

Edgar Filing: EMAGIN CORP - Form 10KSB

EMAGIN CORP  
Form 10KSB  
April 15, 2005

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
FORM 10-KSB

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2004  
COMMISSION FILE NO. 001-15751

eMagin Corporation  
(Name of Small Business Issuer in Its Charter)

Delaware	56-1764501
-----	-----
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
2070 Route 52, Hopewell Junction, New York	12533
-----	-----
(Address of Principal Executive Offices)	(Zip Code)
(845) 838-7900	
-----	
(Issuer's Telephone Number, Including Area Code)	

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE EXCHANGE ACT: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE EXCHANGE ACT:

Common Stock, \$.001 Par Value Per Share

Check whether the Issuer: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days: Yes [X] No [ ]

Check if there is no disclosure of delinquent filers pursuant to Item 405 of Regulation S-B contained herein, and no disclosure will be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB. [ ]

Our revenues for our most recent fiscal year were \$3,592,867.

There are 81,872,176 shares outstanding as of March 28, 2005. The aggregate market value of the issued and outstanding common stock held by non-affiliates of eMagin based upon the closing price of the common stock as quoted on the American Stock Exchange on March 28, 2005 of \$0.94 was approximately \$33,808,903.

There were 79,638,817 shares of common stock outstanding, as of December 31, 2004.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the registrant's definitive proxy statement to be filed

# Edgar Filing: EMAGIN CORP - Form 10KSB

with the Securities and Exchange Commission pursuant to Regulation 14A in connection with the registrant's 2005 Annual Meeting of Stockholders are incorporated herein by reference into Part III of this Annual Report on Form 10-KSB.

1

FORM 10-KSB

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2004

INDEX

PART I

	Page
Item 1.	Description of Business.....4
Item 2.	Description of Property.....22
Item 3.	Legal Proceedings.....22
Item 4.	Submission of Matters to a Vote of Security Holders.....22

PART II

Item 5.	Market for the Registrant's Common Equity and Related Stockholder Matters and Small Business Issuer Purchases of Equity Securities.....22
Item 6.	Management's Discussion and Analysis or Plan of Operation.....24
Item 7.	Financial Statements.....F-1
Item 8.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.....36
Item 8A.	Controls and Procedures.....36
Item 8B.	Other Information.....36

PART III

Item 9.	Directors, Executive Officers, Promoters and Control Persons; Compliance with Section 16(A) of the Exchange Act.....37
Item 10.	Executive Compensation.....40
Item 11.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.....42
Item 12.	Certain Relationships and Related Transactions.....42
Item 13.	Exhibits.....43

PART IV

Item 14.	Principal Accountant Fees and Services.....45
SIGNATURES.....	46

2

STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

## Edgar Filing: EMAGIN CORP - Form 10KSB

In this annual report, references to "eMagin Corporation," "eMagin," "Virtual Vision," "the Company," "we," "us," and "our" refer to eMagin Corporation and its subsidiary.

Except for the historical information contained herein, some of the statements in this Report contain forward-looking statements that involve risks and uncertainties. These statements are found in the sections entitled "Business," "Management's Discussion and Analysis or Plan Operations," and "Risk Factors." They include statements concerning: our business strategy; expectations of market and customer response; liquidity and capital expenditures; future sources of revenues; expansion of our proposed product line; and trends in industry activity generally. In some cases, you can identify forward-looking statements by words such as "may," "will," "should," "expect," "plan," "could," "anticipate," "intend," "believe," "estimate," "predict," "potential," "goal," or "continue" or similar terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including, but not limited to, the risks outlined under "Risk Factors," that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements. For example, assumptions that could cause actual results to vary materially from future results include, but are not limited to: our ability to successfully develop and market our products to customers; our ability to generate customer demand for our products in our target markets; the development of our target markets and market opportunities; our ability to manufacture suitable products at competitive cost; market pricing for our products and for competing products; the extent of increasing competition; technological developments in our target markets and the development of alternate, competing technologies in them; and sales of shares by existing shareholders. Although we believe that the expectations reflected in the forward looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Unless we are required to do so under US federal securities laws or other applicable laws, we do not intend to update or revise any forward-looking statements.

