity or equity-related securities in the future.

Moreover, assuming that our stock price declined to \$0.14 per share (the closing price on November 15, 2013), and assuming the sale by us to the 2013 Selling Stockholders of all of the 96,555,893 shares being registered on behalf of the 2013 Selling Stockholders hereunder pursuant to draw downs under the 2013 Purchase Agreement, we would receive only approximately \$12,166,042.52 in gross proceeds. If we elect to issue and sell more than the 96,555,893 shares offered under this prospectus to the 2013 Selling Stockholders, which we have the right, but not the obligation, to do, we must first register for resale under the Securities Act any such additional Shares, which could cause additional substantial dilution to our stockholders. Based on the assumption of a \$0.14 trading price, we would be required to register an additional approximately 62,174,266 shares of our common stock to obtain the balance of \$20.0

million of the Total Commitment that would be available to us under the 2013 Purchase Agreement. Because the actual purchase price for the Shares that we may sell to the 2013 Selling Stockholders will fluctuate based on the VWAP of our common stock during the term of the 2013 Purchase Agreement, we are not able to determine at this time the exact number of shares of our common stock that we will issue under the 2013 Purchase Agreement and, therefore, the exact number of shares we will ultimately register for resale under the Securities Act. The resale of such a substantial number of shares of our common stock relative to our current market capitalization into the public market by the 2013 Selling Stockholders, or the perception that such sales may occur, could significantly depress the market price of our common stock and cause substantial dilution to our existing stockholders.

***There are substantial risks associated with the 2013 Purchase Agreement, which could contribute to the decline of the price of our common stock and have a dilutive impact on our existing stockholders.***

In order to have access to capital when needed, we entered into the 2013 Purchase Agreement with the 2013 Selling Stockholders. The terms of the Purchase Agreement are described under the section captioned “DESCRIPTION OF 2013 COMMON STOCK PURCHASE AGREEMENT.” The sale of our common stock pursuant to the terms of the 2013 Purchase Agreement will have a dilutive impact on our existing stockholders. The 2013 Selling Stockholders are not restricted in their ability to resell the shares we issue to them, and any such resale could cause the market price of our common stock to decline. Following any decline in the market price of our common stock, any subsequent advances would require us to issue a greater number of shares of common stock in exchange for each dollar advanced. Under these circumstances our existing stockholders would experience greater dilution. The sale of our common stock under the 2013 Purchase Agreement could encourage short sales by third parties, which could contribute to the further decline of our stock price.

***Hedging transactions may cause the market price of our common stock to decline.***

The 2013 Selling Stockholders have agreed in the 2013 Purchase Agreement that they will not, during the term of the agreement, engage in short-sales of our common stock or other types of hedging transactions that transfers the risk of economic ownership of our stock, subject to limited exceptions and limitations expressly set forth in the 2013 Purchase Agreement. However, fluctuations in the market price of our common stock could create circumstances under which a 2013 Selling Stockholder might have an incentive to nevertheless engage in hedging transactions if it were financially beneficial to do so and if it believed that the risk of non-compliance with the 2013 Purchase Agreement is outweighed by such benefit. If such hedging results in an imbalance on the sell side of the market in our common stock, the price of our common stock will decline.

***Pursuant to the terms of the 2013 Purchase Agreement, the 2013 Selling Stockholders will pay less than the then-prevailing market price for our common stock.***

The common stock to be issued to 2013 Selling Stockholders pursuant to the 2013 Purchase Agreement will be purchased at 90% of the lowest daily volume-weighted average price of our common stock during the five consecutive

trading days after the date we request the advance, provided that in no event shall such price be lower than \$0.03875 per share. The 2013 Selling Stockholders may have a financial incentive to sell our common stock upon receiving the shares to realize the profit equal to the difference between the discounted price and the market price. If they sell the shares, the price of our common stock could decrease.



## FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve risks and uncertainties, such as statements about our plans, objectives, expectations, assumptions, or future events. In some cases, you can identify forward-looking statements by terminology such as “anticipate,” “estimate,” “plan,” “project,” “continuing,” “ongoing,” “expect,” “believe,” “intend,” “may,” “will,” “should,” “could,” and similar expressions. 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 heading “**Risk Factors**” above.

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.

## DESCRIPTION OF 2013 COMMON STOCK PURCHASE AGREEMENT

### 2013 Common Stock Purchase Agreement

On November 8, 2013, we entered into a Common Stock Purchase Agreement (the "2013 Purchase Agreement") with Kingsbrook Opportunities Master Fund LP, Tech Opportunities LLC, and Iroquois Master Fund Ltd. (each, a "2013 Selling Stockholder" and collectively, the "2013 Selling Stockholders"). The 2013 Purchase Agreement provides that, upon the terms and subject to the conditions set forth therein, each of the 2013 Selling Stockholders has committed to purchase such 2013 Selling Stockholders' pro rata portion of up to \$20.0 million (the "Total Commitment") worth of our common stock, \$0.001 par value (the "Shares"), over the 36-month term of the 2013 Purchase Agreement.

In consideration for the 2013 Selling Stockholders' execution and delivery of the 2013 Purchase Agreement, on November 8, 2013, we delivered irrevocable instructions to our transfer agent to issue to each 2013 Selling Stockholder, not later than 4:00 p.m. (New York City time) on the second trading day immediately following November 8, 2013, certificates representing such 2013 Selling Stockholder's pro rata portion of 2,666,667 shares of common stock (the "Commitment Shares"). The Commitment Shares are being registered for resale, together with the shares that may be purchased under the 2013 Purchase Agreement, on the registration statement of which this prospectus is a part.

From time to time over the term of the 2013 Purchase Agreement, commencing on the trading day immediately following the date on which this registration statement is declared effective by the SEC as further discussed below, we may, in our sole discretion, provide each of the 2013 Selling Stockholders with draw down notices (each a "Draw Down Notice") to purchase a specified dollar amount of Shares (the "Draw Down Amount") over a five (5) consecutive trading day period commencing on the trading day specified in the applicable Draw Down Notice (the "Pricing Period") with each draw down subject to the limitations discussed below. The maximum amount of Shares requested to be purchased pursuant to any single Draw Down Notice cannot exceed a dollar amount equal to the lesser of (i) 300% of the average trading volume of our common stock during the ten (10) trading days immediately preceding the date the applicable Draw Down Notice is delivered (the "Applicable Draw Down Exercise Date") multiplied by the lower of (A) the closing trade price of the our common stock on the trading day immediately preceding the Applicable Draw Down Exercise Date and (B) the average of the closing trade prices of our common stock for the three (3) trading days immediately preceding the Applicable Draw Down Exercise Date (such lower price, the "Reference Price"), and (ii) a specified dollar amount set forth in the 2013 Purchase Agreement based on the Reference Price as of the Applicable Draw Down Exercise Date.

Once presented with a Draw Down Notice, each of the 2013 Selling Stockholders is required to purchase such 2013 Selling Stockholder's pro rata portion of the applicable Draw Down Amount on each trading day during the applicable Pricing Period on which the daily volume weighted average price for our common stock (the "VWAP") equals or exceeds an applicable floor price equal to the product of (i) 0.775 and (ii) the Reference Price, subject to adjustment

(the "Floor Price"), provided that in no event shall the Floor Price be less than \$0.03875. If the VWAP falls below the applicable Floor Price on any trading day during the applicable Pricing Period, the 2013 Purchase Agreement provides that the 2013 Selling Stockholders will not be required to purchase their pro rata portions of the applicable Draw Down Amount allocated to that trading day. The per share purchase price for the Shares subject to a Draw Down Notice shall be equal to 90% of the lowest daily VWAP that equals or exceeds the applicable Floor Price during the applicable Pricing Period. Each purchase pursuant to a draw down shall reduce, on a dollar-for-dollar basis, the Total Commitment under the 2013 Purchase Agreement.

The following example demonstrates a hypothetical draw down under the 2013 Purchase Agreement: If the Company delivered a valid Draw Down Notice for a Draw Down Amount equal \$500,000 to the 2013 Selling Stockholders on a trading day ("Trading Day 1"), and the closing trading price of the Company's common stock for each of the three trading days immediately preceding Trading Day 1 was \$0.21, \$0.23, and \$0.25, respectively (in chronological order), then the Floor Price for the draw down would be \$0.186 per share (i.e., 0.775 multiplied by \$0.23, with \$0.23 being the lower of (A) the closing price for the date immediately preceding Trading Day 1 and (B) the average closing price of the three trading days ending on the date immediately preceding Trading Day 1).

Under this example, Trading Day 1 would be the first trading day of the applicable Pricing Period, and if the daily VWAPs for the Company's common stock with respect to the five trading days beginning with and including Trading Day 1 were \$0.24, \$0.23, \$0.21, \$0.20, and \$0.23 per share, respectively, then the purchase price to be paid for the shares subject to the draw-down notice would be \$0.18 per share (i.e., 90% of the lowest daily VWAP over such Pricing Period), and the number of shares to be purchased under the Draw Down Notice would be 2,777,778 (i.e., the Draw Down Amount of \$500,000 divided by the \$0.18 purchase price). On the first trading day after the end of the Pricing Period, the Company would be obligated to deliver to each of the 2013 Selling Stockholders their pro rata share of the 2,777,778 shares being purchased, and the 2013 Selling Stockholders would be obligated to deliver the purchase price of \$0.18 per share with respect to such shares.

Assuming instead that the daily VWAPs for the Company's common stock with respect to the five trading days of the Pricing Period were \$0.20, \$0.19, \$0.17, \$0.17, and \$0.19, respectively, then the Draw Down Amount would be automatically reduced to \$300,000 (i.e., the \$500,000 Draw Down Amount in the Draw Down Notice would be reduced by (A) 0.2 multiplied by (B) the number of days during the pricing period that the daily VWAP fell below the floor price of \$0.186 per share, which would be 2 days). In such instance, the price per share to be paid by the Selling Stockholders would be \$0.19 per share, which is the lowest daily VWAP during the pricing period exceeding the Floor Price, multiplied by 0.9, which results in a price of \$0.171 per share. On the settlement date, the Company would be obligated to deliver to each of the 2013 Selling Stockholders their pro rata share of the 1,754,386 shares being purchased (representing the \$300,000 adjusted Draw Down Amount divided by the \$0.171 per share purchase price), and the 2013 Selling Stockholders would be obligated to deliver the purchase price of \$0.19 per share with respect to such shares. If the Draw Down Amount is reduced because the one of the daily VWAPs during the pricing period falls below the Floor Price, the 2013 Selling Stockholders will not any time have an obligation to purchase shares representing the amount of the reduction, even if the stock price thereafter increases (although the Company will at such time have the right to deliver a new Draw Down Notice).



We are prohibited from issuing a Draw Down Notice if (i) the amount requested in such Draw Down Notice exceeds the Maximum Draw Down Amount, (ii) the sale of Shares pursuant to such Draw Down Notice would cause us to issue or sell or the 2013 Selling Stockholders to acquire or purchase an aggregate dollar value of Shares that would exceed the Total Commitment, (iii) the sale of Shares pursuant to the Draw Down Notice would cause us to sell or the 2013 Selling Stockholders to purchase an aggregate number of shares of our common stock which would result in the collective beneficial ownership by the 2013 Selling Stockholders of more than 9.99% of our common stock (as calculated pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder), or (iv) the applicable Floor Price would be less than \$0.03875 on the Applicable Draw Down Exercise Date. We cannot make more than one draw down in any Pricing Period and must allow two (2) trading days to elapse between the completion of the settlement of any one draw down and the commencement of a Pricing Period for any other draw down.

Each of the 2013 Selling Stockholders has agreed that during the term of the 2013 Purchase Agreement, neither such 2013 Selling Stockholder nor any of its affiliates will, directly or indirectly, engage in any short sales involving our securities or grant any option to purchase, or acquire any right to dispose of or otherwise dispose for value of, any shares of our common stock or any securities convertible into or exercisable or exchangeable for any shares of our common stock, or enter into any swap, hedge or other similar agreement that transfers, in whole or in part, the economic risk of ownership of any shares of our common stock. The 2013 Selling Stockholders will not be prohibited from selling any of the shares of our common stock that they are obligated to purchase under a pending Draw Down Notice.

The 2013 Purchase Agreement contains customary representations, warranties and covenants by, among and for the benefit of the parties. The 2013 Purchase Agreement may be terminated at any time by the mutual written consent of the parties. Unless earlier terminated, the 2013 Purchase Agreement will terminate automatically on the earliest to occur of (i) the first day of the month next following the 36-month anniversary of the first trading day immediately following the date on which this registration statement is declared effective by the SEC, (ii) the date on which the 2013 Selling Stockholders have purchased the Total Commitment worth of common stock under the 2013 Purchase Agreement, or (iii) the date on which our common stock has failed to be listed or quoted on a Trading Market (as defined in the 2013 Purchase Agreement). Under certain circumstances set forth in the 2013 Purchase Agreement, (I) any of the 2013 Selling Stockholders may terminate the 2013 Purchase Agreement on one trading day's prior written notice to us and the other 2013 Selling Stockholders, and (II) we may terminate the 2013 Purchase Agreement on one trading day's prior written notice to each of the 2013 Selling Stockholders. The 2013 Selling Stockholders may not assign their rights or obligations under the 2013 Purchase Agreement.

If we issue a Draw Down Notice and fail to deliver the Shares to any 2013 Selling Stockholder on the applicable settlement date or within two (2) trading days thereafter by crediting such 2013 Selling Stockholder's or its designee's account at DTC, then we have agreed to pay such 2013 Selling Stockholder, in addition to all other remedies available to such 2013 Selling Stockholder under the 2013 Purchase Agreement, an amount in cash equal to 2.0% of the purchase price of such Shares for the initial 30-day period following the applicable settlement date until the Shares have been delivered, and an additional 2.0% for each additional 30-day period thereafter until the Shares have been delivered. In addition, if we fail to transfer all of the Shares subject to a Draw Down Notice to any 2013 Selling Stockholder on the applicable settlement date by crediting such 2013 Selling Stockholder's or its designee's account at

DTC, and if on or after such applicable settlement date such 2013 Selling Stockholder purchases, in an open market transaction or otherwise, shares of common stock necessary to make delivery by such 2013 Selling Stockholder in satisfaction of a sale by such 2013 Selling Stockholder of Shares that such 2013 Selling Stockholder anticipated receiving from us in connection with such draw down, then we have agreed to pay to such 2013 Selling Stockholder, in addition to any other amounts due to such 2013 Selling Stockholder pursuant to the 2013 Purchase Agreement, within three trading days after such 2013 Selling Stockholder's request, an amount, in cash, equal to such 2013 Selling Stockholder's total purchase price (including brokerage commissions, if any) for the Shares so purchased, at which point our obligation to credit such 2013 Selling Stockholder's or its designee's account at DTC for such Shares will terminate.

The 2013 Purchase Agreement also provides for indemnification of each of the 2013 Selling Stockholders and its affiliates in the event that such 2013 Selling Stockholder or its affiliates incur losses, liabilities, obligations, claims, contingencies, damages, costs or expenses relating to a breach by us of any of our representations and warranties under the 2013 Purchase Agreement or the other related transaction documents or any action instituted against a 2013 Selling Stockholder or its affiliates due to the transactions contemplated by the 2013 Purchase Agreement or other transaction documents, subject to certain limitations.

### **2013 Registration Rights Agreement**

In connection with the execution of the 2013 Purchase Agreement, on November 8, 2013, we and the 2013 Selling Stockholders also entered into a Registration Rights Agreement (the "2013 Registration Rights Agreement"). Pursuant to the 2013 Registration Rights Agreement, we have agreed to (i) file the registration statement of which this prospectus is a part (this "Registration Statement") with the SEC to register 96,555,893 Shares on or prior to December 23, 2013 (the "Filing Deadline") and (ii) use our commercially reasonable efforts to have it declared effective as soon as practicable, but in no event later than the earlier of (A) the 90th calendar day after November 8, 2013 and (B) the fifth business day after the date we are notified by the SEC that this Registration Statement will not be reviewed or will not be subject to further review (the "Effectiveness Deadline").

If at any time all of the Registrable Securities (as defined in the 2013 Registration Rights Agreement) are not covered by this initial Registration Statement, we have agreed to file with the SEC one or more additional registration statements so as to cover all of the Registrable Securities not covered by this Registration Statement, in each case, as soon as practicable, but in no event later than the applicable filing deadline for such additional registration statements as provided in the 2013 Registration Rights Agreement.

## **DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS**

### **Description of 2012 Private Placement**

On July 2, 2012, we entered into definitive agreements relating to a private placement (the “2012 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 our common stock at an exercise price of \$0.384 per share (the “Warrants”). The Convertible Notes were convertible at any time at the option of the holder into shares of our common stock at \$0.352 per share (subject to adjustment). The Convertible Notes and the Warrants were issued pursuant to a Securities Purchase Agreement, dated July 2, 2012, with the purchasers of the Convertible Notes (the “2012 Purchase Agreement”) and the closing of the 2012 Private Placement occurred on July 2, 2012. This prospectus covers the resale of the shares of our common stock issuable upon the exercise of certain of the Warrants.



On July 17, 2013, we and each of the holders of the Convertible Notes agreed to cause all remaining principal and interest under the Convertible Notes to be converted into an aggregate of 18,679,584 shares of our common stock in full satisfaction of the Convertible Notes. The shares were delivered to the holders of the Convertible Notes on July 18, 2013. As a result of this conversion, the Convertible Notes were paid off in full and are no longer outstanding.

## **Description of Warrants**

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 we issue or sell shares of our common stock, rights to purchase shares of our common stock, or securities convertible into shares of our common stock for a price per share that is less than the exercise price then in effect, the exercise price of the Warrants 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.

## **2012 Registration Rights Agreement**

In connection with the 2012 Private Placement, on July 2, 2012 we and the purchasers of the Convertible Notes entered into a Registration Rights Agreement (the “2012 Registration Rights Agreement”). Pursuant to the 2012 Registration Rights Agreement, we agreed to file a registration statement with the SEC covering the resale of the shares of our common stock issuable pursuant to the Convertible Notes and Warrants on or before thirty (30) days after the closing of the 2012 Private Placement and to use our best efforts to have the registration statement declared effective as soon as practicable (but in no event later than 75 days after the closing of the 2012 Private Placement if the registration statement was not subject to a full review by the SEC, or 105 days after the closing of the 2012 Private Placement if the registration statement was subject to a full review by the SEC). On August 23, 2012, we filed a registration statement covering the resale of the shares of our common stock issuable pursuant to the Convertible Notes. Pursuant to the 2013 Registration Rights Agreement, certain of the holders of the Warrants waived their registration rights under the 2012 Registration Rights Agreement. This Registration Statement covers the resale of the shares of our common stock issuable upon the exercise of the Warrants by those holders of the Warrants that did not waive their registration rights under the 2012 Registration Rights Agreement (the “2012 Selling Stockholders”). See “**SELLING STOCKHOLDERS – 2012 Selling Stockholders**” beginning on page 23 of this prospectus.

