EMAGIN CORP
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April 24, 2013

As Filed with the Securities and Exchange Commission on April 24, 2013

Registration No. 333-144865

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 3 TO
FORM S-1 ON FORM S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

EMAGIN CORPORATION
(Exact Name of Registrant as Specified in its Charter)

Delaware	3679	56-1764501
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

3006 Northup Way, Suite 103,
Bellevue, WA 98004
(425)-284-5200

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

Andrew G. Sculley, Chief Executive Officer
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(Name, address, including zip code, and telephone number, including area code, of agent for service)

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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.

1

Table of Contents

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. o

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. o

If this form is a post-effective amendment filed pursuant to Rule 462(c) 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. o

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o

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. (Check one):

Large accelerated filer o	Accelerated filer o
Non-accelerated filer o	Smaller reporting company o
(do not check if a 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 Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

EXPLANATORY NOTE

This Post-Effective Amendment No. 3 to Form S-1 on Form S-3 is being filed to update our registration statement on Form S-1 (Registration No. 333-144865) (the "Registration Statement"), which was declared effective by the Securities and Exchange Commission on August 1, 2012, to include information from our annual report on Form 10-K for the year ended December 31, 2012 and to make other updating revisions to the information in the Registration Statement. The Registration Statement relates to the registration of securities being offered by the selling stockholders identified in the prospectus included in the Registration Statement.

Note Regarding Registration Fees:

All fees for the registration of the shares registered on this Post-Effective Amendment No. 3 were paid upon the initial filing of the previously filed registration statement covering such shares. No additional shares are registered and accordingly, no additional fees are payable.

Table of Contents

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

PROSPECTUS SUBJECT TO COMPLETION, DATED April 24, 2013

EMAGIN CORPORATION
11,646,723 SHARES OF
COMMON STOCK

NYSE MKT LLC Trading Symbol: EMAN

This prospectus relates to the resale by the selling stockholder of up to 11,646,723 shares of common stock. The selling stockholders may sell common stock from time to time in the principal market on which the stock is traded at the prevailing market price or in negotiated transactions. We will pay the expenses of registering these shares.

Our common stock is listed on the NYSE MKT LLC under the symbol “EMAN”. The last reported sales price per share of our common stock as reported by the NYSE MKT LLC on April 23, 2013 was $3.20 per share.

Investing in these securities involves significant risks. See “Risk Factors” beginning on page 18.

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. You should read this prospectus carefully before you invest.

The date of this prospectus is April___, 2013

The information in this Prospectus is not complete and may be changed. This Prospectus is included in the Registration Statement that was filed by eMagin Corporation with the Securities and Exchange Commission. The selling stockholders may not sell these securities until the registration statement becomes effective. This Prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the sale is not permitted.

Table of Contents

Table of Contents

	Page
About this Prospectus	6
Cautionary Statement Regarding Forwarding-Looking Statements	6
Summary	7
Risk Factors	18
Use of Proceeds	28
Selling Stockholders	28
Plan of Distribution	31
Description of Capital Stock	33
Delaware Law and Certain Charter and By-law Provisions	34
Legal Matters	34
Experts	34
Where You Can Find More Information	34
Incorporation of Certain Information By Reference	35

You should rely only on the information contained or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference into this prospectus. If any person does provide you with information that differs from what is contained or incorporated by reference in this prospectus, you should not rely on it. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You should assume that the information contained in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information contained in any document we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any prospectus supplement or any sale of a security. These documents are not an offer to sell or a solicitation of an offer to buy these securities in any circumstances under which the offer or solicitation is unlawful.

Table of Contents

ABOUT THIS PROSPECTUS

The following summary highlights selected information contained in this prospectus. This summary does not contain all the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus carefully, including the “risk factors” section, the financial statements and the notes to the financial statements.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The information contained in this prospectus and the documents and information incorporated by reference in this prospectus include some statements that are not purely historical and that are “forward-looking statements.” Such forward-looking statements include, but are not limited to, statements regarding our expectations, hopes, beliefs, intentions or strategies regarding the future, including our financial condition, and results of operations. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words “anticipates,” “believes,” “continue,” “could,” “estimates,” “expects,” “intends,” “may,” “might,” “plans,” “possible,” “potential,” “predicts,” “projects,” “seeks,” “s and similar expressions, or the negatives of such terms, may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements contained in this prospectus are based on current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments actually affecting us will be those anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements, including the following:

- Our ability to obtain and maintain all necessary government certifications and/or licenses to conduct our business;
- The cost of complying with current and future governmental regulations and the impact of any changes in the regulations on our operations;
- Adverse capital and credit market conditions, and our ability to meet liquidity needs;
- Our ability to obtain additional funding for our continuing operations and to fund our expansion;
- Our ability to meet our financial projections for any financial year;
- Our ability to retain our key executives and to hire additional senior management; and
- Other factors, including those described in this prospectus under the heading “Risk Factors,” as well as factors set forth in other filings we make with the Securities and Exchange Commission, including those contained in “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our annual report on Form 10-K and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our 10-Q quarterly reports.

6

Table of Contents

If one or more of these risks or uncertainties materializes, or if any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

SUMMARY

The following is only a summary, and does not contain all of the information that you need to consider in making your investment decision. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference into this prospectus under “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” from our other filings with the SEC, as well as any prospectus supplement applicable to an offering of the securities registered pursuant to the registration statement of which this prospectus forms a part. Investing in our securities involves risks. Therefore, please carefully consider the information provided under the heading “Risk Factors” beginning on page 18.

ABOUT EMAGIN CORPORATION

Introduction

eMagin Corporation (“eMagin, “we,” “our,” or “us,”) is a leader in the manufacture of microdisplays using OLED (organic light emitting diode) technology. We design, develop, manufacture, and market OLED on silicon microdisplays, virtual imaging products which utilize OLED microdisplays, and related products. We also perform research in the OLED field. Our virtual imaging products integrate OLED technology with silicon chips to produce high-resolution microdisplays smaller than one-inch diagonally which, when viewed through a magnifier, create virtual images that appear comparable in size to that of a computer monitor or a large-screen television. Our products enable our original equipment manufacturer (“OEM”) customers to develop and market improved or new electronic products, especially products that are mobile and highly portable so that people have immediate access to information and may experience immersive forms of communications and entertainment.

We believe our OLED microdisplays offer a number of significant advantages over comparable liquid crystal microdisplays (LCDs) including greatly increased power efficiency, less weight, and dramatically higher contrast, with expected lower overall system costs relative to alternative microdisplay technologies. Using our active matrix OLED technology, many computer and electronic system functions can be built directly into the OLED microdisplay silicon backplane, resulting in compact, high resolution, power efficient systems. Already proven in military and commercial systems, our portfolio of OLED microdisplays deliver high-resolution, flicker-free virtual images, working effectively even in extreme temperatures and high-vibration conditions We have developed our own intellectual property and accumulated over 10 years of manufacturing know-how to create high performance OLED microdisplays.

eMagin Corporation was created through the merger of Fashion Dynamics Corporation ("FDC"), which was organized on January 23, 1996 under the laws of the State of Nevada and FED Corporation ("FED"), a developer and manufacturer of optical systems and microdisplays for use in the electronics industry. Simultaneous with this merger, we changed our name to eMagin Corporation. eMagin is incorporated in the state of Delaware.

Table of Contents

We derive the majority of our revenue from sales of our OLED microdisplay products. We also generate revenue from sales of optics, microdisplays combined with optics ("microviewers"), and virtual imaging systems. In addition we earn revenue from both government and commercial development contracts that in some cases complement and support our internal research and development programs.

Our Technology Platforms

Small Molecule, Top-Emitting Active Matrix OLED Technology

There are two basic classes of OLED technology, dubbed single molecule or small molecule (monomer) and polymer. Our microdisplays are currently based upon active matrix small molecule OLED technology, which we refer to as active matrix OLED ("AMOLED") because we build the displays directly onto silicon chips. Our AMOLED technology uniquely permits millions of individual low-voltage light sources to be built on low-cost, silicon computer chips to produce single color, white or full-color display arrays. Using our OLED technology, many computer and video electronic system functions can be built directly into the silicon chip, under the OLED film, resulting in very compact, integrated systems with lower overall system costs relative to alternative technologies.

OLEDs are thin films of stable organic materials that emit light of various colors when a voltage is impressed across them. OLEDs are emissive devices, which mean they create their own light, as opposed to liquid crystal displays, which require a separate light source. As a result, our OLED microdisplays use less power and can be capable of higher brightness and fuller color than liquid crystal microdisplays. Because the light they emit is Lambertian, which means that it appears equally bright from most forward directions, a moderate movement in the eye does not change the image brightness or color as it does in other technologies.

We have developed numerous and significant enhancements to OLED microdisplay technology as well as key silicon circuit designs to effectively incorporate the OLED film on a silicon integrated circuit. For example, we have developed a unique, top-emitting structure for our OLED devices that enables OLED displays to be built on opaque silicon integrated circuits rather than only on glass. Our OLED microdisplays emit full visible spectrum light that is isolated with color filters to create full color images. Our microdisplays have a brightness that can be greater than that of a typical notebook computer and can have a potential useful life of over 50,000 operating hours, in certain applications. New materials and device improvements, such as our recently developed OLED-XL™ technology, offer the potential for even better performance for brightness, efficiency, and lifespan. In addition to our active matrix OLED technology, we have developed compact optic and lens enhancements which, when coupled with the microdisplay, provide the high quality large screen appearance that we believe a large proportion of the marketplace demands.

We believe that our AMOLED technology provides significant advantages over other microdisplay technologies in our targeted microdisplay markets. We believe these key advantages include:

- Low power consumption for improved battery life and longer system life;
- High-speed performance resulting in clear video images;
- Wide angle light emission resulting in large apparent screen size;
- Wide operating temperature range;
- Good environmental stability (vibration and humidity);

- Low manufacturing cost; and
- Low cost system solutions.

Table of Contents

Prism Optics

High quality, large view lenses with a wide range for eye positioning are essential for using our displays in near-eye systems. We have developed advanced molded plastic prism lenses which permit our AMOLED microdisplays to provide large field of view images that can be viewed for extended periods with reduced eye-fatigue. We have engaged a firm to manufacture our lenses in order to provide them in larger quantities to our customers and are using them in certain of our own systems.