3

### PART I

#### ITEM 1. DESCRIPTION OF BUSINESS

##### Introduction

eMagin Corporation designs, develops, manufactures, and markets virtual imaging products which utilize OLEDs, or organic light emitting diodes, OLED-on-silicon microdisplays and related information technology solutions. We 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, or OEM, customers to develop and market improved or new electronic products. We believe that virtual imaging will become an important way for increasingly mobile people to have quick access to high resolution data, work, and experience new more immersive forms of communications and entertainment.

Our first commercial product, the SVGA+ (Super Video Graphics Array plus 52 added columns of data) OLED microdisplay was initially offered for sampling in 2001, and our first SVGA-3D (Super Video Graphics Array plus built-in stereovision capability) OLED microdisplay was shipped in early 2002. We have

## Edgar Filing: EMAGIN CORP - Form 10KSB

now accepted purchase agreements for larger quantities of our commercial microdisplay products and virtual imaging subsystems which combine displays with lenses. These products are being applied or considered for near-eye and headset applications in products such as entertainment and gaming headsets, handheld Internet and telecommunication appliances, viewfinders, and wearable computers to be manufactured by OEM customers for military, medical, industrial, and consumer applications. We market our products in North American, Europe, and Asia.

Our OLED-on-silicon microdisplays offer a number of advantages over current liquid crystal microdisplays, including increased brightness, lower power requirements, less weight and wider viewing angles. Using our active matrix OLED technology, many computer and video electronic system functions can be built directly into the OLED-on-silicon microdisplay, resulting in compact systems with expected lower overall system costs relative to alternate microdisplay technologies. We have developed our own technology to create high performance OLED-on-silicon microdisplays and related optical systems and we have licensed certain fundamental OLED and display technology from Eastman Kodak.

As the first to exploit OLED technology for microdisplays, and with the support of our partners and the development of our intellectual property, we believe that we enjoy a significant advantage in the commercialization of this display technology for virtual imaging. We are the only company to sell full-color active matrix small molecule OLED-on-silicon microdisplays. In January 2005 we announced the world's first personal display system to combine OLED technology with head-tracking and 3D stereovision, the Z800 3D Visor.

Our sub-system group, which produces our headsets, offers value added services to our customers by providing custom engineering support for virtual imaging subsystem design and prototyping, as well as by creating standardized optical and electronics interfaces for our displays that accelerate the time to market for products offered by our new potential customers.

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. FDC had no active business operations other than to acquire an interest in a business. On March 16, 2000, FDC acquired FED. The merged company changed its name to eMagin Corporation. Following the Merger, the business conducted by the Company is the business conducted by FED prior to the Merger.

Our website is located at [www.emagin.com](http://www.emagin.com). We make available on our website, free of charge, our annual report on Form 10KSB, our proxy statement, our quarterly reports on Form 10QSB, our current reports on Form 8K, amendments to reports filed under the Securities and Exchange Act, earnings press releases, and other business-related press releases. We also post on our website the charters of our Audit, Compensation, and Governance and Nominating committees, our Codes of Ethics and any amendments of or waiver to those codes of ethics, and other corporate governance materials recommended by the Securities and Exchange Commission and the American Stock Exchange as they occur.

4

### Industry Overview

The overall flat panel display industry is predicted to grow to approximately \$70 billion by 2008, according to market research by DisplaySearch (Q4, 2004 Survey); iSuppli/Stanford Resources is projecting slightly higher sales of \$95 billion (Q1 2005 Forecast Update), with OLED sales of \$2.25 billion and a compound annual growth rate of 51.5%. Within the flat panel industry there are various sizes and applications of flat panel displays, ranging from wall

## Edgar Filing: EMAGIN CORP - Form 10KSB

size signage to calculator and viewfinder displays. Displays are sold as independent products (such as flat TVs) or as components of other systems (such as laptop computers). Our products target one segment of the flat panel industry which is known as near-to-the-eye or near-eye microdisplays because they are viewed through a lens rather than directly, in comparison to desktop computer screens which are known as direct view displays.