If, during the period beginning on the date that all Registrable Securities (as defined in the 2012 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 2012 Private Placement, we offer, sell, grant any option to purchase, or otherwise dispose of any of our or our subsidiaries' equity or equity equivalent securities (a "Subsequent Placement"), we must first notify each purchaser of the Convertible Notes of our intent to effect a Subsequent Placement. If a purchaser of the Convertible Notes wishes to review the details of a Subsequent Placement, we 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.

## **SELLING STOCKHOLDERS**

### **2013 Selling Stockholders**

This prospectus relates, in part, to the possible resale from time to time by the 2013 Selling Stockholders of any or all of the shares of common stock that have been or may be issued by us to the 2013 Selling Stockholders under the 2013 Purchase Agreement. For additional information regarding the issuance of such common stock to the 2013 Selling Stockholders covered by this prospectus, see "**DESCRIPTION OF 2013 COMMON STOCK PURCHASE AGREEMENT**" beginning on page 19 of this prospectus. We are registering such shares of common stock pursuant to the provisions of the 2013 Registration Rights Agreement in order to permit the 2013 Selling Stockholders to offer the shares for resale from time to time. Except for (i) the ownership of the Convertible Notes and Warrants issued pursuant to the 2012 Purchase Agreement in connection with the 2012 Private Placement, (ii) the ownership of shares of our common stock issued upon conversion of such Convertible Notes, and (iii) the transactions contemplated by the 2013 Purchase Agreement and the 2013 Registration Rights Agreement, none of the 2013 Selling Stockholders has had any material relationship with us within the past three years.

The table below presents information regarding the 2013 Selling Stockholders and the shares of common stock that they may offer from time to time under this prospectus. This table is prepared based on information supplied to us by the 2013 Selling Stockholders, and reflects holdings as of January 15, 2014. The number of shares in the column “Maximum Number of Shares of Common Stock to be sold Pursuant to this Prospectus” represents all of the shares of common stock that the 2013 Selling Stockholders may offer under this prospectus. The 2013 Selling Stockholders may sell some, all or none of their shares in this offering. We do not know how long the 2013 Selling Stockholders will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the 2013 Selling Stockholders regarding the sale of any of the shares.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and includes shares of common stock with respect to which the 2013 Selling Stockholders have voting and investment power. The percentage of shares of common stock beneficially owned by the 2013 Selling Stockholders prior to the offering shown in the table below is based on an aggregate of 375,707,190 shares of our common stock outstanding on January 15, 2014. The number of shares shown as beneficially owned in the table below are calculated pursuant to Rule 13d-3(d)(1) of the Exchange Act. Under Rule 13d-3(d)(1), shares not outstanding that are subject to options, warrants, rights or conversion privileges exercisable within 60 days are deemed outstanding for the purpose of calculating the number and percentage owned by such person, but are not deemed outstanding for the purpose of calculating the percentage owned by each other person listed. Because the purchase price of the shares of common stock issuable under the 2013 Purchase Agreement is determined on each settlement date, the number of shares that may actually be sold by us under the 2013 Purchase Agreement may be fewer than the number of shares being offered by this prospectus on behalf of the 2013 Selling Stockholders. The fourth column assumes the sale of all of the shares offered by the 2013 Selling Stockholders pursuant to this prospectus.

Name of 2013 Selling Stockholder	Number of Shares of Common Stock		Pursuant to this Prospectus	Maximum Number of Shares of Common Stock to be Sold		Number of Shares of Common Stock Owned After Offering	
	Owned Prior to Offering	Percent		Number(3)	Percent(2)	Number(3)	Percent(2)
<b>Kingsbrook Opportunities Master Fund LP(4)</b>	8,097,917	2.12 %	38,622,357	7,031,250	1.84 %		

<b>Tech Opportunities LLC(5)</b>	800,000	0.21	%	28,966,768	0	0	%
<b>Iroquois Master Fund Ltd.(6)</b>	3,925,000	1.04	%	28,966,768	3,125,000	0.82	%

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(1) This number includes the shares of common stock we issued to the applicable 2013 Selling Stockholder on November 8, 2013 as its Pro Rata Amount of Commitment Shares in consideration for entering into the 2013 Purchase Agreement with us; with respect to Kingsbrook Opportunities Master Fund LP and Iroquois Master Fund Ltd. This number also includes warrants issued to such 2013 Selling Stockholders in connection with the 2012 Private Placement. In accordance with Rule 13d-3(d) under the Exchange Act, we have excluded from the number of shares beneficially owned prior to the offering all of the shares that the 2013 Selling Stockholders may be required to purchase pursuant to draw downs under the 2013 Purchase Agreement, because the issuance of such shares is solely at our discretion and is subject to certain conditions, the satisfaction of all of which are outside of the 2013 Selling Stockholders' control, including this Registration Statement becoming and remaining effective. Also, under the terms of the 2013 Purchase Agreement, we may not issue shares of our common stock to the 2013 Selling Stockholders to the extent that the 2013 Selling Stockholders or any of their affiliates would, at any time, beneficially own more than 9.99% of our outstanding common stock.

(2) Applicable percentage ownership is based on 375,707,190 shares of our common stock outstanding as of January 15, 2014.

(3) Assumes the sale of all 96,555,893 shares being offered by the 2013 Selling Stockholders pursuant to this prospectus.

(4) The business address of Kingsbrook Opportunities Master Fund LP ("Kingsbrook Opportunities") is 689 Fifth Avenue, 12<sup>th</sup> Floor, New York, New York 10022. We have been advised that Kingsbrook Opportunities is not a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, and that neither Kingsbrook Opportunities nor any of its affiliates is an affiliate or an associated person of any FINRA member or independent broker-dealer. Kingsbrook Partners LP ("Kingsbrook Partners") is the investment manager of Kingsbrook Opportunities and consequentially 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 Mssrs. Storch, Chill and Wallace disclaim beneficial ownership of these securities.

- (5) The business address of Tech Opportunities LLC (“Tech Opportunities”) is 777 Third Avenue, 30<sup>th</sup> Floor, New York, New York 10017. We have been advised that Tech Opportunities is not a member of FINRA or an independent broker-dealer, and that neither Tech Opportunities nor any of its affiliates is an affiliate or an associated person of any FINRA member or independent broker-dealer. Hudson Bay Capital Management LP, the investment manager of Tech Opportunities, has voting and investment power over securities held by Tech Opportunities. 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 of these securities.

- (6) The business address of Iroquois Master Fund Ltd. is 641 Lexington Avenue, 26<sup>th</sup> Floor, New York, New York 10022. We have been advised that Iroquois Master Fund Ltd. is not a member of FINRA or an independent broker-dealer, and that neither Iroquois Master Fund Ltd. nor any of its affiliates is an affiliate or an associated person of any FINRA member or independent broker-dealer. Iroquois Capital Management L.L.C. (“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.

## 2012 Selling Stockholders

The shares of common stock being offered by the 2012 Selling Stockholders are those issuable to the 2012 Selling Stockholders upon exercise of their Warrants. For additional information regarding the issuance of the Warrants, see “**DESCRIPTION OF 2012 PRIVATE PLACEMENT AND WARRANTS**” beginning on page 20 of this prospectus. We are registering the shares of common stock issuable to the 2012 Selling Stockholders upon the exercise of their Warrants in order to permit the 2012 Selling Stockholders to offer the shares for resale from time to time. Except for (i) the ownership of the Convertible Notes and Warrants issued pursuant to the 2012 Purchase Agreement and (ii) the ownership of shares of our common stock issued upon conversion of such Convertible Notes, the 2012 Selling Stockholders have not had any material relationship with us or our affiliates within the past three years.

The table below lists the 2012 Selling Stockholders and other information regarding the beneficial ownership of shares of our common stock by each of the 2012 Selling Stockholders. The second column lists the number of shares of common stock beneficially owned by each 2012 Selling Stockholder, based on its ownership of shares of our common stock issued upon conversion of its Convertible Notes and its ownership of Warrants, as of January 15, 2014 assuming exercise of the Warrants held by such Selling Stockholder 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 2012 Selling Stockholders.

This prospectus covers the resale of 100% of the maximum number of shares of common stock issuable upon exercise of the Warrants held by the 2012 Selling Stockholders as of the trading day immediately preceding the date this Registration Statement is filed with the SEC, all subject to adjustment as provided in the 2012 Registration Rights Agreement and in each case without regard to any limitations on exercise of such Warrants. Because 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 on behalf of the 2012 Selling Stockholders. The fourth column assumes the sale of all of the shares offered by the 2012 Selling Stockholders pursuant to this prospectus.

Under the terms of the Warrants, a 2012 Selling Stockholder may not exercise the Warrants to the extent such 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 exercise, excluding for purposes of such determination shares of common stock issuable 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").

Name of Selling Stockholder	Number	Maximum	Number
	of Shares	Number of	of Shares
	of	Shares	of
	Common	of	Common
	Stock	Common	Stock
	Owned	Stock to be	Owned
	Prior to	Pursuant	After
	Offering	to this	Offering
		Prospectus	
<b>Empery Asset Master Ltd.(1)</b>	1,796,875	1,796,875	0
<b>Hartz Capital Investments, LLC(2)</b>	3,671,875	3,671,875	0

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, (1) may also be deemed to have investment discretion and voting power over the shares held by EAM. EAM, Mr. Hoe and Mr. Lane each disclaim any beneficial ownership of these shares. We have been advised that Empery Asset Master Ltd. is not a member of FINRA or an independent broker-dealer, and that neither Empery Asset Master Ltd. nor any of its affiliates is an affiliate or an associated person of any FINRA member or independent broker-dealer.

Edward J. Stern, Ronald J. Bangs and Jonathan B. Schindel, in their capacity as officers of Hartz Capital, Inc., which is the sole manager of Hartz Capital Investments, LLC, share voting and investment control over the shares held by Hartz Capital Investments, LLC. Each of Messers. Bangs and Schindel disclaims beneficial ownership of (2) all of such shares. The address of Hartz Capital Investments, LLC is 400 Plaza Drive, Secaucus, NJ 07094. We have been advised that Hartz Capital Investments LLC is not a member of FINRA or an independent broker-dealer, and that neither Hartz Capital Investments LLC nor any of its affiliates is an affiliate or an associated person of any FINRA member or independent broker-dealer.

## USE OF PROCEEDS

The 2013 Selling Stockholders and the 2012 Selling Stockholders, collectively, may sell all of the common stock offered by this prospectus from time to time. We will not receive any of the proceeds from the sale of such common stock by the 2013 Selling Stockholders or the 2012 Selling Stockholders. We may, however, receive from the 2013 Selling Stockholders aggregate gross proceeds of up to \$20.0 million if all of the shares of common stock contemplated to be sold to the 2013 Selling Stockholders pursuant to the 2013 Purchase Agreement are sold. We may

also receive from the 2012 Selling Stockholders proceeds from the exercise of the Warrants, if exercised. We cannot guarantee that the 2012 Selling Stockholders will exercise the Warrants or that the 2013 Selling Stockholders will purchase all of the shares contemplated to be sold pursuant to the 2013 Purchase Agreement. Any net proceeds received from the sale of shares of our common stock to the 2013 Selling Stockholders under the 2013 Purchase Agreement and from the 2012 Selling Stockholders upon the exercise of the Warrants will be used for general working capital purposes.

#### **DETERMINATION OF OFFERING PRICE**

There is currently a limited public market for our common stock. The 2013 Selling Stockholders and the 2012 Selling Stockholders will determine at what price they may sell the offered shares, and such sales may be made at prevailing market prices or at privately negotiated prices. See “**PLAN OF DISTRIBUTION**” beginning on page 76 of this prospectus.

#### **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 January 27, 2014, the last reported sales price of our common stock was \$0.39 per share.

##### **Number of Common Shareholders**

As of January 15, 2014, we had 220 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.

	<b>High</b>	<b>Low</b>
<b>Year Ended December 31, 2012:</b>		
First Quarter	\$ 0.35	\$ 0.12
Second Quarter	\$ 0.63	\$ 0.15
Third Quarter	\$ 0.33	\$ 0.18
Fourth Quarter	\$ 0.19	\$ 0.10
<b>Year Ended December 31, 2013:</b>		
First Quarter	\$ 0.12	\$ 0.08
Second Quarter	\$ 0.10	\$ 0.06
Third Quarter	\$ 0.23	\$ 0.05
Fourth Quarter	\$ 0.20	\$ 0.13

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

*This management's discussion and analysis should be read in conjunction with the consolidated financial statements and notes included elsewhere in this registration statement.*

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

### Overview

We are a materials technology company that develops and commercializes products made from amorphous alloys. Our Liquidmetal® family of alloys consists of a variety of proprietary 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.

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 structures that form 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.

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Our revenues are derived from (i) selling our bulk Liquidmetal alloy products, which include non-consumer electronic devices, aerospace parts, medical products, automotive components, oil and gas exploration, and sports and leisure goods, (ii) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development, (iii) product licensing and royalty revenue, and (iv) research and development revenue.

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.

## **Licensing Transactions**

### ***Transaction with Visser Precision Cast, LLC***

On June 1, 2012, we entered into a Master Transaction Agreement (the “Visser MTA Agreement”) with Visser Precision Cast, LLC (“Visser”) relating to a strategic transaction for manufacturing services and financing.

Under the manufacturing and service component of the Visser MTA Agreement, we have agreed to engage Visser as a perpetual, exclusive manufacturer of non-consumer electronic products and to 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, except for certain limited exceptions. Further, we have agreed to sublicense to Visser, on a fully-paid up, royalty-free, irrevocable, perpetual, worldwide basis, all intellectual property rights held by us. Visser’s use of such sublicense is limited to the exercise of its manufacturing rights, provided that such limitation will terminate if we fail to comply with certain technical, administrative, and research and development support obligations set forth in the transaction agreements with Visser and such failure is not cured within 60 days. In addition, Visser has a right of first refusal over any proposed transfer of our technology pursuant to any license, sublicense, sale or other transfer, other than a license to a machine or alloy vendor.



Under the Visser MTA Agreement, we issued and sold to Visser in a private placement transaction (i) 30,000,000 shares of common stock at a purchase price of \$0.10 per share resulting in proceeds of \$3 million, and (ii) warrants to purchase 15,000,000 shares of common stock (subsequently increased to 18,539,762 shares under the anti-dilution provisions of the warrants) at an original exercise price of \$0.22 per share (subsequently reduced to \$0.18 per share under the anti-dilution provisions of the warrants), which expire on June 1, 2017. All of the shares of common stock issuable upon exercise of the warrants are subject to a lockup period through December 31, 2016.

In November 2013, we entered into arbitration proceedings with Visser to resolve disputes associated with the Visser MTA Agreement (see note 15 in the accompanying footnotes to the financial statements for the quarter ended September 30, 2013).

### *Apple License Transaction*

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. We 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 with Apple, we are obligated to contribute all intellectual property that we developed through February 2012 (and subsequently amended to extend through February 2014) to CIP. 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.

### *Other License Transactions*

On January 31, 2012, we entered into a Supply and License Agreement for a five year term with Engel Austria GmbH (“Engel”) whereby Engel was granted a non-exclusive license to manufacture and sell injection molding machines to our licensees. Since that time, we have delivered to Engel a customized induction melt system with a configuration for a standard injection-molding machine that that can be commercially supplied and supported by Engel to enable future licensees to manufacture Liquidmetal components. As of December 31, 2013, no revenues have been recognized under this agreement.

On November 16, 2011, we entered into a Development Agreement with Materion Brush Inc. (“Materion”) to evaluate, analyze and develop amorphous alloy feedstock to be supplied in commercial quantities. Further, on June 17, 2012, we entered into a Sales Representation Agreement with Materion whereby Materion shall promote the sale of our products for certain commissions. This agreement is for a two year initial term with annual, automatic renewals. To date, there have been no commission payments related to this agreement.

Our Liquidmetal Golf subsidiary has the exclusive right and license to utilize our Liquidmetal alloy technology for purposes of golf equipment applications. This right and license is set forth in an intercompany license agreement between us and Liquidmetal Golf. This license agreement provides that Liquidmetal Golf has a perpetual and exclusive license to use Liquidmetal alloy technology for the purpose of manufacturing, marketing, and selling golf club components and other products used in the sport of golf. We own 79% of the outstanding common stock in Liquidmetal Golf.

In June 2003, we entered into an exclusive license agreement with LLPG, Inc. (“LLPG”). Under the terms of the agreement, LLPG has the right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets. We, in turn, will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by LLPG. The exclusive license agreement with LLPG expires on December 31, 2021.

In March 2009, we entered into a license agreement with Swatch Group, Ltd. (“Swatch”) under which Swatch was granted a perpetual non-exclusive license to our technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches, and our license agreement with LLPG was simultaneously amended to exclude watches from LLPG’s rights. We will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.





**Results of Operations***Comparison of the years ended December 31, 2012 and 2011*

	<b>For the years</b>			
	<b><u>ended December 31,</u></b>			
	<b><u>2012</u></b>	<b>% of</b>	<b><u>2011</u></b>	<b>% of</b>
	<b>in 000's</b>	<b>Revenue</b>	<b>in 000's</b>	<b>Revenue</b>
<b>Revenue:</b>				
Products	\$ 591		\$ 572	
Licensing and royalties	59		400	
<b>Total revenue</b>	<b>650</b>		<b>972</b>	
Cost of revenue	354	54%	373	38%
<b>Gross margin</b>	<b>296</b>	<b>46%</b>	<b>599</b>	<b>62%</b>
Selling, marketing, general and administrative	4,850	746%	4,243	437%
Research and development	943	145%	1,120	115%
Manufacturing contract costs	6,300	969%	-	-
Settlement expense	-	-	1,713	176%
Total operating expense	12,093		7,076	
<b>Operating loss</b>	<b>(11,797 )</b>		<b>(6,477 )</b>	
Change in value of warrants, gain	6,547		1,328	
Change in value of embedded conversion feature liability, gain	4,931		-	
Debt discount amortization expense	(11,949 )		-	
Financing costs	(1,355 )		-	
Other income	34		26	
Interest expense	(459 )		(90 )	
Interest income	23		22	
Gain on disposal of subsidiary, net	-		12,109	
Loss from operations of discontinued operations, net	-		(763 )	
<b>Net income (loss)</b>	<b>\$ (14,025 )</b>		<b>\$ 6,155</b>	

*In discussing our results of our operations, we have categorized the specific items of our statements of operations into various categories to facilitate the understanding of our core business operations. Explanations of each category as well as analyses of specific items contained in that category are discussed below:*

*Operating revenue and expenses*

Operating revenue and expenses category of statements of operations items represent those items that pertain to our core operations in the bulk alloy manufacturing and licensing business as follows:

*Revenue.* Our revenues are segregated into two types representing (i) Products which contain revenues related to our bulk alloy manufacturing business and (ii) Licensing and royalties which contain revenues related to our bulk alloy licensing business.