Our Market Opportunities

The markets we target broadly fall into the categories of military, industrial/medical, and consumer though many products serve multiple markets (“dual use”). Within each of these market sectors, we believe that our OLED microdisplays, when combined with compact optic lenses, will become a key component for a number of mobile electronic products. Many of these products employ head-wearable displays that incorporate microdisplays mounted in or on eyeglasses, goggles, simple headbands, helmets, or hardhats, and are often referred to as head-mounted displays (HMDs) or headsets. Head-wearable displays may block out surroundings for a fully immersive experience, or be designed as "see-through" or "see-around" to the user's surroundings. They may contain one (monocular) or two (binocular) displays. Some of the increased current interest is due to accelerating the timetable to adapt such systems to military applications such as night vision and fire and rescue applications.

Military

Properly implemented, we believe that head-mounted systems incorporating our microdisplays increases the user’s effectiveness by allowing hands-free operation and increasing situational awareness with enough brightness for use in daylight, yet controllable for nighttime light security. As a COTS (commercial off the shelf) component, OLED microdisplays intrinsically demonstrate performance characteristics important to military and other demanding commercial and industrial applications, including high contrast, wide dimming range, shock and vibration resistance and insensitivity to high G-forces. The image does not suffer from flicker or color breakup in vibrating environments, and the microdisplay's wide viewing angle allows ease of viewing for long periods of time. Most importantly, our OLED's very low power consumption reduces battery weight and increases allowed mission length. The OLED's inherent wide temperature tolerance range is of special interest for military applications because the display can turn on instantly at temperatures far below freezing and can operate at very high temperatures in desert conditions. Our microdisplay products provide power advantages over other microdisplay technologies, particularly liquid crystal displays which require backlights and heaters and cannot provide instant-on capabilities at low temperatures.

Our products’ military applications primarily fall into three broad areas: (1) helmet-mounted displays for situational awareness and data, (2) night vision/thermal imaging goggles and viewers, and (3) training and simulation devices. Similar systems are of interest for other military applications as well as for demanding operations such as urban security, homeland defense, fire and rescue.

Situational Awareness. Situational awareness products include head mounted displays that are used to display such things as digital maps or sensor imagery. Handheld imagers also provide improved situational awareness for surveillance and training. In certain situations these products are combined with a weapon system in order to give the user the capability of selecting targets without direct exposure. Our OLED microdisplays have been incorporated into both U.S. and foreign military situational awareness programs.

Table of Contents

Night Vision/Thermal Imaging. Night vision goggles allow the user to see in low light conditions. Most versions include two different technologies: infrared/thermal, and image intensification. Third and fourth generation military devices usually use some combination of the two modes. Thermal imagers detect infrared energy (heat) and convert it into an electronic signal. The resulting signal needs to be presented on a display. Heat sensed by an infrared camera can be very precisely quantified, or measured, allowing the user to not only monitor thermal performance, but also identify and evaluate the relative severity of heat-related problems. Thermal imaging systems can be stand-alone handheld systems or integrated as part of the aiming mechanism for a larger system. Our OLED microdisplays are typically targeted to uncooled systems, as opposed to systems that require external cooling in order to increase their sensitivity. Advances in sensor technology, both in sensitivity and resolution as well as economic efficiency, have been the driving factors in the adoption of thermal technologies for military applications. The power efficiency and environmental ruggedness of our products are strong competitive advantages, particularly in these small hand-held non-cooled systems. Fielded products incorporating eMagin OLED microdisplays include Northrop Grumman's Lightweight Laser Designator Rangefinders (LLDR), Thales SOPHIE™ handheld thermal imagers, and Thales MINIE™, LUCIE™, and MONIE™ night vision goggles.

Training and Simulation. Our OLED microdisplays and our Z800 3DVisor are used by OEMs for use with their simulation and training products. The Z800's capability to integrate 360 degree head tracking and stereo vision, as well as its wide field of view are attractive attributes for any simulation or virtual reality system. The companies that incorporate our OLEDs in their training and simulation products include: Quantum 3D, Rockwell Collins, Intevac Vision Systems, and Sensics.

Our displays have been commercialized or prototyped for situational awareness and night vision/thermal imaging applications by military systems integrators including Elbit, L-3 Communications, Intevac Vision Systems, Nivisys, BAE Oasys Technology, Qioptiq, Rockwell Collins, Saab, Sagem DS, and Thales, among many others, as well as for related operations such as urban security, fire and rescue.

Commercial, Industrial, and Medical

We believe that a wide variety of commercial and industrial markets offer significant opportunities for our products due to increasing demand for instant data accessibility in mobile workplaces. Some examples of potential microdisplay applications include: immediate access to inventory such as parts, tools and equipment availability; instant accessibility to maintenance or construction manuals; routine quality assurance inspection; endoscopic surgery; and real-time viewing of images and data for a variety of applications. As one potential example, a user wearing a HMD while using test equipment, such as oscilloscopes, can view technical data while simultaneously probing printed circuit boards. Current commercial products equipped with our OLED microdisplays in these sectors include those produced by Liteye, FLIR Systems, Nordic NeuroLab, VRmagic GmbH, Sensics and Total Fire Group, among others.

The Company is exploring opportunities in the digital cinema Electronic View Finder ("EVF") market. These are similar to those found in consumer video cameras but are of significantly higher performance in the area of resolution and overall image quality.

Table of Contents

Consumer

We believe that the most significant driver of the longer term near-eye virtual imaging microdisplay market is growing consumer demand for mobile access to larger volumes of information and entertainment in smaller packages. This desire for mobility has resulted in the development of mobile video personal viewer products in two general categories: (i) an established market for electronic viewers incorporated in products such as viewfinders for digital cameras and video cameras which may potentially also be developed as personal viewers for cell phones and (ii) an emerging market for headset-application platforms which include accessories for mobile devices, portable DVD systems, electronic games, and other entertainment, and wearable computers.

As our OLED displays are manufactured in increasingly higher volumes at reduced costs, we believe that our OLED microdisplay products will be increasingly well positioned to compete with and displace liquid crystal displays in the rapidly growing consumer market as demand for higher-resolution, and better image quality evolves to meet the wish for more sophisticated Personal Viewers. Examples of potential applications for mobile Personal Viewers include handheld personal computers and mobile devices, like smartphones, whose small, direct view screens are often limitations, but which are now capable of running software applications that would benefit from a larger display accessory and entertainment and gaming video headset systems, which permit individuals to privately view television, including HDTV, video CDs, DVDs and video games on virtual large screens or stereovision.

Our Products

Our first commercial microdisplay was the SVGA+ OLED microdisplay, which was introduced in 2001. In 2008 we introduced engineering samples of our SXGA OLED microdisplays and began selling significant quantities of the SXGA product in 2010. In the fourth quarter of 2011 we began selling pre-production samples of the WUXGA OLED microdisplays. eMagin OLED display products are being applied or considered for near-eye and headset applications in products to be manufactured by OEM customers for a wide variety of military, medical, industrial, and consumer applications. We offer our products to OEMs and other buyers as both separate components, integrated bundles coupled with our own optics, or full systems. We also offer engineering support to enable customers to quickly integrate our products into their own product development programs and offer design of customized displays with resolutions or features to meet special customer requirements.

SVGA+ OLED Microdisplay Series (Super Video Graphics Array of 852x600). This 0.62 inch diagonal microdisplay has a resolution of 852x600 triad pixels (1.53 million picture elements). The display also has an internal NTSC monochrome video decoder for low power night vision systems. SVGA+ Rev3 OLED-XL microdisplay is a power efficient OLED display solution for near-eye personal viewer applications which, uses less than 115 mW power in monochrome, such as for thermal imaging applications, and lower than 175 mW at 400 cd/m2 (60Hz video at 70 cd/m2) for full color video. This microdisplay has simpler calibration over temperature and is ideal for demanding binocular luminance and color matching.

SXGA OLED-XL (Super eXtended Graphics Array, 1280 x 1024). Our SXGA OLED microdisplay with a 0.77 inch diagonal active area provides 3,932,160 sub-pixels in an active area. The display’s triad pixel array comprises triads of vertical sub-pixels stacked side by side to make up each 12 x 12mm color pixel. The SXGA OLED-XL microdisplay offers digital signal processing, requiring less than 200mW under typical operation. The supported video formats are SXGA, 720p, DVGA (through 1280 x 960 pixel doubling), and both frame sequential and field sequential stereovision.

Table of Contents

WUXGA OLED-XL (Widescreen Ultra eXtended Graphics Array, 1920 x 1200). Our WUXGA OLED-XL microdisplay provides higher resolution than most HD (High Definition) flat screen televisions. With a triad sub-pixel structure this display is built of 7,138,360 active dots at 3.2 microns each. The WUXGA OLED-XL is built upon the voltage pixel drive approach first developed for the SXGA OLED-XL which provides improved uniformity, ultra-high contrast (measured at greater than 100,000:1) and lower power. The advanced of the WUXGA design features eMagin's proprietary "Deep Black" architecture that ensures that off-pixels are truly black, automatically optimizes contrast under all conditions, and delivers better pixel to pixel uniformity. The WUXGA OLED-XL includes a very low-power, low-voltage-differential-signaling (LVDS) serial interface and the overall display power requirement is typically less than 350 mW running standard video. Also included is eMagin's proprietary motion enhancement technology which smoothes video display and virtually eliminates unwanted artifacts. Like the SXGA, the WUXGA provides a FPGA driver design available on a separate, lower power driver board, or as source code for integration into end product electronics giving OEM developers maximum versatility and flexibility. On-board circuitry ensures consistent color and brightness over a wide range of operating temperatures.

VGA OLED-XL (Video Graphics Array, 640 x 480). The VGA OLED-XL microdisplay was added to eMagin's product line in April 2011 and is our smallest (0.5 inches) and lowest powered (<60 mW monochrome/<100 mW color). The VGA OLED-XL utilizes the same voltage pixel drive architecture and "Deep Black" technology as the SXGA and WUXGA designs and includes motion artifact reduction technology like the WUXGA. Also like the SXGA and WUXGA, the VGA provides a FPGA driver design for maximum flexibility and versatility. The VGA interface is 30-bit digital RGB.

Lens and Design Reference Kits. We offer a WF05 prism optic, with mounting brackets or combined with OLED microdisplays to form an optic-display module. We provide Design Reference Kits, which include a microdisplay and associated electronics to help OEMs evaluate our microdisplay products and to assist their efforts to build and test new products incorporating our microdisplays.

Integrated Modules. We provide near-eye virtual imaging modules that incorporate our OLED-on-silicon microdisplays with our lenses and electronic interfaces for integration into OEM products. We have shipped customized modules to several customers, some of which have incorporated our products into their own commercial products.