Near-eye virtual imaging using microdisplays are used in small optically magnified devices such as video headsets, camcorders, viewfinders and other portable devices. Microdisplays are typically of such high resolution that they are only practically viewed with magnifying optics. Although the displays are typically physically smaller than a postage stamp, they can provide a magnified viewing area similar to that of a full size computer screen. For example, when magnified through a lens, a high-resolution 0.6-inch diagonal display can appear comparable to a 19 to 21-inch diagonal computer screen at about 2 feet from the viewer or a 60-inch TV screen at about 6 feet. One version of our display and optic recreates the virtual imaging viewing and sound experience of sitting in the middle seat of a typical movie theater.

The microdisplay market, according to McLaughlin Consulting Group in a report issued in its Microdisplay Forecast Report 2004, is expected to grow from \$1.2 billion in 2003 to at least \$4 billion in 2008. Insight Media and the McLaughlin Consulting Group predict particularly significant growth in one segment of that market - consumer products. Their joint "Personal Displays: Opportunity Analysis and Forecast 2004" focuses microdisplay-enabled personal electronics for consumers as well as professionals in vertical markets and projects growth in this segment from \$73 million in 2004 to \$1 billion market by 2008.

We believe that the most significant driver of the 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 near-eye microdisplay 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 such as notebook and sub-notebook computers, portable DVD systems, electronic games, and other entertainment, and wearable computers.

Until now, near-eye virtual imaging microdisplay technologies have not simultaneously met all of the requirements for high resolution, full color, low power consumption, brightness, lifetime, size and cost which are required for successful commercialization in OEM consumer products. We believe that our new OLED-on-silicon microdisplay product line meets these requirements better than alternative products and will help to enable virtual imaging to emerge as an important display industry segment.

### Our Approach: OLED-on-Silicon Microdisplays and Optics

There are two basic classes of organic light emitting diode, or OLED, technology, dubbed single molecule or small molecule (monomer) and polymer. Our microdisplays are currently based upon active matrix molecular OLED technology, which we call OLED-on-silicon because we build the displays directly on silicon chips. Our OLED-on-silicon 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. OLED-on-silicon microdisplays offer a number of advantages over current liquid crystal microdisplays, including increased brightness, lower power requirements, less weight and wider viewing angles. Using our OLED technology, many computer and video electronic system functions can be built directly into the silicon chip,

## Edgar Filing: EMAGIN CORP - Form 10KSB

under the OLED film, resulting in very compact, integrated systems with lowered overall system costs relative to alternative technologies.

5

We have developed our own proprietary and patented technology to create high performance OLED-on-silicon microdisplays and related optical systems and we license fundamental OLED technology from Eastman Kodak. (See "Intellectual Property" and "Strategic Relationships"). We expect that the integration of our OLED-on-silicon microdisplays into mobile electronic products will result in lower overall system costs to our OEM customers.

We believe that our OLED-on-silicon microdisplays will initiate a new generation of virtual imaging products that could have a profound impact on many industries. Headsets providing virtual screens surrounding the user in a sphere of data become a practical reality with our displays and a low cost head tracker. Because our microdisplays generate and emit light, they have a wider viewing angle than competing liquid crystal microdisplays, and because they have the same high brightness at all forward viewing angles, our microdisplays permit a large field-of-view and superior optical image.

The wider viewing angle of our display results in the following superior optical characteristics:

- o the user does not need to as accurately position the head-wearable display to the eye;
- o the image will change minimally with eye movement and appear more natural; and
- o the display can be placed further from the eye and not cut off part of the image.

In addition, our OLED-on-silicon microdisplays offer faster response times and use much less power than competitive liquid crystal microdisplay systems. Our subsystem-level power consumption is so low that two SVGA, full color, full speed motion video computer displays can easily be run in stereovision off the power from a single USB port on a portable computer. Battery life is extended or weight is greatly reduced in systems using our products.