Total revenue decreased by \$322 thousand to \$650 thousand for the year ended December 31, 2012 from \$972 thousand for the year ended December 31, 2011. The decrease is primarily attributable to a one-time license fee from Swatch in the amount of \$381 thousand that was recognized in 2011. This decrease was slightly offset by an increase in our Products revenue from prototype and other revenue from our manufacturing business in 2012.

*Cost of revenue, products.* Cost of revenue was \$354 thousand, or 54% of total revenue, for the year ended December 31, 2012 from \$373 thousand, or 38% of total revenue, for the year ended December 31, 2011. The cost to manufacture parts from our bulk alloys manufacturing business is variable and differs based on the unique design of each product. In addition, much of our current product mix consists of prototype parts and other revenue 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 revenue percentages to stabilize and be more predictable.

*Gross margin.* Our gross margin decreased by \$303 thousand from \$599 thousand as of December 31, 2011 to \$296 thousand as of December 31, 2012. Our gross margin percentage decreased from 62% as of December 31, 2011 to 46% as of December 31, 2012. These decreases are primarily the result of the \$381 thousand one-time Swatch license recognized in 2011.

In order to evaluate our margins more thoroughly, we must look to revenue and costs related to our products category of revenue. So excluding Licensing and royalties revenue in our gross margin calculation, the gross margin for our Products category of revenue is \$237 thousand or 40% for the year ended December 31, 2012 and \$199 thousand or 35% for the year ended December 31, 2011.

*Selling, marketing, general, and administrative expenses.* Selling, marketing, general, and administrative expenses increased by \$607 thousand to \$4.9 million, or 746% of revenue, for the year ended December 31, 2012 from \$4.2 million, or 437% of revenue, for the year ended December 31, 2011. The increase from the prior year was mainly due to additional payroll and recruiting expenses for new hires including an Executive Vice President of Business Development and Operations and a Sales Engineer to facilitate the adoption of our technology. We also paid board fees for 2011 and 2012 in fiscal year 2012. We expect to invest further in our selling efforts by expanding our marketing and sales programs, as well as adding new headcount in our sales department.

*Research and Development Expenses.* Research and development expenses decreased by \$177 thousand to \$943 thousand, or 145% of revenue, for the year ended December 31, 2012, from \$1.1 million, or 115% of revenue, for the year ended December 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. We have hired a new Vice President of Engineering at the end of 2012, and we expect to invest further in our research and development efforts to facilitate the adoption of our technology.



*Manufacturing contract costs.* Manufacturing contract costs consist of a one-time \$6.3 million non-cash expense for the year ended December 31, 2012 related to the discount pricing that Visser received under the Visser MTA Agreement. The \$6.3 million was determined by taking the \$0.21 difference between our weighted average \$0.31 stock price at the time of issuances of our common stock and the \$0.10 per share actual purchase price, multiplied by the 30,000,000 shares issued to Visser.

*Settlement expense.* Settlement expense consists of a one-time expense of \$1.7 million for the year ended December 31, 2011, in satisfaction of a legal settlement with SAGA. We did not incur any settlement expense for the year ended December 31, 2012.

*Operating loss.* Operating loss increased by \$5.3 million from \$6.5 million for the year ended December 31, 2011 to \$11.8 million for the year ended December 31, 2012. Excluding the one-time manufacturing contract costs and settlement expense, Operating loss increased by \$733 thousand from a loss of \$4.8 million for the year ended December 31, 2011 to a loss of \$5.5 million for the year ended December 31, 2012. As discussed above, the increase in our operating loss, excluding one-time expenses, is primarily related to a decrease in Total revenue and an increase in operating expense categories from 2011 to 2012.

We continue to invest in our technology infrastructure to expedite the adoption of our technology, but we have experienced long sales lead times for customer adoption of our technology. Until that time where we can either (i) increase our revenues with shipments of routine, commercial parts through our third party contract manufacturer or (ii) obtain significant licensing revenues, we expect to have operating losses for the foreseeable future.

#### Non-operational expenses

Our income statement contains various, significant items that are non-operational in nature. These categories of expenses may have significant gains and losses based on the volatility of our stock price as follows:

*Change in value of warrants, gain.* The change in value of warrants was a non-cash gain of \$6.5 million, for the year ended December 31, 2012, which resulted from periodic valuation adjustments for warrants issued in connection with the Visser MTA Agreement and the 2012 Private Placement. The significant increase during the year ended December 31, 2012 compared to the gain of \$1.3 million during the year ended December 31, 2011 was primarily due to the decrease in our stock price during the second half of 2012 from \$0.32 as of June 30, 2012 to \$0.10 as of December 31, 2012. Changes in the value of our warrants are non-cash and do not affect the operations of our business.

*Change in value of embedded conversion feature liability, gain.* Change in value of embedded conversion feature liability was a non-cash gain of \$4.9 million for the year ended December 31, 2012. The change in value of embedded conversion feature liability is mainly due to changes in our stock price, similar to the foregoing fluctuation in the change in value of warrants, associated with the valuation of our embedded conversion feature liability related to convertible note under the 2012 Private Placement.

*Financing costs.* Financing costs consist of \$1.4 million of non-cash expense for the year ended December 31, 2012, related to the booking of our warrant liability for the issuance of 15,000,000 warrants to Visser at an exercise price of \$0.22 per share under the Visser MTA Agreement (see "--Licensing Transactions").

*Other income.* Other income was \$34 thousand for the year ended December 31, 2012, and \$26 thousand for the year ended December 31, 2011. Other income is primarily due to gains on settlements on accounts payable for less than face value.

*Debt discount amortization expense.* Debt discount amortization expense was \$11.9 million of non-cash expense for the year ended December 31, 2012. Debt discount amortization expense primarily relates to the amortization of \$12 million of original debt discount over the term of the senior convertible notes issued as part of the 2012 Private Placement along with its issuance costs. The amount includes amortization of debt discount of \$7.4 million under the effective interest method and a one-time amortization of debt discount of \$1.9 million for the year ended December 31, 2012.

*Interest expense.* Interest expense was \$459 thousand for the year ended December 31, 2012 and was \$90 thousand for the year ended December 31, 2011. Interest expense for the year ended December 31, 2012 consists of the 8% interest related to the senior convertible notes issued as part of the 2012 Private Placement. Interest expense for the year ended December 31, 2011 primarily consisted of interest accrued on the \$1.7 million SAGA promissory note.

*Interest income.* Interest income was \$23 thousand and \$22 thousand for the year ended December 31, 2012 and 2011, 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 are non-cash in nature.

*Loss from discontinued operations.* Loss from discontinued operations of \$763 thousand for the year ended December 31, 2011 consisted of the losses from operations of our discontinued subsidiaries. Our discontinued subsidiaries were either sold or de-consolidated as of December 31, 2011.



*Net income (loss).* Due to the significant impact of our non-recurring, non-cash and non-operating expenses discussed above, our net loss of \$14.0 million as of December 31, 2012 and net income of \$6.2 million as of December 31, 2011 are reflective of significant fluctuations that are unrelated to the operations of our bulk alloy business. Our “Operating loss, excluding non-recurring expenses” should be reviewed in conjunction with our net income (loss) for a more thorough review of our core business operations.

*Comparison of the three and nine months ended September 30, 2013 and 2012 (unaudited)*

All amounts described in this table are in thousands, except share and per share data . All amounts described in this table are unaudited.

	<b>For the three months</b>				<b>For the nine months</b>			
	<b><u>ended September 30,</u></b>				<b><u>ended September 30,</u></b>			
	<b><u>2013</u></b>	<b>% of</b>	<b><u>2012</u></b>	<b>% of</b>	<b><u>2013</u></b>	<b>% of</b>	<b><u>2012</u></b>	<b>% of</b>
	<b>in 000's</b>	<b>Products</b>	<b>in 000's</b>	<b>Products</b>	<b>in 000's</b>	<b>Products</b>	<b>in 000's</b>	<b>Products</b>
		<b>Revenue</b>		<b>Revenue</b>		<b>Revenue</b>		<b>Revenue</b>
Revenue:								
Products	\$ 456		\$ 80		\$ 721		\$ 471	
Licensing and royalties	-		27		7		46	
Total revenue	456		107		728		517	
Cost of sales	396	87%	73	91%	589	82%	256	54%
Gross margin	60	13%	34	43%	139	19%	261	55%
Selling, marketing general and administrative	1,213	266%	1,372	1715%	3,735	518%	3,338	709%
Research and development	368	81%	217	271%	829	115%	616	131%
Manufacturing contract costs	-		-		-		6,300	
Operating loss	(1,521 )		(1,555 )		(4,425 )		(9,993 )	
Change in value of warrants, gain (loss)	(2,511 )		4,184		(1,715 )		4,010	
Change in value of embedded conversion	(2,435 )		2,785		621		2,785	

feature liabilities, gain				
Debt discount amortization expense	(361 )	(6,247 )	(6,504 )	(6,247 )
Financing costs	-	-	-	(1,355 )
Interest expense	(21 )	(240 )	(242 )	(258 )
Interest income	1	10	5	18
Gain on extinguishment of debt	91	-	91	-

*In discussing our results of our operations, we have categorized the specific items of our statements of operations into various categories to facilitate the understanding of our core business operations. Explanations of each category as well as analyses of specific items contained in that category are discussed below:*

Operating revenue and expenses

The “Operating revenue and expenses” category of statements of operations items represent those items that pertain to our core operations in the bulk alloy manufacturing and licensing business as follows:

*Revenue.* Total revenue increased to \$456 thousand for the three months ended September 30, 2013 from \$107 thousand for the three months ended September 30, 2012. Total revenue also increased for the nine months ended September 30, 2013 to \$728 thousand from \$517 thousand for the same period in 2012. The increase for the respective periods was primarily attributable to an increase in research and development services under existing purchase orders.

*Cost of sales.* Cost of sales was \$396 thousand, or 87% of products revenue, for the three months ended September 30, 2013, an increase from \$73 thousand, or 91% of products revenue, for the three months ended September 30, 2012. Cost of sales was \$589 thousand, or 82% of products revenue, for the nine months ended September 30, 2013, an increase from \$256 thousand, or 54% of products revenue, for the nine months ended September 30, 2012. The cost to manufacture parts from our bulk alloys manufacturing business is variable and differs based on the unique design of each product. In addition, much of our current product mix consists of prototype parts and other revenue which have higher internal variable cost percentages, relative to products revenue, than would otherwise be incurred by contract manufacturers. Therefore, our cost of sales as a percentage of products revenue may not be representative of our future cost percentages. When and if we begin increasing our products revenues with shipments of routine, commercial parts through our third party contract manufacturer, we expect our cost of sales percentages to stabilize and be more predictable.

*Gross margin.* Our gross margin increased to \$60 thousand from \$34 thousand for the three month periods ended September 30, 2013 and 2012, respectively. Our gross margin, as a percentage of products revenue, decreased to 13% from 43% for the three month periods ended September 30, 2013 and 2012, respectively. Our gross margin decreased to \$139 thousand from \$261 thousand for the nine month periods ended September 30, 2013 and 2012, respectively. Our gross margin, as a percentage of products revenue, decreased to 19% from 55% for the nine month periods ended September 30, 2013 and 2012, respectively. As discussed above under “Cost of sales”, much of our current product mix consists of prototype parts and other revenue which have higher internal variable cost percentages, relative to revenue, than would otherwise be incurred by contract manufacturers. As such, our gross margin percentages may fluctuate based on volume and quoted production prices per unit and may not be representative of our future business. When and if we begin increasing our revenues with shipments of routine, commercial parts through our third party contract manufacturer, we expect our gross margin percentages to stabilize and be more predictable.

*Selling, Marketing, General, and Administrative.* Selling, marketing, general and administrative expenses were \$1.2 million and \$3.7 million for the three and nine months ended September 30, 2013, respectively, compared to \$1.4 million and \$3.3 million for the three and nine months ended September 30, 2012, respectively. The increase in expense for the nine-month period ended September 30, 2013 is due to additional payroll expenses for new hires including an Executive Vice President of Business Development and Operations and a Sales Engineer to facilitate the adoption of our technology. The decrease in the three month period ended September 30, 2013 is due to reductions in legal and consulting expenses, which were slightly off-set by increases in payroll expenses for the period.

*Research and Development.* Research and development expenses increased to \$368 thousand and \$829 thousand for the three and nine months ended September 30, 2013, respectively, from \$217 thousand and \$616 thousand for the three and nine months ended September 30, 2012, respectively. The increase from the prior year was mainly due to additional company research during 2013, inclusive of testing programs related to our golf subsidiary, and the hiring of our Vice President of Engineering at the end of 2012. 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 and related production processes.



*Manufacturing Contract Costs.* Manufacturing contract costs consisted of \$6.3 million for the three and nine months ended September 30, 2012 related to the discount pricing that Visser received under the Visser MTA Agreement (see note 3 “June 2012 Visser MTA Agreement” in the accompanying footnote to the financial statements for the period ended September 30, 2013). The \$6.3 million was determined by taking the \$0.21 difference between the Company’s weighted average \$0.31 stock price at the time of issuances of our common stock to Visser and the \$0.10 per share actual purchase price, multiplied by the 30,000,000 shares issued to Visser. No such costs were incurred in 2013.

*Operating loss.* Operating loss was \$1.5 million and \$4.4 million for the three and nine month periods ended September 30, 2013, respectively. This compares to \$1.6 million and \$10.0 million for the three and nine month periods ended September 30, 2012. Excluding the one-time manufacturing contract costs, loss was \$1.6 million and \$3.7 million for the three and nine month periods ended September 30, 2012, respectively. The change in our loss is primarily attributable to the increase in operating expenses, off-set by higher revenues, as discussed above.

We continue to invest in our technology infrastructure to expedite the adoption of our technology, but we have experienced long sales lead times for customer adoption of our technology. Until that time where we can either (i) increase our revenues with shipments of routine, commercial parts through our third party contract manufacturer or (ii) obtain significant licensing revenues, we expect to have operating losses for the foreseeable future.

#### Non-operational expenses

Our statement of operations contains various, significant items that are non-operational in nature. These categories of expenses may have significant gains and losses based on the volatility of our stock price as follows:

*Change in Value of Warrants.* The change in value of warrants was a non-cash loss of \$2.5 million and \$1.7 million for the three and nine months ended September 30, 2013, respectively. The change in value of warrants was a non-cash gain of \$4.2 million and \$4.0 million for the three and nine months ended September 30, 2012, respectively. These gains and losses result from periodic valuation adjustments related to fluctuations in our stock price for warrants issued in connection with the Visser MTA Agreement and our senior convertible notes issued in our private placement that closed in July 2012, as further described in note 3 to the accompanying financial statements (the “2012 Private Placement”). Changes in the value of our warrants are non-cash and do not affect the core operations of our business or liquidity.



*Change in Value of Embedded Conversion Feature Liability.* Change in value of embedded conversion feature liability was a non-cash gain (loss) of \$(2.4 million) and \$621 thousand for the three and nine months ended September 30, 2013, respectively. The change in value of embedded conversion feature liability is due to changes in our stock price associated with the valuation of our embedded conversion feature liability related to the senior convertible notes issued as part of the July 2012 Private Placement, as well as the gradual decrease in the embedded conversion feature liability in conjunction with the amortization of our senior convertible notes. As part of the final conversion of the senior convertible notes on July 17, 2013, the associated embedded conversion liability was reduced to zero due to exercise of the conversion option and was included in the calculation of the resulting gain on extinguishment of the senior convertible notes (see note 7 in the accompanying footnotes to the financial statements for the period ended September 30, 2013).

*Debt Discount Amortization.* Debt discount amortization expense was \$361 thousand and \$6.5 million of non-cash expense for the three and nine months ended September 30, 2013, respectively (see Consolidated Statements of Cash Flows in the accompanying financial statements for the period ended September 30, 2013). Debt discount amortization primarily relates to the amortization of \$12 million of original debt discount over the term of the senior convertible notes issued as part of the 2012 Private Placement along with related issuance costs. The amount includes amortization of debt discount and issuance costs of \$188 thousand and \$4.5 million for the three and nine months ended September 30, 2013, respectively, under the effective interest method, as well as \$173 thousand and \$2.0 million of expense for the three and nine months period ended September 30, 2013, respectively, related to the additional issuance of stock at a discount in relation to the amortization of our senior convertible notes. As part of the final conversion of the senior convertible notes on July 17, 2013, the associated unamortized debt discount and debt issuance costs were reduced to zero and were included in the calculation of the resulting gain on extinguishment of the senior convertible notes (see note 7 in the accompanying footnotes to the financial statements for the period ended September 30, 2013).

*Financing Costs.* Financing costs consisted of \$1.4 million for the three and nine months ended September 30, 2012 related to the recording of our warrant liability for the issuance of warrants to purchase 15,000,000 shares of our common stock to Visser at an exercise price of \$0.22 per share, which expire on June 1, 2017 under the Visser MTA Agreement (see note 3 in the accompanying footnotes to the financial statements for the period ended September 30, 2013). No such financing costs were incurred in 2013.

*Interest Expense.* Interest expense for the three and nine months ended September 30, 2013 was \$21 thousand and \$242 thousand, respectively, and consists of the 8% interest related to the senior convertible notes issued as part of the 2012 Private Placement. Interest expense related to the same obligation was \$240 thousand and \$258 thousand, respectively, for the three and nine months ended September 30, 2012.

*Interest Income.* Interest income relates to interest earned from our cash deposit for the respective periods.





*Gain on Extinguishment of Debt.* Gain on extinguishment of debt was \$91 thousand for both the three and nine month periods ended September 30, 2013, respectively. The gain consisted of the write-off of unamortized debt discount, unamortized debt issuance costs, embedded conversion feature liabilities, and the difference between the reacquisition price of the shares issued and the contractual conversion price of the senior convertible notes (see note 7 in the accompanying footnotes to the financial statements for the period ended September 30, 2013).

## **Liquidity and Capital Resources**

### *Year ended December 31, 2012*

Our cash used in continuing operations was \$5.2 million for the year ended December 31, 2012, while cash used in continuing operations was \$5.1 million for the year ended December 31, 2011. Our cash used in investing activities was \$86 thousand for the year ended December 31, 2012 primarily from purchase of property and equipment. Our cash provided by financing activities of continuing operations was \$12.3 million for the year ended December 31, 2012 primarily from convertible debt issuance. As of December 31, 2012, our cash balance was \$7.2 million.