Z800 3DVisor™. Our Z800 3DVisors™ give users the ability to work with their hands while simultaneously viewing information or video on the display. The Z800 3DVisor enables more versatile portable computing, using a 0.59-inch diagonal microdisplay (SVGA-3D capable of delivering an image that appears comparable to that of a 19-inch monitor at 22 to 24 inches from the eye, or a 105 inch movie screen at 12 foot distance.) Our systems are currently being used for personal entertainment, electronic gaming, and military training and simulation, among other applications.

Government Contract Funding

We derive a portion of our revenue from funding that we receive pursuant to research contracts or subcontracts funded by various agencies of the United States Government. The revenue that we recognize from these contracts represents reimbursement by various government entities. In 2007, we were awarded a contract for the development of power efficient microdisplays for the United States Army Night Vision and Electronic Sensors Directorate ("NVESD"). In 2008, this agreement was renewed through 2010; it was renewed again though 2011. In 2010 we were awarded a Cooperative Research and Development Agreement by NVESD for the Development, Evaluation and Characterization of Active Matrix Organic Light Emitting Diode (AMOLED) for use in Head Mounted Displays.

12

Table of Contents

In 2007, we were awarded a contract for the development of an ultra-high resolution display for United States Army Telemedicine and Advanced Technology Research Center ("TATRC"). In 2008 and 2009, this agreement was renewed through the first quarter of 2012. In February of 2012, we were awarded a Small Business Innovation Research contract by the United States Special Operations Command to optimize our WUXGA (1920x1200) microdisplay for mass production for dual use applications.

The U.S. Navy awarded eMagin a contract in 2011 for research and development of microdisplays using Silicon on Insulator technology. In 2012, we were awarded a follow-on contract for development of a high-brightness, high resolution microdisplay to be used for head-mounted avionics applications. Work on this contract will continue in 2013.

Our government contracts require us to conduct the research effort described in the statement of work section of the contract. These contracts may be modified or terminated at the discretion of the government and are subject to authorization, appropriation and allocation of the required funding on an annual basis. On contracts for which we are the prime contractor, we subcontract portions of the work to various entities and institutions. Approximately 13% of 2012 revenue was related to research contracts funded by the U.S. Government as compared to 14% in 2011.

Our strategy is to strengthen our leadership position as a worldwide supplier of microdisplays and virtual imaging technology solutions for applications in high growth segments of the electronics industry by capitalizing on our experience and expertise in active matrix OLED technology. We aim to provide microdisplays and complementary accessories to enable OEM customers to develop and manufacture new and enhanced electronic products. Some key elements of our strategy to achieve these objectives include the following:

- Strengthen our technology leadership. As the first to exploit AMOLED microdisplays, we believe that we enjoy a significant advantage in bringing this technology to market. By continuing to invest in research and development, and protecting our intellectual property, we expect to further develop performance improvements and provide a competitive edge for our customers who integrate our displays into their end products.

- Optimize microdisplay manufacturing efficiencies while protecting proprietary processes. We intend to reduce our production costs primarily through increasing manufacturing yield and lowering fixed costs through reduced cycle time and increased automation, as well as equipment upgrades. We outsource certain portions of microdisplay production, such as chip fabrication, to minimize both our costs and time to market. We intend to retain the OLED-related processes in-house, where we have a core competency and manufacturing expertise. We also believe that by keeping these processes under tight control we can better protect our proprietary technology and process know-how. We believe that this strategy will also enhance our ability to continue to optimize and customize processes and devices to meet customer needs.

- Build and maintain strong design capabilities. We employ in-house design capabilities supplemented by outsourced design services. Building and maintaining this capability will allow us to reduce engineering costs, accelerate the design process and enhance design accuracy to respond to our customers' needs as new markets develop. In addition, we intend to maintain a product design staff capable of rapidly developing prototype products for our customers and strategic partners. Contracting third party design support to meet demand and for specialized design

skills may also remain a part of our overall long term strategy. Given these capabilities the company continues to look for opportunities to add value to our displays to increase revenue.

Table of Contents

- Leverage strategic relationships. External relationships play an important role in our research and development efforts. Suppliers, equipment vendors, government organizations, contract research groups, external design companies, customer and corporate partners, consortia, and university relationships all enhance the overall research and development effort and bring us new ideas and solutions. In addition, we participate in industry associations such as Society Information Display ("SID"), FlexTech Alliance (formerly known as United States Display Consortium), OLED Association, Consumer Electronics Association, and the Association of the United States Army, among others. Furthermore, we have established a CRADA (Cooperative Research and Development Agreement) with the US Army/RDECOM/NVESD as of August 2010 for the purpose of evaluating and characterizing new and existing AMOLED microdisplay configurations. This agreement expires in 2015. We believe that strategic relationships allow us to better determine the demands of the marketplace and, as a result, allow us to focus our future research and development activities to satisfy our customers' evolving requirements.

Sales and Marketing

We primarily provide our OLED display and optics components for OEMs to incorporate into their branded products and sell through their own well-established distribution channels. We have traditionally marketed and sold our products to customers through targeted selling, promotions, select advertising and attendance at trade shows. We identify companies with end products and applications for which we believe our products will provide a key differentiator. Marketing efforts focus on identifying prospects and communicating the product performance attributes foremost in the minds of purchasing decision-makers. We believe that this approach positions us to achieve the highest possible return on investment for our marketing expense.

We market our products in North America, Asia, and Europe directly from our sales office located in our Bellevue, Washington facility. We also have distributors in China and Korea.

An OEM design cycle typically requires between 6 and 36 months, depending on the uniqueness of the market, the complexity of the end product, or in the case of military OEM customers, government procurement schedules. Because our microdisplays are the main functional component that defines many of our customers' end products, we work closely with customers to provide technical assistance throughout the product evaluation and integration process.

Customers

Customers for our products include both large multinational and smaller OEMs. We maintain relationships with OEMs in a diverse range of industries encompassing the military, industrial, medical, and consumer market sectors. During 2012, we estimate 16% of our net product revenues were to firms in the commercial market, 61% to firms in the military market, and 23% to firms in both military and commercial markets as compared to 2011, where 13% were to firms in the commercial market, 54% to firms in the military market, and 33% to firms in both military and commercial markets. During 2012, 67% of our net revenue was to firms based in the United States and 33% was to international firms as compared to 63% domestic revenue and 37% international revenue during 2011. In 2012, we had 10 customers that accounted for approximately 53% of our total revenue as compared to 10 customers that accounted for approximately 48% of our total revenue in 2011. In 2012, we had 1 customer that accounted for more than 10% of our total revenue and in 2011, we did not have any customer that accounted for more than 10% of our total revenue.

14

Table of Contents

Backlog

As of January 31, 2013, we had a backlog of approximately $13.4 million for purchases through December 2013. This backlog primarily consists of non-binding purchase orders and purchase agreements but does not include expected revenue from R&D contracts or expected NRE (non-recurring engineering) programs under development. The majority of our backlog consists of non-binding purchase orders or purchase agreements for delivery over the next six months. Most purchase orders are subject to rescheduling or cancellation by the customer with no or limited penalties. We believe that the backlog metric is of limited utility in predicting future sales because many of our OEM customers operate on a ship-to-order basis. Variations in the magnitude and duration of purchase orders and customer delivery requirements may result in substantial fluctuations in backlog from period to period.

Manufacturing Facilities

Our manufacturing facilities are located at IBM's Microelectronics Division facility, known as the Hudson Valley Research Park, located about 70 miles north of New York City in Hopewell Junction, New York. We lease approximately 37,000 square feet of space which houses our own equipment for OLED microdisplay fabrication and research and development, includes a 16,300 square foot class 10 clean room space, additional lower level clean room space, assembly space and administrative offices.

Facilities services provided by IBM include our clean room, pure gases, high purity de-ionized water, compressed air, chilled water systems, and waste disposal support. This infrastructure provided by our lease with IBM provides us with many of the resources of a larger corporation without the added overhead costs. It further allows us to focus our resources more efficiently on our product development and manufacturing goals.

We believe manufacturing efficiency is an important factor for success, especially in the consumer markets. Although, we currently have the equipment needed for profitable production in place, we purchased $2.5 million and $2.9 million in 2012 and 2011, respectively, of additional equipment mainly related to manufacturing and we plan to add $3.2 million of equipment in 2013 to increase capacity and yield and to meet expected demand for our microdisplays.

Competition

The industry in which we operate is highly competitive. We face competition from legacy technologies such as transmissive liquid crystal microdisplays (LCDs) as well as from alternative flat panel display technologies such as virtual scanning retinal displays. There are many large and small companies that manufacture or have in development products based on these technologies. Kopin Corporation manufactures both transmissive and reflective LCDs and is currently our principal competitor.

There are a few manufacturers of high resolution OLED microdisplays that produce microdisplays that compete with our microdisplay products. They are Yunnan North OLEiD Opto-Electronic Technology Co., Ltd., in China (also known as Olightek), and MicroOLED, in France. Both are shipping OLED microdisplays into the market. Sony Mobile Display Corp., in Japan, produces OLED microdisplays for integration into Sony’s own higher-level systems such as digital cameras and HMDs. In the near-term we do not expect these companies to affect our military business however we anticipate some affect from this competition on our international and commercial business.

Sony has developed and released a 3D consumer HMD that utilizes their OLED microdisplays and was specifically designed for the consumer with their typical electrical interfaces. We do not expect the introduction of this product to significantly affect sales of our Z800 in our historical markets. The Z800 has an established OEM base and has more flexible interfaces for ease of integration into the training and simulation market (largest market segment), where the Sony HMD was specifically designed for the consumer. However, even though the Z800 represents a very small part

of our business, we have experienced a decline in Z800 sales. We believe that the Z800 needs to be updated. We plan on updating a version of the product to digital from analog and increasing the resolution.

Table of Contents

We may also compete with potential licensees of Universal Display Corporation or Global OLED Technology LLC among others, each of which potentially can license OLED technology portfolios. If other new OLED-based companies enter our markets with directly relevant display designs and without manufacturing and reliability issues, we will face additional competition, though we believe that our progress to date in this area gives us a significant head start.

In the future, we believe that competition will come from LCOS ("liquid crystal on silicon"), small transmissive LCDs, and OLED microdisplays manufactured by competitors. While we believe that OLED technology is technically superior providing higher quality images, greater environmental ruggedness, reduced electronics cost and complexity, and improved power efficiency microdisplays, there is no assurance that we will continue to be the dominant OLED microdisplay supplier.