Our SVGA+ OLED microdisplay stores all the color and luminance value information at each of the more than 1.5 million picture elements, or pixels, between refresh cycles in the display array, eliminating the flicker or color breakup seen by most other high-resolution microdisplay technologies. Even power efficient frame rates as low as 30 Hz can usually be used effectively. Power consumption at the system level is expected to be the lowest of any full-color, full-video SVGA resolution range, large view microdisplay on the market. The OLED's ability to emit light at wide angles allows customers to create large field of view (approx. 40 degrees), wide image capture range images from very compact, low-cost, one-piece optical systems. The display contains the majority of the electronics required for connection to the RGB (red, green, blue signal) port of a portable computer imbedded in its silicon chip backplane, thereby eliminating many other components required by other display technologies such as digital-analog converters, application-specific integrated circuits (ASICs), light sources, multiple optical elements, and other components. We believe that these features will enable our new class of microdisplay to potentially be the most compact, highest image quality, and lowest cost solution for high resolution near-eye applications, once they are in full production.

We have commercialized two OLED microdisplay products, our SVGA+ resolution microdisplay, which contains 1.53 million picture elements, and our stereovision-capable SVGA-3D microdisplay, which contains 1.44 million picture

## Edgar Filing: EMAGIN CORP - Form 10KSB

elements. We sell our OLED-on-silicon microdisplays for use as components by customers who prefer to design and build their own lenses or coupled with our own optics. We also plan to offer OLED processing on our customers' integrated circuits to some OEMs who design their own integrated circuits. We provide PC Interface Kits and Developer 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. We are commencing manufacturing of a personal display system, Z800 3D Visor for PCs, which incorporates eMagin OLED display stereovision with head tracking capability.

### Our Product Lines

We offer our products to OEMs and other large volume buyers as both separate components and integrated bundles in a three-tiered platform. We

6

believe that our strategy of offering our products both as separate components and as integrated bundles that include microdisplays and lenses will allow us to address the needs of the largest number of potential customers.

(1) OLED-on-silicon microdisplays for integration into near-eye virtual imaging OEM products for consumer, industrial, and military markets;

(2) Microviewer(TM) near-eye virtual imaging modules that incorporate our OLED-on-silicon microdisplays with compact lenses and electronic interfaces for integration into OEM products for consumer, industrial, and military markets. We have shipped customized microviewer modules to several customers, some of which have incorporated our products into their own commercially available products;

(3) Head-wearable near-eye virtual imaging display systems that will incorporate our Microviewers(TM) for consumer and industrial markets.

We also offer engineering support and a variety of support products, including developer kits and PC interface kits, to enable customers to quickly integrate our products into their own product development programs.

### Our Products

#### (1) OLED Microdisplay Products

We serve as a component manufacturer by supplying our OLED-on-silicon microdisplays for those customers who have their own lenses or integrated circuits. Our first commercial microdisplay products are based on our "SVGA series" OLED microdisplays. We expect to offer our SXGA OLED microdisplay during early 2006. This is a new design effort for a smaller, lower cost, full-color SXGA. We have experienced several short delays in the design phase which is normal, and to be expected in a research and development process. The table below provides a partial listing of the display products, or in the late stages of development.

#### OLED Microdisplays:

Microdisplay Product Numbers	Description	Resolution (pixels)	Color
EMA-100080	SVGA+ OLED microdisplay	852x3x600	color
EMA-100100	SVGA+ OLED microdisplay	852x3x600	white
EMA-100116	SVGA+ OLED microdisplay	852x3x600	yellow
EMA-100110	SVGA+ OLED microdisplay	852x3x600	green

## Edgar Filing: EMAGIN CORP - Form 10KSB

EMA-100052	SVGA 3D OLED microdisplay	800x3x600	color
TBD	SVGA 3DS OLED microdisplay	800x3x600	various
TBD	SXGA OLED microdisplay	1280x3x1024	various
TBD	QVGA OLED microdisplay	320x3x240	various

0.62-inch Diagonal SVGA+ (Super Video Graphics Array plus 52 added columns of data) for Consumer OEMs. This display has a resolution of 852 x 3 x 600 pixels, and was dubbed "SVGA+" because it has 52 more display columns than a standard SVGA display. The design permits users to run either (1) standard SVGA (800 x 600 pixels) to interface to the analog output of many portable computers or (2) 852 x 480, using all the data available from a DVD player in a 16:9 wide screen entertainment format. The SVGA+ can be made as a full-color or monochrome microdisplay primarily for high-performance and large-view consumer OEM products such as games, video/data head-wearable displays, digital cameras, video cameras and other portable electronics applications. The display also has an internal NTSC monochrome video decoder for low power night vision systems. This product is designed to interface with most portable personal computers.