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 such purchasers the right to purchase up to an aggregate of 18,750,000 shares of our common stock at an exercise price of \$0.384 per share. At December 31, 2012, the outstanding principal and accrued but unpaid interest under the convertible notes was \$7.0 million.

### *Nine Months Ended September 30, 2013 (unaudited)*

Our cash used in operations was \$4.0 million for the nine months ended September 30, 2013, cash used in investing activities was \$185 thousand for the nine months ended September 30, 2013, and cash provided by financing activities was \$74 thousand for the nine months ended September 30, 2013. As of September 30, 2013, our cash balance was \$3.0 million.

On July 2, 2012, we completed the 2012 Private Placement pursuant to which we issued \$12 million in principal amount of senior convertible notes that were due on September 1, 2013 and warrants to the purchasers of such notes giving such purchasers the right to purchase up to an aggregate of 18,750,000 shares of our common stock at an exercise price of \$0.384 per share. As of July 17, 2013, the notes issued in the 2012 Private Placement were paid off in full through the issuance of common stock (see note 7 in the accompanying footnotes to the financial statements for

the period ended September 30, 2013).

We anticipate that our current capital resources, when considering expected losses from operations, will be sufficient to fund our operations through the end of the first quarter of 2014. 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 will likely require that we raise additional funds to support our operations beyond the first quarter of 2014. There is no assurance that we will be able to raise such additional funds on acceptable terms, if at all. If we raise additional funds by issuing securities, existing stockholders may be diluted. If funding is insufficient at any time in the future, we may be required to alter or reduce the scope of our operations or to cease operations entirely. Uncertainty as to the outcome of these factors raises substantial doubt about our ability to continue as a going concern.

On November 8, 2013, we entered into a Common Stock Purchase Agreement that will allow us to raise up to \$20 million through periodic issuances of common stock over a three year period (see note 15 in the accompanying footnotes to the financial statements for the period ended September 30, 2013).

### **Off Balance Sheet Arrangements**

As of December 31, 2012 and September 30, 2013, we 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. There were no impairment losses during the years ended December 31, 2012 and 2011.

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 and Monte Carlo Simulation pricing models and changes in fair value during the period are reported in our earnings.

We record debt discount based on a valuation that is derived from a combination of the fair value of warrants and embedded conversion features in accordance with FASB ASC 815-10, *Derivatives and Hedging*, and FASB ASC 815-40, *Contracts in Entity's Own Equity*. Once the original valuation is determined, we utilize the effective interest method to amortize the debt discount over the life of our senior convertible notes.

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. Our adoption of this guidance on January 1, 2012 did not have a significant impact on our consolidated financial statements.

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. Our adoption of this guidance on January 1, 2012 did not have a significant impact on our consolidated financial statements.

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.

In February 2013, the FASB issued an accounting standards update which requires disclosure related to items reclassified out of accumulated other comprehensive income (AOCI). The guidance requires entities to present separately, for each component of other comprehensive income (OCI), current period reclassifications and the remainder of the current-period OCI. In addition, for certain current period reclassifications, an entity is required to disclose the effect of the item reclassified out of AOCI on the respective line item of net income. The adoption of this pronouncement did not have a material impact on our consolidated financial statements and accompanying disclosures.

In February 2013, the FASB issued an accounting standard update which modifies the requirements for the recognition, measurement, and disclosure of obligations resulting from joint and several liability arrangements for which the total amount of the obligation is fixed at the reporting date. The guidance requires companies to measure these obligations as the sum of the amount the company has agreed with co-obligors to pay and any additional amount it expects to pay on behalf of one or more co-obligors. This guidance is effective for all fiscal years, and interim periods within those years, beginning after December 31, 2013. We do not expect this guidance to have a material impact on our consolidated financial statements.

In July 2013, the FASB issued an accounting standards update which will require that an unrecognized tax benefit be presented on the balance sheet as a reduction of a deferred tax asset for a net operating loss ("NOL") or tax credit carryforward under certain circumstances. The guidance is effective for all fiscal years, and interim periods within those years, beginning December 15, 2013. We do not expect this guidance to have a material 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.

## **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](http://www.liquidmetal.com) and all of our filings with the

Securities and Exchange Commission (“SEC”) are available free of charge on our website.

## **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.

### ***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 continue to develop 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-inch thickness limitation of our zirconium-titanium bulk alloy renders our alloys currently unsuitable for use as structural materials in large-scale applications, such as load-bearing beams in building construction. We continue to engage in research and development with the goal of developing processing technology and new alloy compositions that will enable our bulk alloys to be formed into thicker objects.

### *Cost Advantages*

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

### **Our Strategy**

The key elements of our strategy include:

*Focusing Our Marketing Activities on Select Products with Optimized Gross-Margins.* We have and continue to focus our marketing activities on select products with optimized gross margins for the long term. This strategy is designed to align our product development initiatives with our processes and cost structure, and to reduce our exposure to more commodity-type product applications that are prone to unpredictable demand and fluctuating pricing. Our focus is primarily on products that possess design features that take advantage of our existing and developing manufacturing technology and that command a price commensurate with the performance advantages of our alloys. In addition, we will continue to engage in prototype manufacturing, both for internally manufactured products and for products that will ultimately be licensed to or manufactured by third parties.

*Pursuing Strategic Partnerships In Order to More Rapidly Develop and Commercialize Products.* We have and continue to actively pursue and support strategic partnerships that will enable us to leverage the resources, strength, and technologies of other companies in order to more rapidly develop and commercialize products. These partnerships may include licensing transactions in which we license full commercial rights to our technology in a specific application area, or they may include transactions of a more limited scope in which, for example, we outsource manufacturing activities or grant limited licensing rights. We believe that utilizing such a partnering

strategy will enable us to reduce our working capital burden, better fund product development efforts, better understand customer adoption practices, leverage the technical and financial resources of our partners, and more effectively handle product design and process challenges.



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

### **Applications for Liquidmetal Alloys**

We have focused our commercialization efforts for Liquidmetal alloys on four 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.

### ***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 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, automotive components and industrial machines. We believe that there are multiple applications and opportunities in the non-consumer electronics product category for us to produce parts that command the higher margin and premium prices consistent with our core business strategy.

We believe that the continued miniaturization of, and the introduction of advanced features to non-consumer electronic devices is a primary driver of growth, market share, and profits in our industry. The high strength-to-weight ratio and elastic limit and the processing advantages of bulk Liquidmetal alloys enable the production of smaller, thinner, but stronger electronic parts. We also believe that the strength characteristics of our alloys could facilitate the creation of a new generation of non-consumer electronic devices which currently may not be viable because of strength limitations of conventional metal parts in the marketplace today. Lastly, we believe that our alloys offer style and design flexibility, such as shiny metallic finishes, to accommodate the changing tastes of our customers.



On August 5, 2010, we entered into a license transaction with Apple Inc. (“Apple”) pursuant to which, for a one time license fee, we granted to Apple a perpetual, worldwide, fully-paid, exclusive license to commercialize our intellectual property in the field of “consumer electronic” products, as defined in the license agreement. As a result, we will not pursue application of our bulk Liquidmetal alloys in the consumer electronics field. However, we continue to work with Apple to develop and advance research and development in the amorphous alloy space to benefit both consumer and non-consumer electronics fields. For more information regarding our transaction with Apple, see “ – Licensing Transactions” below.

### ***Aerospace and Defense***

We design and develop components for aerospace and defense customers to meet their requirements for complex, high strength parts with precision tolerances through our near net-shape molding process. Some of the parts we have developed cannot be made by any other conventional fabrication process, offering designers of high performance, mission critical systems unique alternatives.

Because of the high degree of uniformity and consistency of our volume molding process, we are able to reduce significant costs associated with machining and verifying the dimensional tolerances of high precision parts and post-fabrication steps required to apply highly polished surfaces. Additional key properties for the aerospace and defense market are Liquidmetal’s tensile strength, hardness, wear resistance, resistance to corrosion, and Liquidmetal’s unique properties associated with explosives and munitions.

The many high value and specialized applications within the aerospace and defense industry present significant opportunities for our technology and solutions, and as they are designed into key systems, will provide us with potential long-term revenue streams.

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

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

In the sporting goods industry, we believe that the high strength, hardness, and elasticity of our bulk alloys have the potential to enhance performance in a variety of products including but not limited to golf clubs, tennis rackets and skis. We further believe that many sporting goods products are conducive to our strategy of focusing on high-margin products that meet our design criteria.

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

### ***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. These include, but are not limited to, specialized blades, orthopedic instruments utilized for implant surgery procedures, dental devices, and general surgery devices. The potential value offered by our alloys is higher performance in some cases and cost reduction in others, the latter stemming from the ability of Liquidmetal alloys to be net shape cast into components, thus reducing costs of secondary processing. The status of most components in the prototyping phase is subject to non-disclosure agreements with our customers.

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

### **Licensing Transactions**

#### ***Transaction with Visser Precision Cast, LLC***

On June 1, 2012, the Company entered into a Master Transaction Agreement (the "Visser MTA Agreement") with Visser Precision Cast, LLC ("Visser") relating to a strategic transaction for manufacturing services and financing.

Under the manufacturing/sublicense component of the Visser MTA Agreement, the Company has agreed to engage Visser as a perpetual, exclusive manufacturer of non-consumer electronic products and to 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, except for certain limited exceptions. Further, the Company has agreed to sublicense to Visser, on a fully-paid up, royalty-free, irrevocable, perpetual, worldwide basis, all intellectual property rights held by the Company. In addition, Visser has a right of first refusal over any proposed transfer by the Company of its technology pursuant to any license, sublicense, sale or other transfer, other than a license to a machine or alloy vendor.



Under the Visser MTA Agreement, the Company issued and sold to Visser in a private placement transaction (i) 30,000,000 shares of common stock at a purchase price of \$0.10 per share resulting in proceeds of \$3 million and (ii) warrants to purchase 15,000,000 shares of common stock at an exercise price of \$0.22 per share which expire on June 1, 2017. All of the shares of common stock issuable upon exercise of the warrants is subject to a lock-up period through December 31, 2016.

In November 2013, the Company and Visser entered into arbitration proceedings to resolve disputes associated with the Visser MTA Agreement.

### ***Apple License Transaction***

On August 5, 2010, the Company entered into a license transaction with Apple Inc. (“Apple”) pursuant to which (i) the Company contributed substantially all of its 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 the Company 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 the Company 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 with Apple, the Company is obligated to contribute all intellectual property that it developed through February 2012 (and subsequently amended to extend through February 2014) to CIP. The Company is also obligated to maintain certain limited liability company formalities with respect to CIP at all times after the closing of the license transaction.

### ***Other License Transactions***

On January 31, 2012, the Company and Engel Austria GmbH (“Engel”) entered into a Supply and License Agreement for a five year term whereby Engel was granted a non-exclusive license to manufacture and sell injection molding machines to the Company’s licensees. Since that time, the Company has delivered to Engel a customized induction melt system with a configuration for a standard injection-molding machine that that can be commercially supplied and supported by Engel to enable future licensees to manufacture Liquidmetal components.

On November 16, 2011, the Company and Materion Brush Inc. (“Materion”) entered into a Development Agreement to evaluate, analyze and develop amorphous alloy feedstock to be supplied in commercial quantities. Further, on June 17, 2012, the Company entered into a Sales Representation Agreement with Materion whereby Materion shall promote the sale of Liquidmetal’s products for certain commissions. This agreement is for a two year initial term with annual, automatic renewals.



The Company's Liquidmetal Golf subsidiary has the exclusive right and license to utilize the Company's Liquidmetal alloy technology for purposes of golf equipment applications. This right and license is set forth in an intercompany license agreement between Liquidmetal Technologies and Liquidmetal Golf. This license agreement provides that Liquidmetal Golf has a perpetual and exclusive license to use Liquidmetal alloy technology for the purpose of manufacturing, marketing, and selling golf club components and other products used in the sport of golf. Liquidmetal Technologies owns 79% of the outstanding common stock in Liquidmetal Golf.

In June 2003, the Company entered into an exclusive license agreement with LLPG, Inc. ("LLPG"). Under the terms of the agreement, LLPG has the right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets. The Company, in turn, will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by LLPG. The exclusive license agreement with LLPG expires on December 31, 2021.

In March 2009, the Company entered into a license agreement with Swatch Group, Ltd. ("Swatch") under which Swatch was granted a perpetual non-exclusive license to the Company's technology to produce and market watches and certain other luxury products. In March 2011, this license agreement was amended to grant Swatch exclusive rights as to watches, and the Company's license agreement with LLPG was simultaneously amended to exclude watches from LLPG's rights. The Company will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by Swatch. The license agreement with Swatch will expire on the expiration date of the last licensed patent.

## **Our Intellectual Property**

Pursuant to our transaction with Apple described under "– Licensing Transactions" above, we license substantially all our intellectual property from our wholly-owned subsidiary, Crucible Intellectual Property, LLC. Our intellectual property consists of patents, trade secrets, know-how, and trademarks. Protection of our intellectual property is a strategic priority for our business, and we intend to vigorously protect our patents and other intellectual property. Our intellectual property portfolio includes 58 owned or licensed U.S. patents and numerous patent applications relating to the composition, processing, and application of our alloys, as well as various foreign counterpart patents and patent applications.

Our initial bulk amorphous alloy technology was developed by researchers at the California Institute of Technology ("Caltech"). We have acquired patent rights that provide us with the exclusive right to commercialize the amorphous alloy and other amorphous alloy technology developed at Caltech through a license agreement ("Caltech License Agreement") with Caltech. In addition to the patents and patent applications that we license from Caltech, we are building a portfolio of our own patents to expand and enhance our technology position. These patents and patent applications primarily relate to various applications of our bulk amorphous alloys and the processing of our alloys. The patents expire on various dates between 2014 and 2032. Our policy is to seek patent protection for all technology,

inventions, and improvements that are of commercial importance to the development of our business, except to the extent that we believe it is advisable to maintain such technology or invention as a trade secret.

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

## **Research and Development**

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

*Enhance Material Processing and Manufacturing Efficiencies.* We are working with our strategic partners to enhance material processing and manufacturing efficiencies. We plan to continue research and development of processes and compositions that will decrease our cost of making products from Liquidmetal alloys.

*Optimize Existing Alloys and Develop New Compositions.* We believe that the primary technology driver of our business will continue to be our proprietary alloy compositions. We plan to continue research and development on new alloy compositions to generate a broader class of amorphous alloys with a wider range of specialized performance characteristics. We believe that a larger alloy portfolio will enable us to increase the attractiveness of our alloys as an alternative to incumbent materials and, in certain cases, drive down product costs. We also believe that our ability to optimize our existing alloy compositions will enable us to better tailor our alloys to our customers' specific application requirements.

*Develop New Applications.* We will continue the research and development of new applications for Liquidmetal alloys. We believe the range of potential applications will broaden by expanding the forms, compositions, and methods of processing of our alloys.

We conduct our research and development programs internally and also through strategic relationships that we enter into with third parties. As of December 31, 2013, our internal research and development efforts are conducted by a team of four scientists and engineers each of whom we either employ directly or engage as a consultant.

In addition to our internal research and development efforts, we enter into cooperative research and development relationships with leading academic institutions. We have entered into development relationships with other companies for the purpose of identifying new applications for our alloys and establishing customer relationships with such companies. Some of our product development programs are partially funded by our customers. We are also engaged in negotiations with other potential customers regarding possible product development relationships. Our research and development expenses for the years ended December 31, 2013 and 2012 were \$1.2 million and \$943 thousand, respectively.



## **Raw Materials**

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

## **Manufacturing**

Our current manufacturing strategy is to partner with global companies that are contract manufacturers and alloy producers. We are seeking third party companies with a proven track record of success and that can gain specialized skills and knowledge of our alloys through close collaborations with our team of scientists and engineers. We believe that partnering with these global companies will allow us to forgo the capital intensive requirements of maintaining our own manufacturing facilities and allow us to focus on our core business which is to expand our patent portfolio of intellectual property and develop long term relationships with our customers.

Under the manufacturing/sublicense component of the Visser MTA Agreement, the Company has agreed to engage Visser as a perpetual, exclusive manufacturer of non-consumer electronic products and to 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, except for certain limited exceptions.

## **Customers**

During 2013, there were 3 major customers, who together accounted for 90% of our revenue. During 2012, there were three major customers, who together accounted for 70% of our revenue. In the future, we expect that a significant portion of our revenue may continue to be concentrated in a limited number of customers, even if our bulk alloys business grows.

## **Competition**

Other than our authorized licensees, we are not aware of any other company or business that manufactures, markets, distributes, or sells bulk amorphous alloys or products made from bulk amorphous alloys. We believe it would be

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

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

### **Backlog**

Because of the minimal lead-time associated with orders of bulk alloy parts, we generally do not carry a significant backlog. The backlog as of any particular date gives no indication of actual sales for any succeeding period.

### **Sales and Marketing**

We direct our marketing efforts towards customers that will incorporate our components and products into their finished goods. To that end, we have hired additional business development personnel who, in conjunction with engineers and scientists, will actively identify potential customers that may be able to benefit from the introduction of Liquidmetal alloys to their products. We currently have 3 full-time employees and 1 contractor engaged in sales and marketing activities.

### **Employees**

As of December 31, 2013, we had 18 total employees, all of whom are employed on a full-time basis. As of that date, none of our employees were represented by a labor union. We have not experienced any work stoppages and we consider our employee relations to be favorable.

## **Governmental Regulation**

Government regulation of our products will depend on the nature and type of product and the jurisdictions in which the products are sold. For example, medical instruments incorporating our Liquidmetal alloys will be subject to regulation in the United States by the FDA and corresponding state and foreign regulatory agencies. Medical device manufacturers to whom we intend to sell our products may need to obtain FDA approval before marketing their medical devices that incorporate our products and may need to obtain similar approvals before marketing these medical device products in foreign countries.

## **Environmental Law Compliance**

Beryllium is a minor constituent element of some of our alloys. The processing of beryllium can result in the release of beryllium into the workplace and the environment and in the creation of beryllium oxide as a by-product. Beryllium is classified as a hazardous air pollutant, a toxic substance, a hazardous substance, and a probable human carcinogen under environmental, safety, and health laws, and various acute and chronic health effects may result from exposure to beryllium. We are required to comply with certain regulatory requirements and to obtain a permit from the U.S. Environmental Protection Agency or other government agencies to process beryllium.