Intellectual Property

We believe we have developed a substantial intellectual property portfolio of patents, trade secrets and manufacturing know-how. It is important to protect our investment in technology by obtaining and enforcing intellectual property rights, including rights under patent, trademark, trade secret and copyright laws. We seek to protect inventions we consider significant by applying for patents in the United States and other countries when appropriate. The U.S. Government holds licenses to much of our technology as a result of their funding a significant portion of our research and development.

Our intellectual property covers a wide range of materials, device structures, processes, and fabrication techniques, primarily concentrated in the following areas:

- OLED Devices, Architecture, Structures, and Processes;
- Display Color Processing and Sealing;
- Active Matrix Circuit Methodologies and Designs;
- Lenses and Tracking (Eye and Head);
- Ergonomics and Industrial Design;
- Wearable Computer Interface Methodology; and
- Legacy Field Emission and General Display Technologies.

We believe that, in addition to patent protection, our success is dependent upon non-patentable trade secrets and technical expertise. To protect this information and know-how from unauthorized use or disclosure, we use nondisclosure agreements and other measures to protect our proprietary rights, and we require all employees, and where appropriate, contractors, consultants, advisors and collaborators to enter into confidentiality and non-competition agreements. We believe that our intellectual property portfolio, coupled with our strategic relationships and accumulated manufacturing know-how in OLED, gives us a significant advantage over potential competitors.

Employees

As of January 31, 2013, we had a total of 101 full time and part time staff. None of our employees are represented by a labor union. We have not experienced any work stoppages and consider our relations with our employees to be good.

Table of Contents

The Offering

Common stock offered by selling stockholders	Up to 11,646,723 shares, consisting of the following: · up to 1,000,000 shares of common stock issuable upon the exercise of common stock purchase warrants at an exercise price of $1.03 per share and 663,294 shares of common stock issued upon the cashless exercise of common stock purchase warrants*; · 1,000,000 shares of common stock issued upon the exercise of common stock purchase warrants at an exercise price of $0.48 per share**; · 1,438,096 shares of common stock, consisting of (i) 1,428,572 shares issued upon conversion of the note ("Stillwater Note") issued to Stillwater Holdings LLC (f/k/a Stillwater LLC) ("Stillwater") representing $500,000 of the principal amount of the Stillwater Note and (ii) 9,524 shares issued for accrued and unpaid interest under the Stillwater Note***; and · up to 7,545,333 shares of common stock issuable upon the conversion of Series B Convertible Preferred Stock.
Common Stock to be outstanding after the offering	32,232,529 shares assuming the full exercise of the warrants and full conversion of Series B Convertible Preferred Stock underlying shares which are included in this prospectus.****
Use of Proceeds	We will not receive any proceeds from the sale of the common stock; however, we will receive proceeds from the exercise of our warrants.
NYSE MKT LLC Symbol	EMAN

* On April 14, 2010, Stillwater elected to exercise 875,467 of its common stock purchase warrants on a cashless basis and received 663,294 shares of common stock.

** On July 18, 2011, Stillwater elected to exercise its common stock purchase warrants at an exercise price of $0.48 per share and received 1,000,000 shares of common stock.

*** On July, 23 2007, Stillwater elected to convert $252,166.50 of the Stillwater Note, then outstanding, representing $250,000 of the principal amount of the Note due on July 23, 2007 and $2,166.50 of accrued and unpaid interest into shares of common stock. Stillwater received 720,476 shares of the common stock at the conversion price of $0.35. On December 22, 2008, Stillwater elected to convert the $251,166.67 of the remaining Stillwater Note representing $250,000 of the principal amount of the Note due on December 22,

2008, and $1,166.67 of accrued and unpaid interest, into shares of common stock. Stillwater received 717,620 shares of the common stock at the conversion price of $0.35.

**** The information above regarding the common stock to be outstanding after the offering is based on 23,687,196 shares of the Company's common stock outstanding as of April 8, 2013.

Table of Contents

RISK FACTORS

You should carefully consider the following risk factors and the other information included herein as well as the information included in other reports and filings made with the SEC before investing in our common stock. The following factors, as well as other factors affecting our operating results and financial condition, could cause our actual future results and financial condition to differ materially from those projected. The trading price of our common stock could decline due to any of these risks, and you may lose part or all of your investment.

RISKS RELATED TO OUR FINANCIAL RESULTS

We have had losses in the past and may incur losses in the future.

Our accumulated deficit is approximately $188 million as of December 31, 2012. We achieved profitability for three consecutive quarters in 2012. We have been EBITDA positive every quarter for 19 consecutive quarters since the second quarter of 2008. We can give no assurances that we will continue to be profitable in the future. We cannot assure investors that we will sustain profitability or that we will not incur operating losses in the future.

We may not be able to execute our business plan due to a lack of cash from operations.

We anticipate that our cash from operations will be sufficient to meet our requirements over the next twelve months. In the event that cash flow from operations is less than anticipated and we are unable to secure additional funding to cover our expenses, in order to preserve cash, we may have to reduce expenditures and effect reductions in our corporate infrastructure, either of which could have a material adverse effect on our ability to continue our current level of operations. No assurance can be given that if additional financing is necessary, that it will be available, or if available, will be on acceptable terms.

Our operating results have significant fluctuations.

In addition to the variability resulting from the short-term nature of commitments from our customers, other factors contribute to significant periodic quarterly fluctuations in results of operations. These factors include, but are not limited to, the following:

- the receipt and timing of orders and the timing of delivery of orders;
- the inability to adjust expense levels or delays in adjusting expense levels, in either case in response to lower than expected revenues or gross margins;
- the volume of orders relative to our manufacturing capacity;
- product introductions and market acceptance of new products or new generations of products;

Table of Contents

- changes in cost and availability of labor and components;
- product mix;
- variation in operating expenses; regulatory requirements and changes in duties and tariffs;
- pricing and availability of competitive products and services; and
- changes, whether or not anticipated, in economic conditions.

Accordingly, the results of any past periods should not be relied upon as an indication of our future performance.

RISKS RELATED TO MANUFACTURING

The manufacture of active matrix OLED microdisplays continues to evolve as better methods are discovered and employed and therefore we may encounter manufacturing issues or delays.

Ours is an evolving technology and we are pioneers in this active matrix OLED microdisplay manufacturing technique. As such, we cannot assure you that we will be able to produce our products in sufficient quantity and quality to maintain existing customers and attract new customers. In addition, we cannot assure you that we will not experience manufacturing problems which could result in delays in delivery of orders or product introductions.

We are dependent on a single manufacturing line.

We currently manufacture our products on a single manufacturing line. If we experience any significant disruption in the operation of our manufacturing facility or a serious failure of a critical piece of equipment, we may be unable to supply microdisplays to our customers. For this reason, some OEMs may also be reluctant to commit a broad line of products to our microdisplays without a second production facility in place. However, we try to maintain product inventory to fill the requirements under such circumstances. Interruptions in our manufacturing could be caused by manufacturing equipment problems, the introduction of new equipment into the manufacturing process or delays in the delivery of new manufacturing equipment. Lead-time for delivery, installation and testing of manufacturing equipment can be extensive. No assurance can be given that we will not lose potential sales or be unable to meet production orders due to production interruptions in our manufacturing line.

We rely on key sole source and limited source suppliers.

We depend on a number of sole source or limited source suppliers for certain raw materials, components, and services. These include circuit boards, graphic integrated circuits, passive components, materials and chemicals, and equipment support. We maintain several single-source supplier relationships, either because alternative sources are not available or because the relationship is advantageous due to performance, quality, support, delivery, capacity, or price considerations. Even where alternative sources of supply are available, qualification of the alternative suppliers and establishment of reliable supplies could result in delays and a possible loss of sales, which could be detrimental to operating results. We do not manufacture the silicon integrated circuits on which we incorporate our OLED technology. Instead, we provide the design layouts to a sole semiconductor contract manufacturer who manufactures the integrated circuits on silicon wafers. Our inability to obtain sufficient quantities of components and other materials or services on a timely basis could result in manufacturing delays, increased costs and ultimately in reduced or delayed sales or lost orders which could materially and adversely affect our operating results. Generally, we do not have long term contracts or written agreements with our source suppliers, but instead operate on the basis of short

term purchase orders.

Table of Contents

Our results of operations, financial condition and business would be harmed if we were unable to balance customer demand and capacity.

As customer demand for our products changes, and as we enter new markets which may require higher volume mass production, we must be able to ramp up or adjust our production capacity to meet demand. We are continually taking steps to address our manufacturing capacity needs for our products. If we are not able to expand or if we increase our capacity too quickly, our prospects may be limited and our business and results of operations could be adversely impacted. If we experience delays or unforeseen costs associated with adjusting our capacity levels, we may not be able to achieve our financial targets. For some of our products, vendor lead times exceed our customers' required delivery time causing us to order to forecast rather than order based on actual demand. Ordering raw material and building finished goods based on forecasts exposes us to numerous risks including potential inability to service customer demand in an acceptable timeframe, holding excess inventory or having unabsorbed manufacturing overhead.

Variations in our production yields impact our ability to reduce costs and could cause our margins to decline and our operating results to suffer.

All of our products are manufactured using technologies that are highly complex. The number of usable items, or yield, from our production processes may fluctuate as a result of many factors, including but not limited to the following:

- variability in our process repeatability and control;
- contamination of the manufacturing environment or equipment;
- equipment failure, power outages, or variations in the manufacturing process;
- lack of consistency and adequate quality and quantity of piece parts and other raw materials;
- defects in packaging either within or without our control; and
- any transitions or changes in our production process, planned or unplanned.

We could experience manufacturing interruptions, delays, or inefficiencies if we are unable to timely and reliably procure components from single-sourced suppliers.

We maintain several single-source supplier relationships, either because alternative sources are not available or because the relationship is advantageous due to performance, quality, support, delivery, capacity, or price considerations. If the supply of a critical single-source material or component is delayed or curtailed, we may not be able to ship the related product in desired quantities and in a timely manner. Even where alternative sources of supply are available, qualification of the alternative suppliers and establishment of reliable supplies could result in delays and a possible loss of sales, which could harm operating results.

Table of Contents

RISKS RELATED TO OUR INTELLECTUAL PROPERTY

We may not be successful in protecting our intellectual property and proprietary rights.