0.59-inch Diagonal SVGA-3D (Super Video Graphics Array plus built-in stereovision capability) for Consumer OEMs. This display has a resolution of 800 x 3 x 600 pixels. The SVGA-3D can be made as a full-color or monochrome microdisplay primarily for high-performance and large-view consumer OEM products such as personal computer games and video/data head-wearable displays, but is also designed to be applicable for digital cameras, video cameras and other portable electronics applications since the 3D feature is optional. A built-in circuit provides compatibility with single channel frame sequential stereoscopic vision without additional external components. In high volumes, the SVGA-3D is

7

priced lower than the SVGA+, so it is likely to be selected whenever the OEM customer does not need monochrome NTSC or the extra columns of resolution.

Under Development - 0.62-inch Diagonal SXGA (Super eXtended Video Graphics Array) for consumer, industrial, medical and military applications. We are developing a full color SXGA microdisplay product as a personal computer-compatible headset display for a large spectrum of applications. We anticipate that prototypes of this display will become available for sampling in early 2006. This product will have 1280 x1024 triad color pixels and an active diagonal similar to that of the SVGA+ microdisplay. It will include luminance and dimming ranges compatible with the demands of Military applications as well as those of high-end consumer and industrial markets. Even though this SXGA is not expected to be a high volume production item, we anticipate that its performance features combined with a small package will generate a considerable interest and serve as a catalyst for the development of new applications

Under Development - With our partner Rohm Corporation of Japan we are developing a new QVGA (Quarter Video Graphics Array) viewfinder microdisplay with 320x240 resolution for camcorders, digital cameras, web phones, and low end games.

### OLED Microdisplay Kits:

Kit Product Number	Description	Available colors
EMA-100119	SVGA+ Monocular Developer Kit	Color, white, yellow,
EMA-100120	SVGA+ Binocular Developer Kit	Color, white, yellow,
EMA 100125	SVGA 3D Monocular Developer Kit	Color, white, yellow,
EMA-100126	SVGA 3D Binocular Developer Kit	Color, white, yellow,
EMA-100121 HB	High Bright Monocular Developer Kit	Yellow



## Edgar Filing: EMAGIN CORP - Form 10KSB

EMA-100135	SVGA Series Monocular PC Interface Kit	Color, white, yellow,
EMA-100136	SVGA Series Binocular PC Interface Kit	Color, white, yellow,

Developer Kit. The multi-functional Developer Kit provides a menu selection of resolution, frequency, image flip, monochrome operation, gain, and offset. It also provides NTSC RS-170 video composite input for SVGA+ (monochrome only). An optional serial-to-I2C adapter provides direct loading and interrogation of display registers located on the display chip.

The PC Interface Kit provides a simple RGB interface with image flipping for SVGA+ and SVGA-3D displays, and automatic stereovision signal recognition for SVGA-3D displays. Interface kits can be provided configured with or without displays.

### (2) Microviewer(TM) Products Incorporating Lenses

By providing an integrated solution of a complete microdisplay and lens assembly to integrate into OEM customers' end product design, OEM customers can avoid incurring expensive optics design and tooling costs. Different lens and microdisplay specifications can be mixed and matched to be adapted to many end products.

We have developed advanced lens technology for several applications and believe we hold key patents on certain low cost, high performance lens technology for microdisplay applications. Our lens technology permits our OLED-on-silicon microdisplays to provide large field of view images that can be viewed for extended periods with reduced eye-fatigue.

8

We intend to sell Microviewer(TM) modules to OEMs for integration with their branded products. Some of our potential customers have stated a preference for Microviewers(TM) over microdisplays since Microviewers(TM) incorporate lenses which save OEMs a step in their manufacturing process and can save them the time required to develop, or integrate a third party high performance lens system. Custom microviewer products incorporated into specially designed modules are currently being sold to OEMs, including Sage Technologies, Night Vision Equipment Corporation, and Total Fire Group.

Molded plastic prism lenses have been developed under eMagin direction to help our commercial and consumer OEM customers obtain better quality, large area virtual images using our displays at relatively low cost to alternate approaches. First sample lens were shipped to select customers for evaluation in February 2005.