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

## **Golf Subsidiary**

From 1997 until September 2001, we were engaged in the retail marketing and sale of golf clubs through a majority owned subsidiary, Liquidmetal Golf. The retail business of Liquidmetal Golf was discontinued in September 2001. However, in December 2012, we recommenced activities and discussions with potential partners regarding the development of golf club components for golf original equipment manufacturers that will integrate these components into their own clubs and then sell them under their respective brand names. Liquidmetal Technologies owns 79% of the outstanding common stock in Liquidmetal Golf.

Our Liquidmetal Golf subsidiary has the exclusive right and license to utilize our Liquidmetal alloy technology for purposes of golf equipment applications. This right and license is set forth in an intercompany license agreement



between Liquidmetal Technologies and Liquidmetal Golf. This license agreement provides that Liquidmetal Golf has a perpetual and exclusive license to use Liquidmetal alloy technology for the purpose of manufacturing, marketing, and selling golf club components and other products used in the sport of golf. In consideration of this license, Liquidmetal Golf has issued 4,500,000 shares of Liquidmetal Golf common stock to Liquidmetal Technologies, which comprises of Liquidmetal Technologies' 79% ownership interest in Liquidmetal Golf.

## **Properties**

Our principal executive office and principal research and development offices are located in Rancho Santa Margarita, California and consist of approximately 15,000 square feet. We occupy this facility pursuant to a lease agreement that expires in April 2016. We currently expect that the foregoing facility will meet our anticipated research, warehousing, and administrative needs for the foreseeable future.

## **Legal Proceedings**

In November 2013, Visser and we entered into arbitration proceedings with the Judicial Arbitrator Group in Denver, Colorado. Both parties have filed claims alleging breaches of various obligations under the Visser MTA Agreement entered into on June 1, 2012.

In general, we have filed claims for damages against Visser for fraudulently inducing us into entering the Visser MTA Agreement and harm inflicted on us for its failure to perform under the manufacturing component of the Visser MTA Agreement. In addition, we are seeking reformation and/or termination of parts of the Visser MTA Agreement in order to free us from the exclusive manufacturing arrangement with Visser and allow us to seek other manufacturing partners. Visser has also filed claims for damages against us alleging several violations of the Visser MTA Agreement including fraudulent contract inducement and securities fraud through alleged misrepresentations regarding our future capitalization, breach of several components of the Visser MTA Agreement through alleged inappropriate sharing of intellectual property with other business partners, as well as the lack of a qualified sales force in marketing our technology and related production efforts of Visser. Visser also requests equitable relief in the form of orders increasing its stock ownership and requiring us to honor its asserted rights of first refusal with respect to our technology.

## **MANAGEMENT**

### **Directors and Executive Officers**

The following table provides information with respect to our directors and officers as of January 15, 2014:

<b>Name</b>	<b>Age</b>	<b>Position(s)</b>
Thomas Steipp	63	President, Chief Executive Officer, Director
Tony Chung	44	Chief Financial Officer
Bruce Bromage	59	Executive Vice-President of Business Development and Operations
Scott Gillis	60	Director
Mark Hansen	58	Director
Abdi Mahamedi	51	Chairman of the Board of Directors
Ricardo Salas	49	Executive Vice President, Director
Bob Howard-Anderson	57	Director
Richard Sevcik	65	Director

*Thomas Steipp* was elected by our board of directors to serve as our President and Chief Executive Officer in August 2010 and was also elected to our board of directors in August 2010. Mr. Steipp previously served in various roles at Symmetricom, Inc., a publicly traded provider of products for communications infrastructure and systems. Mr. Steipp served as Symmetricom's Chief Executive Officer from December 1998 to June 2009, Chief Financial Officer from December 1998 to October 1999, and President and Chief Operating Officer of Telecom Solutions, a division of Symmetricom, from March 1998 to December 1998. Mr. Steipp also served on Symmetricom's board of directors from 1998 to 2009. During his employment with Symmetricom, Mr. Steipp worked to transform the company from a technology holding company into a telecommunications hardware focused company, served as the company's spokesman in working with investors, implemented a new business model, worked to reduce operating expenses, and led acquisition activities. Mr. Steipp has also served on the board of directors of Alpha and Omega Semiconductors Limited, a publicly traded designer, developer and global supplier of a broad range of power semiconductors, since November 2006. Mr. Steipp received his B.S. in electrical engineering from the Air Force Academy and M.S. in industrial administration from Purdue University. Our board of directors believes that Mr. Steipp's experience and background make him a qualified and valuable member of our board of directors. In particular, Mr. Steipp's experience and background in working with publicly traded, technology-based industrial products companies, recruiting executives, working with investors, implementing new business models, and leading acquisition activities make him a valuable resource for our company.

*Tony Chung* was elected by our board of directors to serve as our Chief Financial Officer in December 2008. Most recently, Mr. Chung served as Chief Financial Officer at BETEK Corporation, a real estate and investment subsidiary of SK Engineering and Construction, from February 2008 to December 2008 and as Chief Financial Officer of Solarcity, a company providing advanced solar technology and installation services, from March 2007 to January 2008. Mr. Chung's primary role was to manage the overall financial operations of both companies. Previously, Mr. Chung was employed by us as our Vice President of Finance from May 2004 to February 2007. Mr. Chung is a Certified Public Accountant and served eight years at KPMG as an Audit and Consulting Manager for several large multinational companies. He received his B.S. degree in Business Administration from University of California Berkeley's Haas School of Business in 1992. Mr. Chung is also an Attorney at Law and received his J. D. degree from Pacific Coast University School of Law in 2006.

*Bruce Bromage* was elected by our board of directors to serve as Executive Vice President of Business Development and Operations in November 2012 after serving as a Strategic Marketing and Operations consultant with the company since June 2012. From April 2002 to August 2010, Dr. Bromage served as Executive Vice President and General Manager of Symmetricom, a publicly traded provider of products for communications infrastructure and systems, and was an officer of that company. Responsibilities during his eight years with the company included Corporate Strategy, M&A Integration, Information Technology, and General Management of the Timing, Test and Measurement Division and the Technology Realization Center. Prior to Symmetricom, Dr. Bromage held senior executive positions with two high-technology startups and managed Strategic Business Development with Hewlett Packard. Dr. Bromage received his Ph.D. in Cognitive Psychology from the University of California, Santa Barbara in 1981 and has completed executive programs with the Stanford Graduate School of Business. Our board of directors believes that Dr. Bromage's experience and background make him a qualified and valuable member of our executive management team. In particular, his prior experience in start-up companies, developing new technologies and business models and his extensive knowledge in acquisitions and negotiations make him a valuable resource for our company.



*Scott Gillis* was elected to our board of directors in August 2011 and has served as the Chairman of our Audit Committee and as a member of our Compensation Committee and our Corporate Governance and Nominating Committee since that time. Mr. Gillis recently retired, after serving AIG for 28 years, as a financial executive and business unit CFO. Before retiring from AIG, Mr. Gillis served AIG's Life & Retirement business, SunAmerica Financial Group, as Senior Vice President of Finance, as Treasurer, and as CFO of SunAmerica's retirement services businesses. He has served many years on the boards of a number of SunAmerica companies, including SunAmerica Life Insurance Company, SunAmerica Annuity and Life Assurance Company, First SunAmerica Life Insurance Company, Variable Annuity Life Insurance Company, AIG Advisor Group Inc., SunAmerica Affordable Housing Partners Inc., SunAmerica Investments Inc., SunAmerica Capital Services Inc. and Western National Life Insurance Company. Mr. Gillis began his career at SunAmerica as Director of Audit. From 1989 to 1995 he served as Vice President and Controller of the SunAmerica Life Companies. He was promoted to Senior Vice President and Controller in 1996, elected a director in 2000, and then CFO in 2003. He was elected Vice President of SunAmerica Inc. in 1998, made Controller in 2000, promoted to Senior Vice President in 2001 and named CFO in 2004. In 2011, he was named a Senior Vice President of SunAmerica Financial Group. Our board of directors believes that Mr. Gillis' experience and background make him a qualified and valuable member of our board of directors. In particular, Mr. Gillis' background working in multi-million dollar companies in the financial industry and experience in the financial sector make him a valuable resource for our company. In addition, our board of directors believes that his 37 years of experience with financial reporting and financial statements, and two decades of experience with SEC filings and financial statements make him a valuable member of the audit committee of our board of directors.

*Mark Hansen* began serving on our board of directors in February 2011 and has been the Chairman of our Compensation Committee and our Corporate Governance and Nominating Committee and a member of our Audit Committee since August 2011. Mr. Hansen brings thirty plus years of executive management experience serving consumers through retail, foodservice and consumer package goods venues. Mr. Hansen has been with Cobalt Development Partners, LLC since 2003 and is presently the Managing Partner. The firm focuses on the development of emerging consumer and intellectual property companies. From June 1997 to September 1998, Mr. Hansen served as the President and CEO of SAM's Club, which generated \$23 billion in revenue with 75,000 employees and from November 1989 to June 1997, the President and CEO of PETsMART, the country's largest retailer of pet supplies and services. Mr. Hansen's previous and present board of director positions include Applebee's Restaurants, Amazon.com, Swander Pace Capital, Pet360.com and Arizona State University Business School Dean's Counsel. Mr. Hansen received his Bachelor's Degree in Fine Arts from Roosevelt University in 1976. Our board of directors believes that Mr. Hansen's experience and background make him a qualified and valuable member of our board of directors. In particular, Mr. Hansen's background working with multi-million dollar corporations and other experience in the service sector including pharmacy, optical, veterinary hospitals and small business service centers make him a valuable resource for our company.

*Abdi Mahamedi* has served as a director since May 2009 and became Chairman of our board of directors in March 2010. Since 1987, Mr. Mahamedi has served as the President and Chief Executive Officer of Carlyle Development Group of Companies (“CDG”), which develops and manages residential and commercial properties in the United States on behalf of investors worldwide. At CDG, Mr. Mahamedi evaluates and supervises all of the investment activities and management personnel. Prior to joining CDG, Mr. Mahamedi founded Emanuel Land Company, a subsidiary of Emanuel & Company, a Wall Street investment banking firm, and served as a managing director for Emanuel Land Company from 1986 to 1987. In 1983, Mr. Mahamedi received his B.S.E. degree in Civil and Structural Engineering from the University of Pennsylvania, and in 1984 he received his M.S.E. degree in Civil and Structural Engineering from the University of Pennsylvania. Our board of directors believes that Mr. Mahamedi’s experience and background make him a qualified and valuable member of our board of directors. In particular, his knowledge in working with global investment companies and leading acquisition activities makes him a valuable resource for our company.

*Ricardo Salas* began serving as our Executive Vice President in December 2008 and began serving on our board of directors in October 2010. He previously served as our Chief Executive Officer and President from December 2005 through October 2006 and from October 2006 to December 2008, he served as an independent consultant to the Company. Mr. Salas also served on our board of directors from April 1995 to May 2003. From January 2000 through June 2005, Mr. Salas served as Chief Executive Officer of iLIANT Corporation, an information technology and outsourcing service firm in the health care industry. He served as a director of CyberDefender Corporation which provides Internet security technology and remote PC repair services to the consumer and small business market, and MED3000 Group, Inc., a national provider of healthcare management and technology services. He served as Director of VillageEDOCS, a technology company providing software-as-a-service to financial services, healthcare and various other industries from June 2005 through March 2013. Mr. Salas received a B.A. degree in Economics from Harvard College in 1986. Our board of directors believes that Mr. Salas’s experience and background make him a qualified and valuable member of our board of directors. In addition to Mr. Salas’s prior experience as our director and executive officer, he has extensive knowledge working with technology-based companies. His background working with investors, leading acquisition activities and negotiating transactions make him a valuable resource for our company.

*Bob Howard-Anderson* began serving on our board of directors in February 2013. Beginning in 2002, Mr. Howard-Anderson served as President and CEO of Occam Networks, a leading provider of broadband access solutions, until its acquisition by Calix Inc. in February 2011. Since the acquisition of Occam Networks, Mr. Howard-Anderson has been consulting and advising small technology and private equity companies and investing in the technology arena. Mr. Howard-Anderson also serves on the board of Technology Credit Union, a greater than \$1 billion credit union, for the past 17 years. Previously, Mr. Howard-Anderson served as Vice President of Product Operations at Procket Networks from 2000 to 2002, where he was responsible for R&D, product management and manufacturing operations. Prior to that, Mr. Howard-Anderson was Vice President of Engineering for Sun Microsystems Inc., responsible for developing and introducing a broad portfolio of products. Prior to Sun Microsystems, he served as Vice President of Engineering at First Pacific Networks as well as Network Equipment Technology. He also held management positions at Bolt Baranek and Newman (BBN) and Octocom Inc. Mr. Howard-Anderson holds a BS in Electrical Engineering and Physics from Tufts University. Our board of directors believes that Mr. Howard-Anderson’s experience and background make him a qualified and valuable member of our board of directors. In particular, his more than 30 years of experience in the data and telecommunication equipment industries managing large R&D and product development initiatives, as well as his experience managing startup companies to profitability will make him a valuable member of our board of directors.





*Richard Sevcik* began serving on our board of directors in May 2013. Mr. Sevcik currently serves as President of Sevcik Consulting, which he founded in 2006 and which provides consulting services to companies that provide semiconductor products and tools to their customers for consumer-oriented products such as smart phones, tablets, digital cameras and eBooks. Since 2010, Mr. Sevcik has also served on the board of directors of Alpha and Omega Semiconductor Limited, a publicly traded designer, developer and global supplier of a broad range of power semiconductors. Mr. Sevcik previously served on the board of directors of SiliconBlue Technologies from 2008 until its acquisition by Lattice Semiconductor in 2011. Mr. Sevcik received his B.S. in engineering physics from the University of Illinois and M.S. in electrical engineering from Northwestern University. Our board of directors believes that Mr. Sevcik's extensive directorial, management and governance experiences and his understanding of the business operation and reporting of publicly traded technology companies, as well as his background in electrical engineering, bring significant management expertise, scientific knowledge and appropriate perspective to our board of directors.

### **Director Independence**

Our board of directors presently has seven members. Our board of directors has determined that four of its current members, Mr. Hansen, Mr. Gillis, Mr. Howard-Anderson, and Mr. Sevcik, are "independent directors" as defined under the rules of The NASDAQ Stock Market, Inc.

## **EXECUTIVE COMPENSATION**

### **Executive Benefits and Perquisites**

Set forth below is information regarding compensation earned by or paid or awarded to the following executive officers of the company during the year ended December 31, 2013: (i) Thomas Steipp, our President and Chief Executive Officer; (ii) Tony Chung, our Chief Financial Officer; (iii) Bruce Bromage, our Executive Vice President of Business Development and Operations and (iv) Rick Salas, our Executive Vice-President. These persons are hereafter referred to as our "named executive officers." The identification of such named executive officers is determined based on the individual's total compensation for the year ended December 31, 2013, as reported below in the Summary Compensation Table.



**Summary Compensation Table**

The following table sets forth for each of the named executive officers: (i) the dollar value of base salary and bonus earned during the years ended December 31, 2013 and 2012; (ii) the aggregate grant date fair value of stock and option awards granted during 2013 and 2012, computed in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 718(R); (iii) the dollar value of earnings for services pursuant to awards granted during 2013 and 2012 under non-equity incentive plans; (iv) non-qualified deferred compensation earnings during 2013 and 2012; (v) all other compensation for 2013 and 2012; and, finally, (vi) the dollar value of total compensation for 2013 and 2012.

<b>Name and Principal Position</b>	<b>Year</b>	<b>Salary</b>	<b>Bonus</b>	<b>Stock Awards</b>	<b>Option Awards</b>	<b>Total</b>
Thomas Steipp, <i>President and Chief Executive Officer</i>	2013	\$ 300,000	\$ 137,015	-	\$ 303,592 (1)	\$ 740,607
	2012	\$ 300,000	-	-	-	\$ 300,000
Tony Chung, <i>Chief Financial Officer</i>	2013	\$ 185,000	\$ 50,154	-	\$ 72,956 (2)	\$ 308,110
	2012	\$ 162,000	-	-	-	\$ 162,000
Ricardo Salas, <i>Executive Vice President</i>	2013	\$ 240,000	\$ 63,206	-	\$ 74,712 (3)	\$ 377,918
	2012	\$ 240,000	-	-	-	\$ 240,000
Bruce Bromage, <i>Executive Vice President- Business Development and Operations</i>	2013	\$ 240,000	\$ 63,206	-	\$ 127,347 (4)	\$ 430,553
	2012	\$ 36,000	-	-	-	\$ 36,000

(1) Options to purchase 4,063,500 shares of our common stock were awarded to Mr. Steipp on February 6, 2013.

(2) Options to purchase 976,500 shares of our common stock were awarded to Mr. Chung on

- February  
6, 2013.  
Options to  
purchase  
1,000,000  
shares of  
our  
common  
(3) stock were  
awarded  
to Mr.  
Salas on  
February  
6, 2013.  
Options to  
purchase  
1,704,500  
shares of  
our  
common  
(4) stock were  
awarded  
to Mr.  
Bromage  
on  
February  
6, 2013.

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

### **Outstanding Equity Awards at 2013 Fiscal Year-End**

The following table sets forth information on outstanding option and stock awards held by the named executive officers at December 31, 2013, including the number of shares underlying both exercisable and unexercisable portions of each stock option as well as the exercise price and expiration date of each outstanding option.

Name	Option Awards			Stock Awards			Equity Incentive Plan Awards:		
	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercisable	Equity Incentive Plan Awards: Number of Option Securities Underlying Unexercised Options	Option Exercise Price	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested	Shares, Units or Rights That Have Not Vested	Unearned Shares, Units or Rights That Have Not Vested
Thomas Steipp	-	4,063,500	(1) -	\$ 0.08	2/6/2023 -	-	-	-	-
	-	-	-	\$ -	-	2,400,000	\$ 576,000	-	-
Tony Chung	-	976,500	(1) -	\$ 0.08	2/6/2023 -	-	-	-	-
	200,000	-	-	\$ 0.086	12/1/2018	-	-	-	-
	150,000	100,000	(2) -	\$ 0.124	7/12/2020	-	-	-	-
Ricardo Salas	-	1,000,000	(1) -	\$ 0.08	2/6/2013 -	-	-	-	-
	-	600,000	(2) -	\$ 0.124	7/12/2020	-	-	-	-
Bruce Bromage	-	1,704,500	(1) -	\$ 0.08	2/6/2023 -	-	-	-	-

(1) The shares underlying these grants vest 20% in the first starting with the vesting commencement date of February 6, 2013, and monthly for the remaining four years thereof.

(2)

The shares underlying these grants vest 20% per year starting with the vesting commencement date of July 12, 2011 and the following four anniversaries thereof.