We rely on a combination of patents, trade secret protection, licensing agreements and other arrangements to establish and protect our proprietary technologies. If we fail to successfully enforce our intellectual property rights, our competitive position could suffer, which could harm our operating results. Patents may not be issued for our current patent applications, third parties may challenge, invalidate or circumvent any patent issued to us, unauthorized parties could obtain and use information that we regard as proprietary despite our efforts to protect our proprietary rights, rights granted under patents issued to us may not afford us any competitive advantage, others may independently develop similar technology or design around our patents, and protection of our intellectual property rights may be limited in certain foreign countries. On April 30, 2007, the U.S. Supreme Court, in KSR International Co. vs. Teleflex, Inc., mandated a more expansive and flexible approach towards a determination as to whether a patent is obvious and invalid, which may make it more difficult for patent holders to secure or maintain existing patents. Any future infringement or other claims or prosecutions related to our intellectual property could have a material adverse effect on our business. Any such claims, with or without merit, could be time consuming to defend, result in costly litigation, divert management's attention and resources, or require us to enter into royalty or licensing agreements. Such royalty or licensing agreements, if required, may not be available on terms acceptable to us, if at all. Protection of intellectual property has historically been a large yearly expense for eMagin. For a period prior to 2008, we were not in a financial position to properly protect all of our intellectual property, and may not be in a position to properly protect our position or stay ahead of competition in new research and the protecting of the resulting intellectual property.

In addition to patent protection, we also rely on trade secrets and other non-patented proprietary information relating to our product development and manufacturing activities. We try to protect this information through appropriate efforts to maintain its secrecy, including requiring employees and third parties to sign confidentiality agreements. We cannot be sure that these efforts will be successful or that the confidentiality agreements will not be breached. We also cannot be sure that we would have adequate remedies for any breach of such agreements or other misappropriation of our trade secrets or that our trade secrets and proprietary know-how will not otherwise become known or be independently discovered by others.

RISKS RELATED TO THE MICRODISPLAY INDUSTRY

The commercial success of the microdisplay industry depends on the widespread market acceptance of microdisplay systems products.

The commercial market for microdisplays is still emerging. Our long-term success may depend on consumer acceptance of microdisplays as well as the success of the commercialization of the microdisplay market. As an OEM supplier, our customer's products must also be well accepted. At present, it is difficult to assess or predict with any assurance the potential size, timing and viability of market opportunities for our technology in this market.

The microdisplay systems business is intensely competitive.

We do business in intensely competitive markets that are characterized by rapid technological change, changes in market requirements and competition from both other suppliers and our potential OEM customers. Such markets are typically characterized by price erosion. This intense competition could result in pricing pressures, lower sales, reduced margins, and lower market share. Our ability to compete successfully will depend on a number of factors, both within and outside our control. We expect these factors to include the following:

21

Table of Contents

- our success in designing, manufacturing and delivering expected new products, including those implementing new technologies on a timely basis;
- our ability to address the needs of our customers and the quality of our customer services;
- the quality, performance, reliability, features, ease of use and pricing of our products;
- successful expansion of our manufacturing capabilities;
- our efficiency of production, and ability to manufacture and ship products on time;
- the rate at which original equipment manufacturing customers incorporate our product solutions into their own products;
- the market acceptance of our customers' products; and
- product or technology introductions by our competitors.

Our competitive position could be damaged if one or more potential OEM customers decide to manufacture their own microdisplays, using OLED or alternate technologies. In addition, our customers may be reluctant to rely on a relatively small company such as eMagin for a critical component. We cannot assure you that we will be able to compete successfully against current and future competition, and the failure to do so would have a materially adverse effect upon our business, operating results and financial condition.

The display industry may be cyclical.

Our business strategy is dependent on OEM manufacturers building and selling products that incorporate our OLED displays as components into those products. Industry-wide fluctuations could cause significant harm to our business. The OLED microdisplay sector may experience overcapacity, if and when all of the facilities presently in the planning stage come on line, leading to a difficult market in which to sell our products.

Our competitors have many advantages over us.

As the microdisplay market develops, we expect to experience intense competition from numerous domestic and foreign companies including well-established corporations possessing worldwide manufacturing and production facilities, greater name recognition, larger retail bases and significantly greater financial, technical, and marketing resources than us, as well as from emerging companies who may be subsidized by their governments. We cannot assure you that we will be able to compete successfully against current and future competition, and the failure to do so would have a materially adverse effect upon our business, operating results and financial condition.

Our products are subject to lengthy OEM development periods.

We sell most of our microdisplays to OEMs who will incorporate them into products they sell. OEMs determine during their product development phase whether they will incorporate our products. The time elapsed between initial sampling of our products by OEMs, the custom design of our products to meet specific OEM product requirements, and the ultimate incorporation of our products into OEM consumer products is significant, often with a duration of

between one and three years. If our products fail to meet our OEM customers' cost, performance or technical requirements or if unexpected technical challenges arise in the integration of our products into OEM consumer products, our operating results could be significantly and adversely affected. Long delays in achieving customer qualification and incorporation of our products could adversely affect our business.

Table of Contents

In order to increase or maintain our profit margins we may have to continuously develop new products, product enhancements and new technologies.

In some markets, prices of established products tend to decline over time. In order to increase or maintain our profit margins over the long term, we believe that we will need to continuously develop new products, product enhancements and new technologies that will either slow price declines of our products or reduce the cost of producing and delivering our products. While we anticipate many opportunities to reduce production costs over time, there can be no assurance that these cost reduction plans will be successful, that we will have the resources to fund the expenditures necessary to implement certain cost-saving measures, or that our costs can be reduced as quickly as any reduction in unit prices. We may also attempt to offset the anticipated decrease in our average selling price by introducing new products with higher selling prices that may or may not offset price declines in more mature products. If we fail to do so, our results of operations could be materially and adversely affected.

RISKS RELATED TO OUR BUSINESS

Our success depends on attracting and retaining highly skilled and qualified technical and consulting personnel.

We must hire highly skilled technical personnel as employees and as independent contractors in order to develop our products. The competition for skilled technical employees is intense and we may not be able to retain or recruit such personnel. We must compete with companies that possess greater financial and other resources than we do, and that may be more attractive to potential employees and contractors. To be competitive, we may have to increase the compensation, bonuses, stock options and other fringe benefits offered to employees in order to attract and retain such personnel. The costs of attracting and retaining new personnel may have a materially adverse affect on our business and our operating results.

Our success depends in a large part on the continuing service of key personnel.

Changes in management could have an adverse effect on our business. We are dependent upon the active participation of several key management personnel and will also need to recruit additional management in order to expand according to our business plan. The failure to attract and retain additional management or personnel could have a material adverse effect on our operating results and financial performance.

Our operating results are substantially dependent on the development and acceptance of new products and technology innovations.

Our future success may depend on our ability to develop new and lower cost solutions for existing and new markets and for customers to accept those solutions. We must introduce new products in a timely and cost-efficient manner, and we must secure production orders for those products from our customers. The development of new products is a highly complex process, and we historically have experienced delays in completing the development and introduction of new products. Some or all of those technologies or products may not successfully make the transition from the research and development lab. Even when we successfully complete a research and development effort with respect to a particular product or technology, it may fail to gain market acceptance. The successful development and introduction of these products depends on a number of factors, including the following:

Table of Contents

- achievement of technology breakthroughs required to make commercially viable devices;
- the accuracy of our predictions of market requirements;
- acceptance of our new product designs;
- acceptance of new technology in certain markets;
- the availability of qualified research and development and product development personnel;
- our timely completion of product designs and development;
- our ability and available resources to expand sales;
- our ability to develop repeatable processes to manufacture new products in sufficient quantities and at low enough costs for commercial sales;
- our customers' ability to develop competitive products incorporating our products; and
- acceptance of our customers' products by the market.

If any of these or other factors become problematic, we may not be able to develop and introduce these new products in a timely or cost-effective manner.

If government agencies or companies discontinue or curtail their funding for our research and development programs our business may suffer.

Changes in federal budget priorities could adversely affect our contract and display product revenue. Historically, government agencies have funded a significant part of our research and development activities. Our funding has the risk of being redirected to other programs when the government changes budget priorities, such as in time of war or for other reasons. Government contracts are also subject to the risk that the government agency may not appropriate and allocate all funding contemplated by the contract. In addition our government contracts generally permit the contracting authority to terminate the contract for the convenience of the government. The full value of the contracts would not be realized if they were prematurely terminated. We may be unable to incur sufficient allowable costs to generate the full estimated contract values. Furthermore, the research and development and product procurement contracts of the customers we supply may be similarly impacted. If the government funding is discontinued or reduced, our ability to develop or enhance products could be limited and our business results or operations and financial conditions could be adversely affected.

Our business depends on new products and technologies.

The market for our products is characterized by rapid changes in product, design and manufacturing process technologies. Our success depends to a large extent on our ability to develop and manufacture new products and technologies to match the varying requirements of different customers in order to establish a competitive position and become profitable. Furthermore, we must adopt our products and processes to technological changes and emerging industry standards and practices on a cost-effective and timely basis. Our failure to accomplish any of the above could

harm our business and operating results.

Table of Contents

We generally do not have long-term contracts with our customers.

Our business has primarily operated on the basis of short-term purchase orders. We receive some longer term purchase agreements, and procurement contracts, but we cannot guarantee that we will continue to do so. Our current purchase agreements can be cancelled or revised without penalty, depending on the circumstances. We plan production primarily on the basis of internally generated forecasts of demand based on communications with customers, and available industry data which makes it difficult to accurately forecast revenues. If we fail to accurately forecast operating results, our business may suffer and the value of your investment in eMagin may decline.

Our business strategy may fail if we cannot continue to form strategic relationships with companies that manufacture and use products that could incorporate our active matrix OLED technology.

Our prospects could be significantly affected by our ability to develop strategic alliances with OEMs for incorporation of our active matrix OLED microdisplay technology into their products. While we intend to continue to establish strategic relationships with manufacturers of electronic consumer products, personal computers, chipmakers, lens makers, equipment makers, material suppliers and/or systems assemblers, there is no assurance that we will be able to continue to establish and maintain strategic relationships on commercially acceptable terms, or that the alliances we do enter in to will realize their objectives. Failure to do so could have a material adverse effect on our business.

Our business depends to some extent on international transactions.

We purchase needed materials from companies located abroad and may be adversely affected by political and currency risk, as well as the additional costs of doing business with foreign entities. Some customers in other countries have longer receivable periods or warranty periods. In addition, many of the foreign OEMs that are the most likely long-term purchasers of our microdisplays expose us to additional political and currency risk. We may find it necessary to locate manufacturing facilities abroad to be closer to our customers which could expose us to various risks, including management of a multi-national organization, the complexities of complying with foreign laws and customs, political instability and the complexities of taxation in multiple jurisdictions.