### (3) Head-Wearable and Headset Systems

Personal Viewer(TM) [IP COUNSEL SHOULD CHECK STATUS OF TRADEMARKS] head-wearable systems, such as our Z800 3D Visor (R) and our prototype eGlass(R) Personal Viewer(TM) give users the ability to work with their hands while simultaneously viewing information or video on the display. Our head-wearable displays enable more versatile portable computing, capable of delivering an image that appears comparable to that of a 19-inch monitor at 22 to 24 inches from the eye using a 0.59-inch diagonal microdisplay (SVGA-3D). We believe that Personal Viewer head-wearable displays will fill the increasing demand for instant data accessibility in mobile workplaces. We expect to sell the head-wearable displays primarily to OEM systems and equipment customers through distributors, direct sales and our e-commerce website which is under development.

Our Market Opportunity

The growth potential of our selected target market segments have been investigated using information gathered from key industry market research firms, including DisplaySearch, Frost and Sullivan, Fuji-Chimera, International Data Corporation, Nikkei, SEMI, Stanford Resources-iSuppli and others. Such data was obtained using published reports and data obtained at industry symposia. We have also relied substantially on market projections obtained privately from industry leaders, industry analysts, and potential customers.

We believe that the consumer oriented, virtual-imaging market is characterized by about 20 large OEMs that, collectively, dominate 90% of the market. The non-consumer market consists of niches - industrial, medical, military, arcade games, 3-D CAD/Virtual Reality, and wearable computers. Within each of these market sectors, we believe that our microdisplays, when combined with compact optic lenses, will become a key component for a number of mobile electronic products. We are targeting the following applications:

(1) Near-Eye Viewers for Digital Cameras, Camcorders and Hand-held Internet and Telecommunications Appliances

We believe that our microdisplays will enhance near-eye applications in the following groups of products:

- o Digital cameras and camcorders, which typically use direct view displays at low resolution, offer a small visual image, and are difficult to see on sunny days. According to Display Search, 41 million digital cameras and 13 million camcorders are expected to be sold in 2005. Some of these products may incorporate microdisplays as high-resolution viewfinders which would permit individuals to see enlarged, high-resolution proofs immediately upon taking the picture, giving them the opportunity to retake a poor shot.
- o Mobile phones and other hand-held Internet and telecommunications appliances which will enable users to access full web and fax pages, data lists and maps in a pocket-sized device. According to the Fuji Chimera Research Institute, an industry market research organization, by 2005 the cellular phone and handheld portable digital assistant markets will grow to 655 million units and 20 million units, respectively. Some of these products may eventually incorporate our microdisplays. In order for the high-resolution wireless telecommunications market to develop, Generation 3 (G3) high-speed data transmission must become widely available. The current cost and limited availability of broadband services has impeded the development of this market, but several telecommunication companies have prototype programs in progress which incorporate our microdisplay products.

For each of these applications, we anticipate that our microdisplays, combined with compact optic lenses, will offer higher resolution, lower power and system cost and achieve larger images than are currently available in the consumer market. As a result, we believe that we can obtain a sizeable share of the market for the display components of these mobile electronic products.

(2) Head-wearable Display Platforms

Head-wearable displays 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

## Edgar Filing: EMAGIN CORP - Form 10KSB

is due to accelerating the timetable to adapt such systems to military applications such as night vision and fire and rescue applications. These have military, commercial, and consumer applications.

### Military

Military demand for head-wearable displays is currently being met with microdisplay technologies that we believe to be inferior to our OLED-on-silicon products. The new generation of soldiers will be highly mobile, and will often need to carry highly computerized communications and surveillance equipment. To enable interaction with the digital battlespace, rugged, yet lightweight and energy efficient technology is required. Currently available microdisplay technologies do not meet the requirements for low power, hands-free, day and night-viewable displays. Our OLED microdisplays demonstrate performance characteristics important to military and other demanding commercial and