## **Employment Agreements**

On August 3, 2010, we entered into an employment agreement with Thomas Steipp, our Chief Executive Officer. Under his employment agreement, Mr. Steipp receives a base salary of \$300,000, which may be adjusted upward in the sole discretion of our board of directors on an annual basis. In addition, Mr. Steipp is entitled to such bonuses or additional compensation as may be granted by our board of directors or the Chairman of our board of directors, in their sole discretion. The employment agreement provides that we can terminate Mr. Steipp's employment at any time and for any reason, provided that if his employment is terminated without "Cause" (as specifically defined in the agreement), then he will continue to be entitled to his base salary and health and welfare benefits for a period of twelve months after termination. In the event that Mr. Steipp terminates his own employment within thirty days after a change in control of the company, we will be obligated to pay him a lump-sum severance payment equal to his base salary for the remainder of the five-year term. The employment agreement provides that Mr. Steipp will not be entitled to any severance compensation if he voluntarily leaves the employment of the company or is terminated for "Cause." In addition, Mr. Steipp was also granted an aggregate of 6 million restricted shares of our common stock, which will vest in increments of 1.2 million shares on each anniversary of his employment with us. In the event that Mr. Steipp ceases to be employed by us prior to the fifth anniversary of his employment as a result of (i) death, (ii) termination by us without "Cause," or (iii) termination by Mr. Steipp within thirty days of a change in control of our company, any unvested shares will immediately vest. In the event that Mr. Steipp ceases to be employed by us prior to the fifth anniversary of his employment for any other reason, he will forfeit any unvested shares.

### **401(k) Savings Plan**

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

### **Pension Benefits**

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

### **Nonqualified Deferred Compensation**

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

## **DIRECTOR COMPENSATION**

The following table sets forth information regarding the compensation received by each of our non-employee directors serving during the year ended December 31, 2013:

**Fees**

Name	Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Nonqualified		Total Compensation (\$)
					Deferred Compensation Earnings (\$)	All Other Compensation (\$)	
Scott Gillis	\$ 38,000 *	-	-	-	-	-	\$ 38,000
Mark Hansen	\$ 36,250	-	\$ 20,172 (1)	-	-	-	\$ 56,422
Abdi Mahamedi	\$ 28,000	-	\$ 20,172 (2)	-	-	-	\$ 48,172
Bob Howard-Anderson	\$ 26,250	-	\$ 20,172 (3)	-	-	-	\$ 46,422
Richard Sevcik	\$ 25,000	-	\$ 20,156 (4)	-	-	-	\$ 45,156

(1) Mr. Hansen held options to purchase 340,000 shares of our common stock as of December, 31, 2013.

(2) Mr. Mahamedi held options to purchase 290,000 shares of our common stock as of December, 31, 2013.

(3) Mr. Howard-Anderson held options to purchase 270,000 shares of our common stock as of December, 31, 2013.

(4) Mr. Sevcik held options to purchase 270,000 shares of our common stock as of December, 31, 2013.

\* Mr. Gillis' 2013 fee was not paid in 2013 and will be paid in 2014.



Our non-employee directors receive certain compensation for their services and are reimbursed for expenses incurred in attending board and committee meetings, as determined by the board of directors.

We have a 2012 Equity Incentive Plan pursuant to which our non-employee directors are entitled to receive stock options. All options granted under the plan have an exercise price equal to the fair market value of our common stock on the date of the grant. These stock options have a 10-year term, are exercisable pursuant to an equal 5-year vesting schedule, and remain exercisable for certain periods of time after a person is no longer a director.

No director who is an employee will receive separate compensation for services rendered as a director. However, our employee directors are eligible to participate in our 2012 Equity Incentive Plan in their capacities as employees.

## **CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

### **Transactions with Related Persons**

On October 14, 2010, we signed an agreement with Innovative Materials Group, LLC (“IMG”), a California limited liability company, which is majority owned by Mr. Kang. Under the agreement, we received a deposit of \$520 thousand from IMG to purchase on behalf of IMG, machinery and equipment located in China. The transaction was based on the potential negotiation and completion of a non-exclusive license agreement with IMG under which the machinery and equipment would be transferred to IMG either directly or through the transfer of ownership of our former Chinese subsidiary, Advanced Metals Materials (“AMM”), that owned the equipment.

On August 5, 2011, we signed a Stock Purchase Agreement (the “Stock Purchase Agreement”) with IMG to sell all of the stock of AMM for \$720 thousand (the “Purchase Price”) where IMG will apply to the payment of the Purchase Price the \$520 thousand deposit previously paid to us and the \$200 thousand balance of the Purchase Price was paid in the form of a Promissory Note due August 5, 2012, bearing an interest rate of 8% per annum. In conjunction with the Stock Purchase Agreement, we also entered into a license agreement with IMG (“IMG License Agreement”) to license certain patents and technical information for the limited purpose of manufacturing certain licensed products with our existing first generation, die cast machines. The IMG License Agreement grants a non-exclusive license to certain product categories, as well as an exclusive license to specific types of consumer eyewear products, and obligates IMG to pay to us a running royalty based on its sales of Licensed Products. The license will expire on August 5, 2021. We recognized \$8 thousand and \$26 thousand in royalty revenues from IMG during the years ended December 31, 2013 and December 31, 2012, respectively.



On December 31, 2012, we signed an amendment to the IMG License Agreement whereby the \$200 thousand Promissory Note from IMG along with accrued interest of \$21 thousand was forgiven in exchange for the return of the eyewear license to us. We accounted for this transaction as an exchange of non-monetary assets and re-classed the \$221 thousand to eyewear license fee. While we continue to maintain an active interest in leveraging the eyewear license for prospective opportunities in the eyewear industry from both a products and licensing perspective, we determined that there was insufficient historical market data on the potential license applications presently available to provide a reasonable basis to fair value the license and its period of useful life. Therefore, we recognized a \$221 thousand impairment loss for accounting purposes as of December 31, 2012.

During the years ended December 31, 2013 and 2012, we incurred \$0 and \$2 thousand in legal fees, respectively, to defend Mr. Kang, as the former Representative Director of our Korean subsidiary, against allegations relating to our former Korean subsidiary's involvement in customs reporting violations in South Korea that allegedly occurred in 2007 and 2008. We had agreed to reimburse Mr. Kang's legal fees incurred on this issue through December 31, 2012.

On February 1, 2012, Mr. Tony Chung, our Chief Financial Officer, converted his 10,000 shares of Series A-1 Preferred Stock into a total of 565,344 shares of our common stock, including dividends received in the form of common stock. On June 13, 2013, Mr. Chung purchased 1,324,999 shares of our common stock at an average share price of \$0.078.

In February 2013, Mr. Abdi Mahamedi, our Chairman, converted his 58,600 shares of Series A-1 Preferred Stock and 260,710 shares of Series A-2 Preferred Stock into a total of 10,387,883 shares of our common stock, including dividends received in the form of common stock. Mr. Mahamedi is a greater-than-5% beneficial owner.

Mr. Thomas Steipp, our Chief Executive Officer, sold an aggregate of 400,000 shares of our common stock on August 5, 2013 pursuant to a trading plan that Mr. Steipp previously adopted under SEC Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Mr. Steipp adopted the trading plan on March 22, 2013 for the purpose of providing him with funds to satisfy certain tax liabilities as a result of the vesting on August 3, 2013 of 1,200,000 shares of restricted common stock held by Mr. Steipp. The restricted shares were granted to Mr. Steipp in 2010 under a previously disclosed Restricted Stock Award Agreement, dated August 3, 2010, between Mr. Steipp and us. The trading plan also provides for the future sale of 400,000 shares of our common stock scheduled for August 4, 2014.

In September 2013, we entered into Change of Control Agreements with Ricardo A. Salas, our Executive Vice President, Tony Chung, our Chief Financial Officer, and certain other executive officers who are not our named executive officers for SEC reporting purposes. The Change of Control Agreements provide that if the executive officer's employment with us is terminated without cause during the one-year period after a change of control of Liquidmetal Technologies, then the terminated officer will receive lump sum severance compensation in an amount equal to twelve months of his then-current base salary. Under the agreements, each of the executive officers will also be entitled to the above-described severance compensation in the event he terminates his own employment within one year after a change of control because of a salary decrease or assignment to a lower-level position. In addition, upon termination, all unvested stock options related to these officers will automatically and immediately vest and shall thereafter be exercisable in accordance with the terms and provisions of the applicable award agreements.

We have an exclusive license agreement with LLPG, Inc. ("LLPG"), a corporation owned principally by Jack Chitayat, a former director. Under the terms of the agreement, LLPG has the right to commercialize Liquidmetal alloys, particularly precious-metal based compositions, in jewelry and high-end luxury product markets. We, in turn, will receive royalty payments over the life of the contract on all Liquidmetal products produced and sold by LLPG. The exclusive license agreement with LLPG expires on December 31, 2021. There were no revenues recognized from product sales and licensing fees from LLPG during 2013 and 2012.

On February 27, 2013, Mr. Chitayat converted his 28,928 shares of Series A-1 Preferred Stock and 109,528 shares of Series A-2 Preferred Stock into a total of 4,626,840 shares of our common stock, including dividends received in the form of common stock.

On June 1, 2012, we entered into a Master Transaction Agreement with Visser Precision Cast, LLC relating to a strategic transaction for manufacturing services and financing (see note 3). In November 2013, we and Visser entered into arbitration proceedings to resolve disputes associated with this agreement. As of December 31, 2013, Visser is a greater-than-5% beneficial owner.

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

### **Review, Approval or Ratification of Transactions with Related Persons**

Our policy is to require that any transaction with a related party required to be reported under applicable SEC rules, other than compensation-related matters, be reviewed and approved or ratified by the Audit Committee of our board of directors. The Audit Committee of our board of directors has not adopted specific procedures for review of, or standards for approval of, these transactions, but instead reviews such transactions on a case by case basis. Our policy

is to require that all compensation-related matters be recommended for board approval by the Compensation Committee of our board of directors. During the last fiscal year and through the date of this prospectus, no transactions with a related party occurred that required a waiver of this policy and no transactions with a related party occurred in which we did not follow this policy.

## **SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table sets forth certain information regarding the beneficial ownership of our common stock as of January 15, 2014 by:

each person known by us to be the beneficial owner of more than 5% of our outstanding common stock;  
each of our directors;  
each of our named executive officers; and  
all directors and executive officers as a group

The number and percentage of shares beneficially owned is determined under the rules of the SEC and is not necessarily indicative of beneficial ownership for any other purpose. The number of shares shown as beneficially owned in the table below are calculated pursuant to Rule 13d-3(d)(1) of the Exchange Act. Under Rule 13d-3(d)(1), shares not outstanding that are subject to options, warrants, rights or conversion privileges exercisable within 60 days are deemed outstanding for the purpose of calculating the number and percentage owned by such person, but are not deemed outstanding for the purpose of calculating the percentage owned by each other person listed. Unless otherwise indicated in the footnotes, each person has sole voting and investment power with respect to the shares shown as beneficially owned. A total of 375,707,190 shares of our common stock were issued and outstanding as of January 15, 2014. Unless otherwise indicated, the address of all directors and named executive officers is 30452 Esperanza, Rancho Santa Margarita, California 92688.

Name of Beneficial Owner	Common Stock Number of Shares(1)		Percent of Class(1)	
<b><u>Directors and Named Executive Officers</u></b>				
Abdi Mahamedi	23,220,271	(2)	6.1	%
Thomas Steipp	8,023,593	(3)	2.1	%
Ricardo Salas	11,028,947	(4)	2.9	%
Mark Hansen	93,000	(5)	*	
Scott Gillis	11,700	(6)	*	
Bob Howard-Anderson	54,000	(7)	*	
Rich Sevcik	-	(8)	*	
Bruce Bromage	340,900	(9)	*	
Tony Chung	2,690,746	(10)	*	
All directors and executive officers as a group (8 persons)	45,463,157		11.6	%
<b><u>5% Shareholders</u></b>				
Carlyle Holdings, LLC 2700 Westchester Ave., Ste. 303 Purchase, NY 10577	20,646,688	(11)	5.4	%
Visser Precision Cast, LLC 5641 N Broadway Denver, CO 80216	47,562,825	(12)	12.1	%
Furniture Rowe, LLC 5641 N Broadway Denver, CO 80216	55,433,132	(13)	14.1	%

(1) Shares of common stock beneficially owned and the respective percentages of beneficial ownership of common stock assumes the exercise or conversion of all options, warrants and other securities convertible into common stock, beneficially owned by such person or entity currently exercisable or exercisable within 60 days of January 15, 2014. Shares issuable pursuant to the exercise of stock options and warrants exercisable within 60 days of January 15, 2014, or securities convertible into common stock within 60 days of January 15, 2014 are deemed outstanding and held by the holder of such shares of common stock, options, warrants, or other convertible securities, for purposes of computing the percentage of outstanding common stock beneficially owned by such person, but are not deemed outstanding for computing the percentage of outstanding common stock beneficially owned by any other person. The percentage of beneficial ownership of common stock beneficially owned is based on 375,707,190 shares of common stock outstanding as of January 15, 2014.

(2) Includes:

(a)

15,608,908 shares of common stock and 5,037,780 shares issuable pursuant to currently exercisable warrants held of record by Carlyle Holdings, LLC. Mr. Mahamedi has the power to direct the voting and disposition of such shares as the president and a sole shareholder of Carlyle Development Group, Inc., which is a managing member of Carlyle Holdings, LLC;

- (b) 759,428 shares of common stock, 1,756,155 shares issuable pursuant to currently exercisable warrants held of record by Mr. Mahamedi; and



58,000 shares issuable pursuant to outstanding stock options which are exercisable currently or within 60 days of  
(c) January 15, 2014. Does not include 232,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of January 15, 2014.

(3) Includes:

4,300,688 shares of common stock, 2,400,000 shares of restricted stock awards which vest ratably over four years  
(a) on August 3, 2014 and 2015, 510,205 shares issuable pursuant to currently exercisable warrants held of record by Mr. Steipp; and

812,700 issuable pursuant to outstanding stock options which are exercisable currently or within 60 days of  
(b) January 15, 2014. Does not include 3,250,800 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of January 15, 2014.

(4) Includes:

3,501,130 shares issuable pursuant to currently exercisable warrants held of record by Silver Lake Group, LLC.  
(a) Mr. Salas has the power to direct the voting and disposition of such shares as the sole shareholder of Silver Lake Group, LLC;

5,097,611 shares of common stock, 2,230,206 shares issuable pursuant to currently exercisable warrants held of record by Mr. Salas; and  
(b)

200,000 shares issuable pursuant to outstanding stock options which are exercisable currently or within 60 days  
(c) of January 15, 2014. Does not include 1,400,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of January 15, 2014.

(5) Includes:

(a) 25,000 shares held of record by Mr. Hansen; and

68,000 shares issuable pursuant to outstanding stock options which are exercisable currently or within 60 days of  
(b) January 15, 2014. Does not include 272,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of January 15, 2014.

- (6) Includes 7,000 shares held of record by Mr. Gillis and 4,700 shares held of record by Mr. Gillis's child and spouse. Mr. Gillis continues to beneficially own all such shares.

- (7) Includes 54,000 shares issuable pursuant to outstanding stock options, held of record by Mr. Howard-Anderson, which are exercisable currently or within 60 days of January 15, 2014. Does not include 216,000 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of January 15, 2014.

- (8) Does not include 270,000 shares that are issuable pursuant to outstanding stock options, held of record by Mr. Sevcik that are not exercisable currently or within 60 days of January 15, 2014.

- (9) Includes 340,900 shares issuable pursuant to outstanding stock options, held of record by Mr. Bromage, which are exercisable currently or within 60 days of January 15, 2014. Does not include 1,363,600 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of January 15, 2014.

- (10) Includes:

- (a) 1,890,343 shares of common stock and 255,103 shares issuable pursuant to currently exercisable warrants held of record by Mr. Chung; and

- (b) 545,300 shares issuable pursuant to outstanding stock options that are exercisable currently or within 60 days of January 15, 2014. Does not include 881,200 shares that are issuable pursuant to outstanding stock options that are not exercisable currently or within 60 days of January 15, 2014.

(11) Includes 15,608,908 shares of common stock and 5,037,780 shares issuable pursuant to currently exercisable warrants held of record by Carlyle Holdings, LLC.

(12) 29,000,000 of restricted common stock and 18,562,825 shares issuable under warrants. Both are subject to a lock-up period through December 31, 2016.

(13) Includes:

(a) 7,870,307 shares of common stock that are held of record by Norden LLC. Furniture Rowe, LLC has the power to direct the voting and disposition of such shares as the sole shareholder of Norden LLC; and

29,000,000 of restricted common stock and 18,562,825 shares issuable under warrants that are held of record by  
(b) Visser Precision Cast, LLC. Furniture Rowe, LLC has the power to direct the voting and disposition of such shares as the sole shareholder of Visser Precision Cast, LLC.

## **DESCRIPTION OF SECURITIES**

### **General**

We are authorized to issue up to 700,000,000 shares of common stock, par value \$0.001 per share, of which 375,707,190 shares were issued and outstanding as of January 15, 2014. We are also authorized to issue up to 10,000,000 shares of preferred stock, par value \$0.001 per share.

### **Common Stock**

The holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Subject to any preferences that may be applicable to any preferred stock issued in the future, the holders of our common stock are entitled to receive ratably any dividends that may be declared from time to time by our board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of any preferred stock then outstanding. Our common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. All outstanding shares of our common stock are fully paid and nonassessable.

### **Preferred Stock**

Our board of directors has the authority, without action by our stockholders, to designate and issue up to 10,000,000 shares of preferred stock in one or more series. Our board of directors may designate the rights, preferences, and privileges of each series of preferred stock, any or all of which may be greater than the rights of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of our common stock until our board of directors determines the specific rights of the holders of such preferred stock. However, these effects might include restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock, and delaying or preventing a change in control of our company without further action by the stockholders. We have no present plans to issue any shares or series of preferred stock.

### **Warrants**

***Warrants –2012 Private Placement***

In connection with the 2012 Private Placement, on July 2, 2012, we issued \$12.0 million in principal amount of Senior Convertible Notes due on September 1, 2013 (the “Convertible Notes”). As part of the private placement of the Convertible Notes, we issued Warrants to the purchasers of the Convertible Notes giving them the right to purchase up to an aggregate of 18,750,000 shares of our common stock at an exercise price of \$0.384 per share (the “Warrants”). 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 we issue or sell shares of our common stock, rights to purchase shares of our common stock, or securities convertible into shares of our common stock for a price per share that is less than the exercise price then in effect, the exercise price of the Warrants 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. The Warrants will expire on the fifth (5th) anniversary of the date on which they first became exercisable.