Our business may expose us to product liability claims.

Our business may expose us to potential product liability claims. Although no such claims have been brought against us to date, and to our knowledge no such claim is threatened or likely, we may face liability to product users for damages resulting from the faulty design or manufacture of our products. While we plan to maintain product liability insurance coverage, there can be no assurance that product liability claims will not exceed coverage limits, fall outside the scope of such coverage, or that such insurance will continue to be available at commercially reasonable rates, if at all.

Our business is subject to environmental regulations and possible liability arising from potential employee claims of exposure to harmful substances used in the development and manufacture of our products.

We are subject to various governmental regulations related to toxic, volatile, experimental and other hazardous chemicals used in our design and manufacturing process. Our failure to comply with these regulations could result in the imposition of fines or in the suspension or cessation of our operations. Compliance with these regulations could require us to acquire costly equipment or to incur other significant expenses. We develop, evaluate and utilize new chemical compounds in the manufacture of our products. While we attempt to ensure that our employees are protected from exposure to hazardous materials, we cannot assure you that potentially harmful exposure will not occur or that we will not be liable to employees as a result.

25

Table of Contents

Some of our business is subject to U.S. government procurement laws and regulations.

We must comply with certain laws and regulations relating to the formation, administration and performance of federal government contracts. These laws and regulations affect how we conduct business with our federal government contracts, including the business that we do as a subcontractor. In complying with these laws and regulations, we may incur additional costs, and non-compliance may lead to the assessment of fines and penalties, including contractual damages, or the loss of business.

Our international sales and operations are subject to export laws and regulations.

We must comply with all applicable export control laws including the Export Administration Regulations ("EAR") and the International Traffic in Arms Regulations ("ITAR"). Certain of our products may be deemed to be controlled for export by the U.S. Commerce Department's Bureau of Industry and Security under the EAR or by the U.S. State Department's Directorate of Defense Trade Controls ("DDTC") under the ITAR. We believe certain of our new products with both high brightness and high resolution will be classified as a defense articles and licenses from the DDTC will be required for exports. Failure to comply with these export control laws can lead to severe penalties, both civil and criminal, and can include debarment from contracting with the U.S. Government.
Current adverse economic conditions may adversely impact our business, operating results and financial condition.

The current economic conditions and market instability may affect our customers and suppliers. Any adverse financial or economic impact to our customers may impact their ability to pay timely, or result in their inability to pay. It may also impact their ability to fund future purchases, or increase the sales cycles which could lead to a reduction in revenue and accounts receivable. Our suppliers may increase their prices or may be unable to supply needed raw materials on a timely basis which could result in our inability to meet customers' demand or affect our gross margins. Our suppliers may, also, impose more stringent payment terms on us. The timing and nature of any recovery in the credit and financial markets remains uncertain, and there can be no assurance that market conditions will improve in the near future or that our results will not be materially and adversely affected.

RISKS RELATED TO OUR STOCK

The substantial number of shares that are or will be eligible for sale could cause our common stock price to decline even if eMagin is successful.

Sales of significant amounts of common stock in the public market, or the perception that such sales may occur, could materially affect the market price of our common stock. These sales might also make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. As of April 8, 2013, we have outstanding common shares of 23,687,196 plus (i) options to purchase 4,753,252 shares, (ii) warrants to purchase 1,000,000 shares and (iii) convertible preferred stock to purchase 7,545,333 shares of common stock.

Table of Contents

We are subject to significant corporate regulation as a public company and failure to comply with all applicable regulations could subject us to liability or negatively affect our stock price.

As a publicly traded company, we are subject to a significant body of regulation, including the Sarbanes-Oxley Act of 2002. While we have developed and instituted a corporate compliance program based on what we believe are the current best practices in corporate governance and continue to update this program in response to newly implemented or changing regulatory requirements, we cannot provide assurance that we are or will be in compliance with all potentially applicable corporate regulations. For example, we cannot provide assurance that, in the future, our management will not find a material weakness in connection with its annual review of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We also cannot provide assurance that we could correct any such weakness to allow our management to assess the effectiveness of our internal control over financial reporting as of the end of our fiscal year in time to enable our independent registered public accounting firm to state that such assessment will have been fairly stated in our Annual Report on Form 10-K or state that we have maintained effective internal control over financial reporting as of the end of our fiscal year. If we fail to comply with any of these regulations, we could be subject to a range of regulatory actions, fines or other sanctions or litigation. If we must disclose any material weakness in our internal control over financial reporting, our stock price could decline.

The market price of our common stock may be volatile.

The market price of our common stock has been subject to wide fluctuations. During our four most recently completed fiscal quarters, the closing price of our stock ranged from a low of $2.70 on April 9, 2012 to a high of $4.83 on September 10, 2012. The market price of our common stock in the future is likely to continue to be subject to wide fluctuations in response to various factors, including, but not limited to, the following:

- variations in our operating results and financial conditions;
- actual or anticipated announcements of technical innovations, new product developments, or design wins by us or our competitors;
- general conditions in the semiconductor and flat panel display industries; and
- worldwide economic and financial conditions.

In addition, the public stock markets have experienced extreme price and volume fluctuations that have particularly affected the market price for many technology companies and that have often been unrelated to the operating performance of these companies. The broad market fluctuations and other factors may continue to adversely affect the market price of our common stock.

Concentration of ownership of our stock may enable one shareholder or a small number of shareholders to significantly influence matters requiring shareholder approval.

As of January 31, 2013, Stillwater Holdings LLC (f/k/a Stillwater LLC) owned approximately 18.13% of our outstanding voting stock, Flat Creek Fiduciary Management, as trustee of a trust which the sole member of Stillwater Holdings LLC has investment control, owned approximately 13.61% of our outstanding voting stock and the sole member of Stillwater Holdings LLC is the investment manager of Rainbow Gate Corporation, which owned approximately 5.51% of our outstanding voting stock. Together such shareholders owned approximately 37.25% of our outstanding voting stock. As a result, these shareholders, if they act together, may be able to exert a significant degree of influence over matters requiring shareholder approval, including the election of directors and approval of significant corporate transactions. Further, if these shareholders act together with another shareholder, Ginola

Limited, which has common directors with Mount Union Corp., Chelsea Trust Company and Crestflower Corporation, as of January 31, 2013, they would collectively have represented approximately 46.29% of our outstanding voting stock. This concentration of ownership may facilitate or hinder a change of control and might affect the market price of our common stock. Furthermore, the interests of this concentration of ownership may not always coincide with our interests or the interests of other shareholders. Nevertheless, the ability to influence the election of the Board of Directors or otherwise have influence does not modify the fiduciary duties of the Board of Directors to represent the interests of all shareholders.

Table of Contents

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by the selling stockholders. We will not receive any proceeds from the sale of shares of common stock in this offering. However, we will receive the sale price of any common stock we sell to the selling stockholders upon exercise of the warrants owned by the selling stockholders. We expect to use the proceeds received from the exercise of the warrants, if any, for general working capital and other corporate purposes. We paid a special one-time dividend in December 2012; however we do not expect to continue to pay dividends in the near future.

SELLING STOCKHOLDERS

The following table sets forth the names of the selling stockholders, the number of shares of common stock owned beneficially by the selling stockholders as of April 8, 2013, and the number of shares of our common stock that may be offered by the selling stockholders pursuant to this prospectus. The table and the other information contained under the captions “Selling Stockholders” and “Plan of Distribution” has been prepared based upon information furnished to us by or on behalf of the selling stockholders. The following table sets forth, as to each of the selling stockholders, the number of shares beneficially owned, the number of share being sold, the number of shares beneficially owned upon completion of the offering and the percentage beneficial ownership upon completion of the offering.

Name	Shares Beneficially Owned Before the Offering	Shares of Common Stock Included in Prospectus Being Sold	Shares Beneficially Owned After the Offering	Percent of Outstanding After Completion of the Offering (12)
Stillwater Holdings LLC	12,631,492 (1)	9,478,723 (4)	2,215,436 (8) (12)	7%
Rainbow Gate Corporation	1,720,658 (2)	937,333 (5)	783,325 (9) (12)	2%
Ginola Limited	4,540,694 (3)	1,070,667 (6)	2,532,694 (10) (12)	8%
Navacorp III LLC	315,177	160,000 (7)	155,177 (11)	-
		11,646,723		

Table of Contents

(1) Represents: (i) 5,316,826 shares of common stock owned by Stillwater Holdings LLC (f/k/a Stillwater LLC), which includes 4,250,000 shares of common stock placed with Flat Creek Fiduciary Management LLC as trustee of a trust for the benefit of minor beneficiaries of the sole member of Stillwater Holdings LLC, in which the sole member of Stillwater Holdings LLC has investment control, and 783,325 shares of common stock owned by Rainbow Gate Corporation of which the sole member of Stillwater Holdings LLC is the investment manager; (ii) warrants held by Stillwater Holdings LLC to purchase 1,000,000 shares of common stock and (iii) 6,314,666 shares of common stock underlying Series B Convertible Preferred Stock which includes 937,333 shares of common stock underlying Series B Convertible Preferred Stock shares held by Rainbow Gate Corporation of which the sole member of Stillwater Holdings LLC is the investment manager. Mortimer D. A. Sackler exercises the sole voting power with respect to the shares held in the name of Stillwater Holdings LLC as sole member, Mortimer D. A. Sackler exercises the sole voting power with respect to the shares held in the name of Rainbow Gate Corporation as investment manager, and Mortimer D.A. Sackler has investment control with respect to the shares held in the name of Flat Creek Fiduciary Management LLC, as trustee; therefore Stillwater Holdings LLC is deemed to beneficially own the shares held by Rainbow Gate Corporation and Flat Creek Fiduciary Management LLC, as trustee, as “beneficially owned”.

(2) Represents (i) 783,325 shares of common stock owned by Rainbow Gate Corporation; and (ii) 937,333 shares of common stock underlying Series B Convertible Preferred Stock. Mortimer D. A. Sackler exercises the sole voting power with respect to the shares held in the name of Rainbow Gate Corporation.

(3) Represents: (i) 2,532,694 shares of common stock owned by Ginola Limited, which include: 783,325 shares of common stock held indirectly by Rainbow Gate Corporation; 78,478 shares of common stock owned by Mount Union Corp.; 57,372 shares of common stock owned by Chelsea Trust Company Limited, as trustee (Ginola Limited disclaims beneficial ownership of the shares owned by Rainbow Gate Corporation, Mount Union Corp. and Chelsea Trust Company Limited, as trustee); and 372,972 shares of common stock owned by Crestflower Corporation, in which the sole shareholder of Crestflower Corporation is Ginola Limited (Ginola Limited disclaims beneficial ownership of the shares owned by Crestflower Corporation except to the extent of its pecuniary interest therein); and (ii) 2,008,000 shares of common stock underlying Series B Convertible Preferred Stock, which includes 937,333 shares of common stock underlying Series B Convertible Preferred Stock held by Rainbow Gate Corporation. Stillwater Holdings LLC (f/k/a Stillwater LLC) and Ginola Limited are beneficially owned by separate parties and therefore do not exert voting control over one another. However, Stillwater Holdings LLC does include the shares held by Rainbow Gate Corporation as “beneficially owned” since the sole member of Stillwater Holdings LLC is investment manager and sole director of Rainbow Gate Corporation and exerts voting control over such shares but Stillwater Holdings LLC disclaims beneficial ownership of such shares. Jonathan White, Philip Le Cornu and Joerg Fischer exercise the shared voting power with respect to the shares held in the name of Mount Union Corp. Stuart Baker, Joerg Fischer, Charles Lubar, Christopher Mitchell, Leslie Schreyer and Jonathan White exercise the shared voting power with respect to the shares held in the name of Chelsea Trust Company Limited. Jonathan White, Joerg Fischer, Philip Le Cornu and Steven Meiklejohn exercise the shared voting power with respect to the

shares held in the name of Crestflower Corporation. Jonathan White, Joerg Fischer and Philip Le Cornu are the directors of Ginola Limited and exercise the shared voting power with respect to the shares held in the name of Ginola Limited.

(4) Represents (i) 1,438,096 shares issued upon conversion of the Stillwater Note and accrued interest and 1,524,131shares issued upon exercise of Warrants placed with Flat Creek Fiduciary Management LLC as trustee of a trust for the benefit of minor beneficiaries of the sole member of Stillwater Holdings LLC, in which the sole member of Stillwater Holdings LLC has investment control, and (ii) 1,139,163 shares issued or issuable upon exercise of Warrants and 5,377,333 shares underlying Series B Convertible Preferred Stock held in the name of Stillwater Holdings LLC. Mortimer D. A. Sackler exercises the sole voting power with respect to the shares held in the name of Stillwater Holdings LLC as sole member and Mortimer D.A. Sackler has investment control with respect to the shares held in the name of Flat Creek Fiduciary Management LLC, as trustee; therefore Stillwater Holdings LLC is deemed to beneficially own the shares held by Flat Creek Fiduciary Management LLC, as trustee, as “beneficially owned”.

Table of Contents

(5) Represents 937,333 shares underlying Series B Convertible Preferred Stock. Mortimer D.A. Sackler exercises the sole voting power with respect to the shares held in the name of Rainbow Gate Corporation.

(6) Represents 1,070,667 shares underlying Series B Convertible Preferred Stock. Jonathan White, Joerg Fischer and Philip Le Cornu are the directors of Ginola Limited and exercise the shared voting power with respect to the shares held in the name of Ginola Limited.

(7) Represents 160,000 shares underlying Series B Convertible Preferred Stock. Mr. Paul Cronson exercises the sole voting power with respect to the shares held in the name of Navacorp III LLC.

(8) Represents 2,215,436 shares of common stock owned by Stillwater Holdings LLC (f/k/a Stillwater LLC), which includes 1,287,000 shares of common stock placed with Flat Creek Fiduciary Management LLC as trustee of a trust for the benefit of minor beneficiaries of the sole member of Stillwater Holdings LLC, in which the sole member of Stillwater Holdings LLC has investment control, and 783,325 shares of common stock owned by Rainbow Gate Corporation of which the sole member of Stillwater Holdings LLC is the investment manager. Mortimer D. A. Sackler exercises the sole voting power with respect to the shares held in the name of Stillwater Holdings LLC as sole member, Mortimer D. A. Sackler exercises the sole voting power with respect to the shares held in the name of Rainbow Gate Corporation as investment manager, and Mortimer D.A. Sackler has investment control with respect to the shares held in the name of Flat Creek Fiduciary Management LLC, as trustee; therefore Stillwater Holdings LLC is deemed to beneficially own the shares held by Rainbow Gate Corporation and Flat Creek Fiduciary Management LLC, as trustee, as “beneficially owned”.

(9) Represents 783,325 shares of common stock owned by Rainbow Gate Corporation. Mortimer D.A. Sackler exercises the sole voting power with respect to the shares held in the name of Rainbow Gate Corporation.

(10) Represents 2,532,694 shares of common stock owned by Ginola Limited, which include: 783,325 shares of common stock held indirectly by Rainbow Gate Corporation; 78,478 shares of common stock owned by Mount Union Corp.; 57,372 shares of common stock owned by Chelsea Trust Company Limited, as trustee (Ginola Limited disclaims beneficial ownership of the shares owned by Rainbow Gate Corporation, Mount Union Corp. and Chelsea Trust Company Limited, as trustee); and 372,972 shares of common stock owned by Crestflower Corporation, in which the sole shareholder of Crestflower Corporation is Ginola Limited (Ginola Limited disclaims beneficial ownership of the shares owned by Crestflower Corporation except to the extent of its pecuniary interest therein). Stillwater Holdings LLC (f/k/a Stillwater LLC) and Ginola Limited are beneficially owned by separate parties and therefore do not exert voting control over one another. However, Stillwater Holdings LLC does include the shares held by Rainbow Gate Corporation as “beneficially owned” since the sole member of Stillwater Holdings LLC is investment manager and sole director of Rainbow Gate Corporation and exerts voting control over such shares. Jonathan White, Philip Le Cornu and Joerg Fischer

exercise the shared voting power with respect to the shares held in the name of Mount Union Corp. Stuart Baker, Joerg Fischer, Charles Lubar, Christopher Mitchell, Leslie Schreyer and Jonathan White exercise the shared voting power with respect to the shares held in the name of Chelsea Trust Company Limited. Jonathan White, Joerg Fischer, Philip Le Cornu and Steven Meiklejohn exercise the shared voting power with respect to the shares held in the name of Crestflower Corporation. Jonathan White, Joerg Fischer and Philip Le Cornu are the directors of Ginola Limited and exercise the shared voting power with respect to the shares held in the name of Ginola Limited.

Table of Contents

(11) Represents 155,177 shares of common stock owned by Navacorp III LLC. Mr. Paul Cronson exercises the sole voting power with respect to the shares held in the name of Navacorp III LLC.

(12) Assumes the sales of all shares of Common Stock included in this prospectus.

A person is deemed to beneficially own securities which the person has the right to acquire within 60 days through the exercise of any option or warrant or through the conversion of a convertible security. As of April 8, 2013 there were 23,687,196 shares of our common stock issued and outstanding.

None of the selling stockholders is a member, affiliate or associate of any broker-dealer. With respect to the shares being registered on behalf of Navacorp III LLC ("Navacorp"), Mr. Paul Cronson, a director of the Company, is the controlling shareholder of Navacorp. Except for the aforementioned, and except as set forth in this prospectus, none of the selling stockholders has, or within the past three years has had, any position, office or material relationship with us or any of our predecessors or affiliates.

Neither we nor our predecessor engaged in any securities transactions with any of the selling stockholders, their affiliates or any person which whom any selling stockholder has a contractual relationship regarding the sale by us of our securities to the selling stockholders. We have been advised by the selling stockholders that they do not have a short position in our common stock. Except as described in this prospectus, we do not have any agreements or understandings with any of the stockholders or any of their affiliates or any person known to us to have a contractual relationship with any of the selling stockholders.

PLAN OF DISTRIBUTION

The selling stockholders and any of their pledgees, donees, assignees and successors-in-interest may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions or by gift. These sales may be made at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling or otherwise transferring shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which a 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;
- sales to a broker-dealer as principal and the resale by the broker-dealer of the shares for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions, including gifts;

Table of Contents

- covering short sales made after the date of this prospectus;
- pursuant to an arrangement or agreement with a broker-dealer 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 of sale permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 of the Securities Act of 1933, as amended, if available, rather than pursuant to this prospectus. The selling stockholders shall have the sole and absolute discretion not to accept any purchase offer or make any sale of shares if it deems the purchase price to be unsatisfactory at any particular time.

The selling stockholders and their pledgees, donees, transferees or other successors in interest, may also sell the shares directly to market makers acting as principals and/or broker-dealers acting as agents for themselves or their customers. Such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principal or both, which compensation as to a particular broker-dealer might be in excess of customary commissions. Market makers and block purchasers purchasing the shares will do so for their own account and at their own risk. It is possible that the selling stockholder will attempt to sell shares of common stock in block transactions to market makers or other purchasers at a price per share which may be below the then existing market price. We cannot assure that all or any of the shares offered in this prospectus will be issued to, or sold by, the selling stockholders. The selling stockholders and any brokers, dealers or agents, upon effecting the sale of any of the shares offered in this prospectus, may be deemed to be an “underwriters” as that term is defined under the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We are required to pay all fees and expenses incident to the registration of the shares, but excluding brokerage commissions.

The selling stockholders, alternatively, may sell all or any part of the shares offered in this prospectus through an underwriter. The selling stockholders have not entered into any agreement with a prospective underwriter and there is no assurance that any such agreement will be entered into. If the selling stockholders propose to sell shares to an underwriter, we will be required to amend this prospectus to reflect the terms of the underwritten offering.

The selling stockholders may pledge shares to brokers under the margin provisions of customer agreements. If the selling stockholders default on a margin loan, the broker may, from time to time, offer and sell the pledged shares. The selling stockholders and any other persons participating in the sale or distribution of the shares will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations under such Act, including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of purchases and sales of any of the shares by, the selling stockholder or any other such person. In the event the selling stockholders is deemed an affiliated purchaser or distribution participant within the meaning of Regulation M, then the selling stockholder will not be permitted to engage in short sales of common stock. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distributions, subject to specified exceptions or exemptions. In addition, if a short sale is deemed to be a stabilizing activity, then the selling stockholder will not be permitted to engage in a short sale of our common stock. All of these limitations may affect the marketability of the shares.

32

Table of Contents

If a selling stockholder notifies us that it has a material arrangement with a broker-dealer for the resale of the common stock, then we would be required to amend the registration statement of which this prospectus is a part, and file a prospectus supplement to describe the agreement between the selling stockholder and the broker-dealer.