***Visser Warrants***

On June 1, 2012, we issued and sold to Visser a warrant to purchase up to 11,250,000 shares of common stock for an aggregate purchase price of \$2.0001 million (the “First Visser Warrant”). In addition, on June 28, 2012, we issued and sold to Visser a warrant to purchase up to 3,750,000 shares of common stock (the “Second Visser Warrant,” and collectively with the First Visser Warrant, the “Visser Warrants”).

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 our 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 the 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 our assets, tender offer or exchange offer with respect to our common stock or reclassification of our common stock, the holders of the Visser Warrants will be entitled to receive thereafter, in lieu of common stock, the consideration (if different from common stock) that the holders of the 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 the 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.

### *Exchange Warrants*

On November 2, 2010, we filed an Amended and Restated Certificate of Designations, Preferences, and Rights (the "Amended Designation") for our Series A-1 and Series A-2 Preferred Stock. The Amended Designation was approved by the number of requisite votes from the holders of our Series A Preferred Stock and was filed with the Delaware Secretary of State in accordance with a consent agreement entered into between us and the holders of 2/3 of the Series A Preferred Stock (the "Consent Agreement"). The Consent Agreement provided that, in exchange for voting in favor of the Amended Designation, the expiration date of the warrants held by the holders who signed the Consent Agreement would be extended to July 15, 2015 and the price-based anti-dilution rights on such warrants would be removed.

The warrant holders who signed the Consent Agreement held warrants to purchase an aggregate of 40,032,833 shares of our Common Stock (the "Consent Warrants"). As of November 2, 2010, there were warrants to purchase 47,232,459 shares of our common stock outstanding. The Consent Warrants were initially recorded as liabilities on our consolidated financial statements in accordance with FASB ASC 815 due to their price-based anti-dilution rights. Upon the removal of the anti-dilution rights with the Consent Agreement, the Consent Warrants no longer met the criteria under FASB ASC 815 and were reclassified as equity as of the date of the Amended Designation. We reclassified \$24,438 from warrant liabilities into equity on November 2, 2010, and this amount is reflected as Warrants in the consolidated statement of shareholders' as of December 31, 2011. As of January 15, 2014, there were

29,779,557 number of Consent Warrants classified as equity, and they all expire on July 15, 2015. The Consent Warrants have exercise prices ranging from \$0.48 to \$0.49 per share.

## **Registration Rights**

### ***2013 Purchase Agreement***

In connection with the execution of the 2013 Purchase Agreement, on November 8, 2013, we and the 2013 Selling Stockholders also entered into a 2013 Registration Rights Agreement. Pursuant to the 2013 Registration Rights Agreement, we have agreed to (i) file this Registration Statement with the SEC to register 96,555,893 Shares on or prior to December 23, 2013 (the "Filing Deadline") and (ii) use our commercially reasonable efforts to have it declared effective as soon as practicable, but in no event later than the earlier of (A) the 90th calendar day after November 8, 2013 and (B) the fifth business day after the date we are notified by the SEC that this Registration Statement will not be reviewed or will not be subject to further review (the "Effectiveness Deadline").

If at any time all of the Registrable Securities (as defined in the 2013 Registration Rights Agreement) are not covered by this Registration Statement, we have agreed to file with the SEC one or more additional registration statements so as to cover all of the Registrable Securities not covered by this Registration Statement, in each case, as soon as practicable, but in no event later than the applicable filing deadline for such additional registration statements as provided in the 2013 Registration Rights Agreement.

### ***2012 Private Placement***

In connection with the 2012 Private Placement, we entered into the 2012 Registration Rights Agreement with the purchasers of the Convertible Notes under which we agreed, on or before thirty (30) days after the closing of the 2012 Private Placement, to file a registration statement with the SEC covering the resale of the shares of our common stock issuable pursuant to the Convertible Notes and Warrants and to use our best efforts to have the registration statement declared effective as soon as practicable (but in no event later than 75 days after the closing of the 2012 Private Placement if the registration statement was not subject to a full review by the SEC, or 105 days after the closing of the 2012 Private Placement if the registration statement was subject to a full review by the SEC). On August 23, 2012, we filed a registration statement covering the resale of the shares of our common stock issuable pursuant to the Convertible Notes. Pursuant to the 2013 Registration Rights Agreement, certain of the holders of the Warrants waived their registration rights under the 2012 Registration Rights Agreement. This Registration Statement covers the resale of the shares of our common stock issuable upon the exercise of the Warrants held by 2012 Selling Stockholders, each of which did not waive their registration rights under the 2012 Registration Rights Agreement.





### ***Visser Registration Rights***

Pursuant to the terms of the registration rights agreement between us and Visser, we are 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 subscription agreement between us and Visser and upon exercise or conversion of the Visser Warrants and the Secured Visser Note, as the case may be. Pursuant to the terms of the registration rights agreement, we are required to file the registration statement on or prior to 90 days after our receipt of the request to effect such registration (the “Filing Date”) and to use our reasonable commercial efforts to have the registration statement declared effective (i) on or prior to 60 days following the Filing Date 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 Filing Date in the case of a registration statement on Form S-1 (120 days in the case of a “full review” by the SEC) (such applicable date, the “Effectiveness Deadline”). We 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 subscription agreement for any unregistered shares of common stock, subject to maximum monetary penalties of 12%. In addition, the registration rights agreement provides Visser with piggyback registration rights on certain registration statements filed by us relating to an offering for our own account.

### **Stock Options**

As of January 15, 2014, we had stock options outstanding under our equity incentive plans to purchase up to 14,984,500 shares of our common stock. Of these options, options to purchase 927,000 shares of common stock were exercisable at January 15, 2014 at a weighted-average exercise price of \$0.41 per share.

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

#### ***Amended and Restated Certificate of Incorporation***

In accordance with Section 102(b)(7) of the Delaware General Corporation Law (the “DGCL”), our amended and restated certificate of incorporation eliminates the personal liability of directors to us and to our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director’s duty of loyalty to us or our stockholders, (ii) for acts or omissions which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit. Our amended and restated certificate of incorporation further provides that, if the DGCL is amended after the effective date of our amended and restated certificate of incorporation to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors will be eliminated or

limited to the fullest extent permitted by the DGCL, as so amended.

Our amended and restated certificate of incorporation also provides that we shall indemnify, to the fullest extent permitted by the DGCL (including, without limitation, Section 145 thereof), any and all persons whom we have power to indemnify under the DGCL.

The indemnification provided for in our amended and restated certificate of incorporation is not exclusive of any other rights to which those seeking indemnification may be entitled as a matter of law under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise, both as to action in such indemnified person's official capacity and as to action in another capacity while serving as our director, officer, employee, or agent, shall continue as to a person who has ceased to be our director, officer, employee, or agent, and shall inure to the benefit of the heirs, executors and administrators of such person.

***Bylaws (as amended)***

Our bylaws (as amended) provide that we shall, to the fullest extent permitted by Section 145 of the DGCL, indemnify any director, officer, employee or agent of our company or any person serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise.

Our bylaws (as amended) also provide for the advancement of expenses (including attorneys' fees) incurred by any person in his capacity as a director or an officer of our company in defending a civil, criminal, administrative or investigative action, suit or proceeding of the type contemplated by Section 145 of the DGCL prior to the final disposition of such action, suit, or proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay such amount if it is ultimately determined that such person is not entitled to be indemnified by us.

Pursuant to our bylaws (as amended), we may, upon resolution passed by our board of directors, purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of our company, or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not we would have the power to indemnify such person against such liability under the provisions of our certificate of incorporation.

The indemnification provided for in our bylaws (as amended) is not exclusive of any other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, shall continue as to a person who has ceased to be our director, officer, employee, or agent, and shall inure to the benefit of the heirs, executors and administrators of such person.

### ***Liability Insurance***

We also maintain a policy of directors' and officers' liability insurance to indemnify our directors and officers with respect to actions taken by them on our behalf.

### ***Indemnification Agreements***

Through Indemnity Agreements with various directors and officers, we have, subject to certain conditions and limitations, agreed to indemnify and hold harmless an officer or director if he or she is or was a party, or is threatened to be made a party, to any Action (as defined in the Indemnity Agreements) by reason of his or her status as, or the fact that he or she is or was or has agreed to become, a director or officer of our company, and/or is or was serving or has agreed to serve as a director or officer of an Affiliate (as defined in the Indemnity Agreements), and/or as to acts performed in the course of his or her duty to our company and/or to an Affiliate, against Liabilities and reasonable Expenses (each as defined in the Indemnity Agreements) incurred by or on behalf of the officer or director in connection with any Action, including, without limitation, in connection with the investigation, defense, settlement or appeal of any Action. Also through Indemnity Agreements, we have agreed to pay to the officer or director, in advance of the final disposition or conclusion of any Action, the officer or director's reasonable expenses incurred by

or on behalf of the officer or director in connection with such Action, provided that certain conditions are satisfied. Finally, through Indemnity Agreements, we have agreed that we may purchase and maintain insurance on behalf of an officer or director against any liability and/or expense asserted against him or her and/or incurred by or on behalf of him or her in such capacity as an officer or director of our company and/or of an Affiliate, or arising out of his or her status as such, whether or not the Company would have the power to indemnify him or her against such liability or advance of expenses under the provisions of the Indemnity Agreement or under the DGCL as it may then be in effect.

### *Delaware Law*

Section 145 of the DGCL, which was adopted by our company as described above, provides that a corporation may indemnify any persons, including officers and directors, who were, are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such officer, director, employee or agent acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation, such as our company, may indemnify officers or directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action, suit or proceeding referred to above, the corporation must indemnify him against expenses (including attorney's fees) actually and reasonably incurred by such person in connection therewith.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

### **Anti-Takeover Effect of Governing Documents and Delaware Law**

Provisions of the DGCL and our amended and restated certificate of incorporation and bylaws (as amended) could make the acquisition of our company through a tender offer, a proxy contest or other means more difficult and could make the removal of incumbent officers and directors more difficult. We expect these provisions to discourage coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of our company to first negotiate with our board of directors. We believe that the benefits provided by our ability to negotiate with the proponent of an unfriendly or unsolicited proposal outweigh the disadvantages of discouraging these proposals. We believe the negotiation of an unfriendly or unsolicited proposal could result in an improvement of its terms.

#### *Delaware Law*

We are subject to Section 203 of the DGCL, which restricts our ability to enter into a business combination with an interested stockholder for a period of three years. Generally, a business combination means a merger, asset sale or other transaction resulting in a financial benefit to the stockholder. An “interested stockholder” is a stockholder who owns 15% or more of our outstanding voting stock. These restrictions do not apply if:

before the date a stockholder becomes an interested stockholder, our board of directors approves either the business combination or the transaction in which the stockholder becomes an interested stockholder;

upon consummation of the transaction in which the stockholder becomes an interested stockholder, the interested stockholder owns at least 85% of our voting stock outstanding at the time the transaction commenced, subject to exceptions; or

on or after the date a stockholder becomes an interested stockholder, the business combination is both approved by our board of directors and authorized at an annual or special meeting of our stockholders by the affirmative vote of at least 66.67% of the outstanding voting stock not owned by the interested stockholder.

#### *Amended and Restated Certificate of Incorporation and Bylaws*

Our bylaws (as amended) establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. At an annual meeting, stockholders may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to our Secretary timely written notice, in proper form, of his or her intention to bring that business before the meeting. The bylaws (as amended) do not give the board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However, our bylaws (as amended) may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Under Delaware law, a special meeting of stockholders may be called by the board of directors or by any other person authorized to do so in the certificate of incorporation or the bylaws. Our bylaws (as amended) authorize a majority of our board of directors to call a special meeting of stockholders, and they require the President or Secretary to call a special meeting upon the written request of stockholders who own an aggregate of least 25% of the outstanding shares of voting stock. Because our stockholders owning less than an aggregate of 25% of our voting stock do not have the right to call a special meeting, such stockholders could not force stockholder consideration of a proposal over the opposition of the board of directors by calling a special meeting of stockholders prior to such time as a majority of the board of directors believed or the chief executive officer believed the matter should be considered or until the next annual meeting provided that the requestor met the notice requirements. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the board also could be delayed until the next annual meeting.

Our amended and restated certificate of incorporation authorizes our board of directors, without stockholder approval, to issue up to 10,000,000 shares of “blank check” preferred stock which could be issued by our board of directors to increase the number of outstanding shares and prevent a takeover attempt.

### **Trading on the OTC Bulletin Board**

Our common stock is currently quoted on the OTC Bulletin Board under the symbol “LQMT.”

### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent’s address is 6201 15th Avenue, Brooklyn, NY 11219, and its telephone number is 800-937-5449.

## **PLAN OF DISTRIBUTION**

### **Common Stock Issuable under the 2013 Purchase Agreement**

We are registering shares of common stock that have been or may be issued by us from time to time to the 2013 Selling Stockholders under the 2013 Purchase Agreement to permit the resale of these shares of common stock after the issuance thereof by the 2013 Selling Stockholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the 2013 Selling Stockholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The 2013 Selling Stockholders may decide not to sell any shares of common stock. Each 2013 Selling Stockholder may sell all or a portion of the shares of common stock beneficially owned by it and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the 2013 Selling Stockholder and/or the purchasers of the shares of common stock for whom they may act as agent. In effecting sales, broker-dealers that are engaged by any of the 2013 Selling Stockholders may arrange for other broker-dealers to participate. Each of the 2013 Selling Stockholders is an “underwriter” within the meaning of the Securities Act. Any brokers, dealers or agents who participate in the distribution of the shares of common stock by the 2013 Selling Stockholders may also be deemed to be “underwriters,” and any profits on the sale of the shares of common stock by them and any discounts, commissions or concessions received by any such brokers, dealers or agents may be deemed to be underwriting discounts and commissions under the Securities Act. Each of the 2013 Selling Stockholders has advised us that it will use an unaffiliated broker-dealer to effectuate all resales of our common stock. To our knowledge, none of the 2013 Selling Stockholders has entered into any agreement, arrangement or understanding with any particular broker-dealer or market maker with respect to the shares of common stock offered hereby, nor do we know the identity of the broker-dealers or market makers that may participate in the resale of the shares. Because each of the 2013 Selling Stockholders is, and any other 2013 Selling Stockholder, broker, dealer or agent may be deemed to be, an “underwriter” within the meaning of the Securities Act, the 2013 Selling Stockholders will (and any other selling stockholder, broker, dealer or agent may) be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of the Securities Act (including, without limitation, Sections 11, 12 and 17 thereof) and Rule 10b-5 under the Exchange Act.

The 2013 Selling Stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;



in the over-the-counter market in accordance with the rules of NASDAQ;

in transactions otherwise than on these exchanges or systems or in the over-the-counter market;

through the writing of options, whether such options are listed on an options exchange or otherwise;

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

In addition, the 2013 Selling Stockholders may transfer the shares of common stock by other means not described in this prospectus. The 2013 Selling Stockholders have represented to us that they have not directly or indirectly engaged in any short sales (as defined by Regulation SHO promulgated under the Securities Exchange Act of 1934, as amended) of our securities since the time that they were first contacted about the transactions contemplated by the 2013 Purchase Agreement. We are not aware of any short sales (as defined by Regulation SHO) made the 2013 Selling stockholders prior to such first contact.

Any broker-dealer participating in such transactions as agent may receive commissions from the 2013 Selling Stockholders (and, if they act as agent for the purchaser of such shares, from such purchaser). Each of the 2013 Selling Stockholders has informed us that each such broker-dealer will receive commissions from such 2013 Selling Stockholder which will not exceed customary brokerage commissions. Broker-dealers may agree with the 2013 Selling Stockholders to sell a specified number of shares at a stipulated price per share, and, to the extent such a broker-dealer is unable to do so acting as agent for the 2013 Selling Stockholders, to purchase as principal any unsold shares at the price required to fulfill the broker-dealer commitment to the 2013 Selling Stockholders. Broker-dealers who acquire shares as principal may thereafter resell such shares from time to time in one or more transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above and pursuant to one or more of the methods described above) at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such shares commissions computed as described above. To the extent required under the Securities Act, an amendment to this prospectus or a supplemental prospectus will be filed, disclosing:

the name of any such broker-dealers;

the number of shares involved;

the price at which such shares are to be sold;

the commission paid or discounts or concessions allowed to such broker-dealers, where applicable;

that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, as supplemented; and

other facts material to the transaction.

Each of the 2013 Selling Stockholders has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common stock.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any of the 2013 Selling Stockholders will sell any or all of the shares of common stock registered on behalf of the 2013 Selling Stockholders pursuant to this registration statement, of which this prospectus forms a part.

Underwriters and purchasers that are deemed underwriters under the Securities Act may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock, including the entry of stabilizing bids or syndicate covering transactions or the imposition of penalty bids. The 2013 Selling Stockholders and any other person participating in the sale or distribution of the shares of common stock will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder (including, without limitation, Regulation M of the Exchange Act), which may restrict certain activities of, and limit the timing of purchases and sales of any of the shares of common stock by, the 2013 Selling Stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making and certain other activities with respect to the shares of common stock. In addition, the anti-manipulation rules under the Exchange Act may apply to sales of the shares of common stock in the market. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We have agreed to pay all expenses of the registration of the shares of common stock issued or issuable to the 2013 Selling Stockholders pursuant to the 2013 Registration Rights Agreement, estimated to be \$92,466 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or "Blue Sky" laws; provided, however, the 2013 Selling Stockholders will pay all selling commissions, concessions and discounts, and other amounts payable to underwriters, dealers or agents, if any, as well as transfer taxes and certain other expenses associated with the sale of such shares of common stock. We have agreed to indemnify each of the 2013 Selling Stockholders and certain other persons against certain liabilities in connection with the offering of shares of common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Each of the 2013 Selling Stockholders has agreed to indemnify us against liabilities under the Securities Act that may arise from any written information furnished to us by such 2013 Selling Stockholder specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

At any time a particular offer of the shares of common stock is made by a 2013 Selling Stockholder, a revised prospectus or prospectus supplement, if required, will be distributed. Such prospectus supplement or post-effective amendment will be filed with the SEC to reflect the disclosure of any required additional information with respect to the distribution of the shares of common stock. We may suspend the sale of shares by the 2013 Selling Stockholders pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

### **Common Stock Issuable Upon Exercise of the Warrants**

We are registering the shares of common stock issuable upon exercise of the Warrants held by the 2012 Selling Stockholders to permit the resale of these shares of common stock by the 2012 Selling Stockholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the 2012 Selling Stockholders of such shares of common stock. We will bear all fees and expenses incident to our obligation to register such shares of common stock.