DESCRIPTION OF CAPITAL STOCK

Common Stock

We are authorized to issue up to 200,000,000 shares of common stock, $0.001 par value. As of April 8, 2013, there were 23,687,196 shares of common stock outstanding. Holders of the common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor. Upon the liquidation, dissolution, or winding up of our company, the holders of common stock are entitled to share ratably in all of our assets which are legally available for distribution after payment of all debts and other liabilities and liquidation preference of any outstanding common stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. The outstanding shares of common stock are validly issued, fully paid and non-assessable.

Preferred Stock

We are authorized to issue up to 10,000,000 shares of Preferred Stock, $0.001 par value. The 10,000,000 shares of Preferred Stock authorized are undesignated as to preferences, privileges and restrictions. As the shares are issued, the Board of Directors must establish a “series” of the shares to be issued and designate the preferences, privileges and restrictions applicable to that series.

The Company filed the Certificate of Designations with the State of Delaware on December 19, 2008. The Certificate of Designations designates 10,000 shares of the Company’s preferred stock as Series B Convertible Preferred Stock. The Preferred Stock has a stated value of $1,000 and has a conversion price of $.75 per share. The Preferred Stock does not pay interest. The holders of the Preferred Stock are not entitled to receive dividends unless the Company’s Board of Directors declared a dividend for holders of the Company’s common stock and then the dividend shall be equal to the amount that such holder would have been entitled to receive if the holder converted its Preferred Stock into shares of the Company’s common stock. Each share of Preferred Stock has voting rights equal to (i) the number of shares of Common Stock issuable upon conversion of such shares of Preferred Stock at such time (determined without regard to the shares of Common Stock so issuable upon such conversion in respect of accrued and unpaid dividends on such share of Preferred Stock) when the Preferred Stock votes together with the Company’s Common Stock or any other class or series of stock of the Company and (ii) one vote per share of Preferred Stock when such vote is not covered by the immediately preceding clause. In the event of a liquidation, dissolution, or winding up of the Company, the Preferred Stock is entitled to receive liquidation preference before the Common Stock. The Company may at its option redeem the Preferred Stock by providing the required notice to the holders of the Preferred Stock and paying an amount equal to $1,000 multiplied by the number of shares for all of such holder’s shares of outstanding Preferred Stock to be redeemed. As of April 8, 2013, there were 5,659 shares of Preferred Stock issued and outstanding.

Table of Contents

Delaware Law and Certain Charter and By-law Provisions

We are subject to the provisions of Section 203 of the Delaware General Corporation Law statute. Section 203 prohibits a publicly-held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within the prior three years did own, 15% or more of the corporation’s voting stock.

Our certificate of incorporation contains certain provisions permitted under Delaware General Corporation Law relating to the liability of directors. The provisions eliminate a director’s liability for monetary damages for a breach of fiduciary duty, except in certain circumstances where such liability may not be eliminated under applicable law. Further, our certificate of incorporation contains provisions to indemnify our directors and officers to the fullest extent permitted by Delaware General Corporation Law.

Transfer Agent

Our transfer agent for our common stock is Continental Stock Transfer, 17 Battery Place, New York, NY 10004.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon for us by Sichenzia Ross Friedman Ference LLP, New York, New York.

EXPERTS

McGladrey LLP, Independent Registered Public Accountants, have audited, as set forth in their report thereon which is incorporated by reference in this Prospectus and Registration Statement, our consolidated balance sheets as of December 31, 2012 and 2011 and the related consolidated statements of operations, shareholders' equity and cash flows for the years then ended, which are incorporated herein by reference in reliance upon the auditors’ opinion based on their expertise in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC’s Public Reference Room at 100 F Street, N.E., Washington, DC 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. The SEC also maintains an Internet site that contains reports, proxy statements and other information about issuers, like us, who file electronically with the SEC. The address of the SEC’s web site is http://www.sec.gov. Our common stock is listed for trading on the NYSE MKT LLC under the symbol “EMAN.”

We have filed a registration statement on Form S-3 with the SEC to register the securities that may be offered pursuant to this prospectus. This prospectus is part of that registration statement and, as permitted by the SEC’s rules, does not contain all of the information included in the registration statement. For further information about us, this offering and our common stock, you may refer to the registration statement and its exhibits and schedules as well as the documents described herein or incorporated herein by reference. You can review and copy these documents,

without charge, at the public reference facilities maintained by the SEC or on the SEC's website as described above or you may obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

Table of Contents

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is considered to be an important part of this prospectus, and information that we file with the SEC at a later date will automatically add to, update or supersede this information.

We incorporate by reference into this prospectus the documents listed below:

- our annual report on Form 10-K for the year ended December 31, 2012 filed with the SEC on March 14, 2013;
- our current reports on Form 8-K, filed with the SEC on March 13, 2013; and
- the description of our common stock contained in our registration statement on Form 8-A12B filed on May 12, 2010.

We are also incorporating by reference all future filings that we make with the SEC under Section 13(a), 13(c), 14, or 15(d) of the Exchange Act after the date of filing of the registration statement on Form S-3 of which this prospectus is a part and prior to the termination or completion of any offering of securities under this prospectus and all applicable prospectus supplements (except, in each case, for information contained in any such filing that is furnished and not "filed" under the Exchange Act), which filings will be deemed to be incorporated by reference in this prospectus, as supplemented by the applicable prospectus supplement, and to be a part hereof from the respective dates of such filings.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request of such person, a copy of any or all of the information that is incorporated by reference in this prospectus. Requests for such documents should be directed to: eMagin Corporation, 3006 Northup Way, Suite 103, Bellevue WA 98004, Attention: Andrew Sculley, Tel: (425) 284-5200.

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC. That registration statement contains more information than this prospectus regarding us and our common stock, including certain exhibits and schedules. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's Internet website.

You should rely only on the information provided in and incorporated by reference into this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front cover of these documents.

Table of Contents

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth an itemization of all estimated expenses, all of which we will pay, in connection with the issuance and distribution of the securities being registered:

NATURE OF EXPENSE	AMOUNT
Registration fee	$ 2,470+
Accounting fees and expenses	10,000 *
Legal fees and expenses	10,000 *
Miscellaneous	5,000 *
TOTAL	$ 27,470 *

+ Of this amount, $113 was paid in connection with the Registration Statement on Form S-3 (SEC file No. 333-144865) and $2,357 was paid in connection with the Registration Statement on Form S-3 (SEC file No. 333-168019.
* Estimated.

Item 15. Indemnification of Directors and Officers.

Our Articles of Incorporation, as amended and restated, provide to the fullest extent permitted by Section 145 of the General Corporation Law of the State of Delaware that our directors or officers shall not be personally liable to us or our shareholders for damages for breach of such director's or officer's fiduciary duty. The effect of this provision of our Articles of Incorporation, as amended and restated, is to eliminate our rights and those of our shareholders (through shareholders' derivative suits on behalf of our company) to recover damages against a director or officer for breach of the fiduciary duty of care as a director or officer (including breaches resulting from negligent or grossly negligent behavior), except under certain situations defined by statute. We believe that the indemnification provisions in our Articles of Incorporation, as amended, are necessary to attract and retain qualified persons as directors and officers.

Our By Laws also provide that the Board of Directors may also authorize us to indemnify our employees or agents, and to advance the reasonable expenses of such persons, to the same extent, following the same determinations and upon the same conditions as are required for the indemnification of and advancement of expenses to our directors and officers. As of the date of this Registration Statement, the Board of Directors has not extended indemnification rights to persons other than directors and officers.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable.

Table of Contents

Item 16. Exhibits.

The following exhibits are filed herewith and as a part of this registration statement:

Exhibit Number	Description
2.1	Agreement and Plan of Merger between Fashion Dynamics Corp., FED Capital Acquisition Corporation and FED Corporation dated March 13, 2000 (incorporated by reference to exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed on March 17, 2000).
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to an appendix to the Registrant's Definitive Proxy Statement filed on September 21, 2006).
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation (incorporated by reference to an appendix to the Registrant’s Definitive Proxy Statement filed on October 26, 2010).
3.3	Bylaws of the Registrant (incorporated by reference to exhibit 99.3 to the Registrant's Definitive Proxy Statement filed on June 14, 2001).
3.4	Certificate of Designations of Series B Convertible Preferred Stock (incorporated by reference to Exhibit 4.2 of the Registrant’s current report on Form 8-K filed on December 23, 2008).
4.1	Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Registrant’s current report on Form 8-K filed on December 23, 2008).
5.1	Opinion of Sichenzia Ross Friedman Ference LLP (previously filed).
23.1	Consent of Sichenzia Ross Friedman Ference LLP (included in Exhibit 5.1).
23.2	Consent of Independent Registered Public Accounting Firm (filed herewith).
	Power of Attorney (Incorporated by reference to the signature page of the registration page on page 40).

Table of Contents

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement.

Provided, however, that the undertakings set forth in paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statements or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

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

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus

that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

Table of Contents

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser: (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424; (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant; (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That: (i) for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of the registration statement as of the time it was declared effective; and (ii) for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bellevue, State of Washington, on this 24th day of April 2013.

EMAGIN CORPORATION

Date: April 24, 2013

By: /s/ Andrew G. Sculley
Andrew G. Sculley
Chief Executive Officer and President
(Principal Executive Officer)

Date: April 24, 2013

By: /s/ Paul Campbell
Paul Campbell
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Paul Campbell his/her true and lawful attorney-in-fact and agent with full power of substitution and re-substitution, for him/her and in his/her name, place and stead, in any and all capacities to sign any or all amendments (including, without limitation, post-effective amendments) to this Registration Statement, any related Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933 and any or all pre- or post-effective amendments thereto, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent, or any substitute or substitutes for him, may lawfully do or cause to be done by virtue hereof.

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

Table of Contents

Signature	Title	Date
/s/ Andrew G. Sculley Andrew G. Sculley	Chief Executive Office, President and Director (Principal Executive Officer)	April 24, 2013
/s/ Paul Campbell Paul Campbell	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 24, 2013
Jill J. Wittels	Director	April 24, 2013
/s/ Claude Charles Claude Charles	Director	April 24, 2013
/s/ Christopher Brody Christopher Brody	Director	April 24, 2013
/s/ Irwin Engelman Irwin Engelman	Director	April 24, 2013
/s/ Leslie Polgar Leslie Polgar	Director	April 24, 2013
Stephen Seay	Director	April 24, 2013
Paul Cronson	Director	April 24, 2013