The 2012 Selling Stockholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the 2012 Selling Stockholders will be responsible for underwriting discounts or commissions or agent's commissions. Such shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions,

on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;

in the over-the-counter market;

in transactions otherwise than on these exchanges or systems or in the over-the-counter market;

through the writing of options, whether such options are listed on an options exchange or otherwise;

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales;

sales pursuant to Rule 144;

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

If the 2012 Selling Stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the 2012 Selling Stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the 2012 Selling Stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The 2012 Selling Stockholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The 2012 Selling Stockholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

The 2012 Selling Stockholders may pledge or grant a security interest in some or all of the Warrants or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of 2012 Selling Stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The 2012 Selling Stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The 2012 Selling Stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the 2012 Selling Stockholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any 2012 Selling Stockholders will sell any or all of the shares of common stock registered on behalf of the 2012 Selling Stockholders pursuant to this Registration Statement.

The 2012 Selling Stockholders and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the 2012 Selling Stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We will pay all expenses of the registration of the shares of common stock issuable to the 2012 Selling Stockholders pursuant to the 2012 Registration Rights Agreement, estimated to be \$92,466 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, that the 2012 Selling Stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the 2012

Selling Stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the 2012 Registration Rights Agreements, or the 2012 Selling Stockholders will be entitled to contribution. We may be indemnified by the 2012 Selling Stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the 2012 Selling Stockholder specifically for use in this prospectus, in accordance with the 2012 Registration Rights Agreement, or we may be entitled to contribution.

Once sold under this Registration Statement, the shares of common stock issuable to the 2012 Selling Stockholders upon the exercise of the Warrants will be freely tradable in the hands of persons other than our affiliates.

## **LEGAL MATTERS**

The validity of the shares of common stock offered by this prospectus will be passed upon for us by the law firm of Foley & Lardner LLP, Tampa, Florida.

## **EXPERTS**

The consolidated financial statements as of and for the year ended December 31, 2012 included in this Prospectus and Registration Statement have been audited by SingerLewak LLP, an independent registered public accounting firm, as stated in its report appearing elsewhere herein, (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the Company's ability to continue as a going concern) and are included in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC under the Securities Act, a registration statement on Form S-1 relating to the securities offered hereby. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to our company and the securities we are offering by this prospectus you should refer to the registration statement, including the exhibits and schedules thereto. You may inspect a copy of the registration statement without charge at the Public Reference Room of the SEC at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an internet site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The SEC's internet address is <http://www.sec.gov>.

Our Internet address is [www.liquidmetal.com](http://www.liquidmetal.com). We make available on our website, free of charge, our periodic and current reports, proxy and information statements and other information we file with the SEC and amendments thereto as soon as reasonably practicable after we file such material with, or furnish such material to, the SEC, as applicable. After accessing the website, the filings can be found by selecting the "About" menu, followed by Selecting the "Investors" tab and the "SEC Filings" link. The contents of the website are not incorporated into this prospectus or into our other filings with the SEC.

We file periodic reports, proxy statements and other information with the SEC in accordance with requirements of the Exchange Act. These periodic reports, proxy statements and other information are available for inspection and copying at the public reference facilities and internet site of the SEC referred to above. In addition, you may request a copy of any or all of our periodic reports incorporated by reference in this prospectus at no cost, by writing or telephoning us at the following address or telephone number:

Liquidmetal Technologies, Inc.

Attn: Investor Relations

30452 Esperanza

Rancho Santa Margarita, California 92688

Phone: (949) 635-2100





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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have audited the accompanying consolidated balance sheets of Liquidmetal Technologies, Inc. and subsidiaries (collectively, the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive income (loss), shareholders' equity (deficit), and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

The accompanying consolidated financial statements have been prepared assuming that the company will continue as a going concern. As discussed in Note 4 to the consolidated financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit. This raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 4. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ SingerLewak LLP

Los Angeles, California  
February 26, 2013

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CONSOLIDATED BALANCE SHEETS  
(in thousands, except share and per share data)

	December 31, 2012	December 31, 2011
<b>ASSETS</b>		
Current assets:		
Cash	\$7,162	\$122
Trade accounts receivable, net of allowance for doubtful accounts of \$11 and \$0	64	241
Related party notes receivable	-	200
Prepaid expenses and other current assets	689	248
Total current assets	\$7,915	\$811
Property and equipment, net	161	162
Patents and trademarks, net	869	968
Other assets	28	52
Total assets	\$8,973	\$1,993
<b>LIABILITIES AND SHAREHOLDERS' DEFICIT</b>		
Current liabilities:		
Accounts payable	154	803
Accrued liabilities	248	457
Accrued dividends	222	571
Deferred revenue	-	67
Short-term debt	-	1,712
Convertible note, net of debt discount of \$4,635	2,365	-
Embedded conversion feature liability	3,934	-
Total current liabilities	\$6,923	\$3,610
Long-term liabilities		
Warrant liabilities	2,766	-
Other long-term liabilities	856	609
Total liabilities	\$10,545	\$4,219
Shareholders' deficit:		
Convertible, redeemable Series A Preferred Stock, \$0.001 par value; 10,000,000 shares authorized; 506,936 and 1,299,151 shares issued and outstanding at December 31, 2012 and December 31, 2011, respectively	-	1
Common stock, \$0.001 par value; 400,000,000 shares authorized; 242,074,324 and 134,467,554 shares issued and outstanding at December 31, 2012 and December 31, 2011, respectively	242	130
Warrants	18,179	24,438
Additional paid-in capital	169,891	149,064
Accumulated deficit	(189,884 )	(175,859 )
Total shareholders' deficit	\$(1,572 )	\$(2,226 )
Total liabilities and shareholders' deficit	\$8,973	\$1,993

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

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## CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

(in thousands, except share and per share data)

	Years Ended December 31,	
	2012	2011
Revenue		
Products	\$591	\$572
Licensing and royalties	59	400
Total revenue	650	972
Cost of revenue, products	354	373
Gross margin	296	599
Operating expenses		
Selling, marketing, general and administrative	4,850	4,243
Research and development	943	1,120
Manufacturing contract costs	6,300	-
Settlement expense	-	1,713
Total operating expenses	12,093	7,076
Operating loss from continuing operations	(11,797 )	(6,477 )
Change in value of warrants, gain	6,547	1,328
Change in value of embedded conversion feature liability, gain	4,931	-
Debt discount amortization expense	(11,949 )	-
Financing costs	(1,355 )	-
Other income	34	26
Interest expense	(459 )	(90 )
Interest income	23	22
Loss from continuing operations before income taxes	(14,025 )	(5,191 )
Income taxes	-	-
Loss from continuing operations	(14,025 )	(5,191 )
Discontinued operations:		
Gain on disposal of subsidiary, net of tax	-	12,109
Loss from operations of discontinued operations, net of tax	-	(763 )
Net income (loss)	(14,025 )	6,155
Other comprehensive income		
Foreign exchange translation gain during the period	-	-
Comprehensive income (loss)	\$(14,025 )	\$6,155
Per common share basic and diluted:		
Net income (loss) per share - basic		
Loss from continuing operations	\$(0.07 )	\$(0.04 )

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Income from discontinued operations	-	0.09
Basic income (loss) per share	\$(0.07	) \$0.05
Net income (loss) per share - diluted		
Loss from continuing operations	\$(0.07	) \$(0.04
Income from discontinued operations	-	0.07
Diluted income (loss) per share	\$(0.07	) \$0.03
Number of weighted average shares - basic		
	188,298,113	118,523,228
Number of weighted average shares - diluted		
	188,298,113	163,292,496

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

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

	Preferred Shares	Common Shares	Preferred Stock	Common Stock	Warrants part of Additional Paid-in Capital	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Compre- hensive (Loss)	Non- controlling Interest	Total
Balance, December 31, 2010	2,171,760	93,695,375	\$2	\$88	\$24,438	\$145,247	\$(181,923)	\$1,494	\$2,507	\$(8,147 )
Conversion of preferred stock	(872,609 )	36,173,750	(1)	36	-	(35 )	-	-	-	-
Common stock issuance	-	4,496,429	-	4	-	2,796	-	-	-	2,800
Warrant exercises	-	-	-	-	-	-	-	-	-	-
Stock option exercises	-	102,000	-	-	-	13	-	-	-	13
Stock-based compensation	-	-	-	-	-	111	-	-	-	111
Restricted stock issued to officer	-	-	-	2	-	440	-	-	-	442
Dividend distribution	-	-	-	-	-	492	-	-	-	492
Foreign exchange translation gain	-	-	-	-	-	-	-	(1,494)	-	(1,494 )
Discontinued operations	-	-	-	-	-	-	(91 )	-	(2,507)	(2,598 )
Net income	-	-	-	-	-	-	6,155	-	-	6,155
Balance, December 31, 2011	1,299,151	134,467,554	\$1	\$130	\$24,438	\$149,064	\$(175,859)	\$-	\$-	\$(2,226 )
Conversion of preferred stock	(792,215 )	25,669,752	(1)	26	-	(25 )	-	-	-	-
Common stock issuance	-	80,171,418	-	83	-	13,839	-	-	-	13,922
Warrant exercises	-	1,411,600	-	1	(6,259 )	6,258	-	-	-	-



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Stock option exercises	-	354,000	-	1	-	43	-	-	-	44
Stock-based compensation	-	-	-	-	-	53	-	-	-	53
Restricted stock issued to officer	-	-	-	-	-	310	-	-	-	310
Dividend distribution	-	-	-	-	-	349	-	-	-	349
Net loss	-	-	-	-	-	-	(14,025 )	-	-	(14,025)

Balance, December 31, 2012	506,936	242,074,324	\$-	\$242	\$18,179	\$169,891	\$(189,884)	\$-	\$-	\$(1,572 )
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The accompanying notes are an integral part of the consolidated financial statements.

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

	Years Ended December 31,	
	2012	2011
<b>Operating activities:</b>		
Net loss	\$(14,025 )	\$6,155
Gain on disposal of subsidiary, net of tax	-	(12,109 )
Loss from operations of discontinued operations, net of tax	-	763
Net loss attributable to continuing operations	\$(14,025 )	\$(5,191 )
Adjustments to reconcile net loss attributable to continuing operations to net cash provided (used in) operating activities:		
Loss on disposal of asset	-	9
Gain attributable to noncontrolling interest of discontinued subsidiary	-	(587 )
Depreciation and amortization	186	182
Impairment charge	221	-
Stock-based compensation	53	553
Restricted stock compensation issued to officer	310	-
Gain from change in value of warrants	(6,547 )	(1,328 )
Gain from change in value of embedded conversion feature liability	(4,931 )	-
Manufacturing contract costs	6,300	-
Debt discount amortization	11,949	-
Non-cash interest expense	434	-
Financing costs	1,355	-
<b>Changes in operating assets and liabilities:</b>		
Trade accounts receivable	177	(192 )
Notes receivable	-	(200 )
Inventories	-	7
Prepaid expenses and other current assets	(5 )	539
Other assets	24	138
Accounts payable and accrued expenses	(854 )	1,022
Deferred revenue	(67 )	58
Other liabilities	247	(73 )
Net cash used in continuing operations	(5,173 )	(5,063 )
Changes in net assets and liabilities of discontinued operations	-	12,134
Net cash provided by (used in) operating activities	(5,173 )	7,071
<b>Investing Activities:</b>		
Purchases of property and equipment	(51 )	(178 )
Investment in patents and trademarks	(35 )	-
Net cash used in investing activities	(86 )	(178 )
<b>Financing Activities:</b>		
Proceeds from short-term debt	1,050	-

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Repayment of short-term debt	(2,762 )	-
Payment of debt issuance costs	(1,033 )	-
Proceeds from exercise of stock options	44	13
Proceeds from convertible debt issuance	12,000	-
Proceeds from stock issuance	3,000	-
Net cash provided by continuing operations	12,299	13
Net cash used in discontinued operations	-	(10,363 )
Net cash provided by (used in) financing activities	12,299	(10,350 )
Effect of foreign exchange translation	-	(1,493 )
Net increase (decrease) in cash and cash equivalents	7,040	(4,950 )
Cash and cash equivalents at beginning of period	122	5,072
Cash and cash equivalents at end of period	\$7,162	\$122

Supplemental Schedule of Non-Cash Investing and Financing Activities:

Offering cost in relation to common stock issuance	2,905	-
Cashless exercise of warrants	6,259	-
Pre-installment payment of convertible debt through common stock issuance	1,240	-

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

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LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
For the Years Ended December 31, 2012 and 2011  
(in thousands, except share and per share data)

1. Description of Business

Liquidmetal Technologies, Inc. (the “Company”) is a materials technology company that develops and commercializes products made from amorphous alloys. The Company’s family of alloys consists of a variety of bulk alloys and composites that utilizes the advantages offered by amorphous alloys technology. The Company designs, develops and sells products and components from bulk amorphous alloys to customers in various industries. The Company also partners with third-party manufacturers and licensees to develop and commercialize Liquidmetal alloy products. The Company believes that its 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 the Company believes will make them preferable to other materials in a variety of applications. The amorphous atomic structure of bulk 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, 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. The Company believes these advantages could result in Liquidmetal alloys supplanting high-performance alloys, such as titanium and stainless steel, and other incumbent materials in a wide variety of applications. Moreover, the Company believes these advantages could enable the introduction of entirely new products and applications that are not possible or commercially viable with other materials.

The Company’s revenues are derived from i) selling bulk Liquidmetal alloy products, which include non-consumer electronic devices, medical products, automotive components, and sports and leisure goods, ii) selling tooling and prototype parts such as demonstration parts and test samples for customers with products in development: iii) product licensing and royalty revenue, and iv) research and development revenue. The Company expects that these sources of revenue will continue to significantly change the character of the Company’s revenue mix.

2. Summary of Significant Accounting Policies

**Principles of Consolidation.** The consolidated financial statements include the accounts of Liquidmetal Technologies, Inc. and its special-purpose wholly-owned subsidiaries, Crucible Intellectual Property and Liquidmetal Golf. All intercompany balances and transactions have been eliminated.

**Non-controlling interest.** The result of operations attributable to the non-controlling interest of discontinued operations are presented within equity and are shown separately from the Company’s equity.

**Revenue Recognition.** Revenue is recognized 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.

The Company's 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 the Company. 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, the Company has 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.

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LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES  
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Cash. The Company considers all highly liquid investments with maturity dates of three months or less when purchased to be cash equivalents. The Company limits the amount of credit exposure to each individual financial institution and places its temporary cash into investments of high credit quality with a financial institution that exceeds federally insured limits. The Company has not experienced any losses related to these balances and believes its credit risk to be minimal.

Trade Accounts Receivable. The Company grants credit to its customers generally in the form of short-term trade accounts receivable. The creditworthiness of customers is evaluated prior to signing a contract with the customer. As of December 31, 2012, 3 customers represented 96%, or \$72, of the total outstanding trade accounts receivable. As of December 31, 2011, three customers represented 67%, or \$162, of the total outstanding trade accounts receivable. During 2012, there were 3 major customers, who together accounted for 70% of the revenue. During 2011, there were three major customers, who together accounted for 66% of the revenue. In the future, the Company expects that a significant portion of the revenue may continue to be concentrated in a limited number of customers, even if the bulk alloys business grows.

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

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

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

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

Fair Value Measurements. The estimated fair values of amounts reported in the consolidated financial statements have been determined using available market information and valuation methodologies, as applicable. The fair value of cash, trade receivables, prepaid expenses and other current assets, accounts payable, and accrued liabilities approximate their carrying value due to their short maturities. The fair value of non-current assets and liabilities approximate their carrying value unless otherwise stated. The carry amounts reported for debt obligations approximate fair value due to the effective interest rate of these obligations reflecting the Company's current borrowing rate.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Entities are required to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value based upon the following fair value hierarchy:

Level 1 — Quoted prices in active markets for identical assets or liabilities;

Level 2 — Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company has one Level 2 financial instrument, warrants that are recorded at fair value on a periodic basis. Warrants are evaluated under the hierarchy of FASB ASC Subtopic 480-10, FASB ASC Paragraph 815-25-1 and FASB ASC Subparagraph 815-10-15-74 addressing embedded derivatives. The fair value of such warrants is estimated using the Black-Scholes option pricing model. The foregoing warrants have certain anti-dilution and exercise price reset provisions which qualify the warrants to be classified as a liability under FASB ASC 815 (see note 12).

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LIQUIDMETAL TECHNOLOGIES, INC AND SUBSIDIARIES  
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
 For the Years Ended December 31, 2012 and 2011  
 (in thousands, except share and per share data)

The Company has one Level 3 financial instrument, an embedded derivative that is recorded at fair value on a periodic basis. The embedded derivative is evaluated under the hierarchy of FASB ASC Subtopic 480-10, FASB ASC Paragraph 815-25-1 and FASB ASC Subparagraph 815-10-15-74 addressing embedded derivatives. The fair value of such embedded derivative is estimated using the Monte Carlo simulation model. The foregoing embedded derivative has certain anti-dilution and exercise price reset provisions which qualify the embedded derivative to be classified as a liability under FASB ASC 815 (see note 11).

As of December 31, 2012, the following table represents the Company's fair value hierarchy for items that are required to be measured at fair value on a recurring basis:

	Fair Value	Level 1	Level 2	Level 3
Embedded conversion feature liability	-	-	-	\$ 3,934
Warrant liabilities	-	-	\$ 2,766	-

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

**Advertising and Promotion Expenses.** Advertising and promotion expenses are expensed when incurred. Advertising and promotion expenses were \$41 and \$16, for the years ended December 31, 2012 and 2011, respectively.

**Legal Costs.** Legal costs are expensed as incurred.

**Stock-Based Compensation.** The Company accounts 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.

**Income Taxes.** Income taxes are provided under the asset and liability method as required by FASB ASC Topic 740, Accounting for Income Taxes. Under this method, deferred income taxes are recognized for the tax consequences of "temporary differences" by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax basis of existing assets and liabilities. The effect of a tax rate change on deferred taxes is recognized in operations in the period that the change in the rate is enacted. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized. Under the provision of FASB ASC Topic 740, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required. The Company may recognize interest and penalties related to uncertain tax positions in income tax expense. There was no expense related to interest and penalties for the year ended December 31, 2012.



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

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

Subsequent Events. In May 2009, the FASB issued a new accounting standard which established general accounting standards and disclosure for subsequent events. In accordance with this standard, the Company evaluated subsequent events through the filing of its Annual Report on Form 10-K with the SEC.

Reclassification. During the year ended December 31, 2011, the Company had discontinued and deconsolidated operations of its subsidiaries and had reclassified the related items on its consolidated balance sheets and consolidated statements of operations and comprehensive income (loss) as of December 31, 2011 to conform to the current year presentation.

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