10

industrial applications including high brightness and resolution, wide dimming range, wider temperature operating ranges, 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. The OLED's very low power consumption reduces battery weight and increases allowed mission length. Properly implemented, we believe that head-mounted systems incorporating our microdisplays will increase effectiveness by allowing hands-free operation and increasing situational awareness with enough brightness to be used in daylight, yet controllable for nighttime light security. The OLED's wide temperature range is especially of 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 OLED microdisplays were selected for several aircraft and soldier applications, including the US Army Land Warrior 1.0 and 2.0 programs, and Stryker Interoperative, and the US Air Force Joint Strike Fighter and Lil Hal Digital Kneeboard, among others. Land Warrior, a core program in the Army's drive to digitize the battlefield, is an integrated digital system that incorporates computerized communication, navigation, targeting and protection systems for use by the twenty-first century infantry soldier. Kaiser Electro-Optics, a Rockwell Collins company and the principal contractor for the US Army's Land Warrior HMD system, and eMagin will apply their respective expertise in HMD and imaging technology to develop rugged, yet lightweight and energy efficient products meeting the requirements of tomorrow's soldier. The US Army expects to initially equip more than 40,000 soldiers with the Land Warrior system. The current overall redesign of the Land Warrior system by General Dynamics and Rockwell Collins has delayed increased volume use of displays beyond small quantities for that program until a future date to be determined. Our display is also used in Kaiser Electro-Optics, Inc.'s commercially available ProView S035 Monocular HMD. Night Vision Equipment Corporation's HelmetIR-50(TM), a lightweight, military helmet mounted thermal imager, which provides hands-free operation and allows viewers to see through total darkness, battlefield obscurants, and even foliage, is the first OLED-equipped product to be listed on the US Government's GSA schedule. Our displays have been commercialized, or planned to be commercialized, by military systems integrators including Insight Technologies, Elbit, Thales, and Sagem. We cannot assure that the Government will remain on schedule, or be fully implemented. Similar systems are of interest for other military applications as well as for related operations such as fire and rescue.

### Commercial, Industrial, and Medical

We believe that a wide variety of commercial and industrial markets offer

## Edgar Filing: EMAGIN CORP - Form 10KSB

significant opportunities due to increasing demand for instant data accessibility in mobile workplaces. Some examples of 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. Commercial products in these sectors include Sage Technologies, Ltd.'s Helmet Vue (TM) Thermal Imaging System and Liteye's 500, developed as an upcoming accessory to Antelope Technologies' MCC Wearable Computing system, which incorporates IBM's wearable PC technology. VRmagic GmbH, a leading developer of virtual reality simulators, is using our OLED microdisplays in their EYESI(TM) Virtual Reality Surgical Simulator, which provides real-time simulation of ophthalmic surgery, high performance biomechanical tissue simulation, precision tracking, and realistic stereo imaging. Sensics has incorporated our OLED displays in their immersive SkyVizor (TM) virtual reality headset to serve as the "eyes" of the Robonaut, a humanoid robot being developed by NASA and DARPA. The Robonaut system can work side by side with humans, or alone in high-risk situations. Telepresence uses virtual reality display technology to visually immerse the operator into the robot's workspace, facilitating operation and interaction with the Robonaut, and potentially reducing the number of dangerous space walks required of real astronauts.

### Consumer

We believe that our head-wearable display products will enhance the following consumer products:

- o Entertainment and gaming video headset systems, which permit individuals to view television, including HDTV, video CDs, DVDs and video games on virtual large screens or stereovision in private without disturbing others. Even though entertainment and gaming headsets represent an emerging product class, we are seeing demand from OEMs. Headset game systems for portable computers with head tracking and/or stereovision appears to be our predominant high

11

quantity near term market opportunity, with several customers indicating an interest in large production quantities of our displays. Our current SVGA-3D display was designed specifically for this market. We believe that these new headset game systems can provide a game or telepresence experience not otherwise practical using conventional direct view display technology. We expect low cost to be important for success in this field, and expect our product cost to decrease in high quantity production. At the 2004 Consumer Electronics Show, Leadtek Research Inc. (Taiwan) announced that it was planning to introduce a consumer HMD using eMagin SVGA-3D displays. The product is currently under development. At the 2005 Consumer Electronics Show, we announced our Z800 3D Visor (R), the world's first personal viewer to combine OLEDs, stereovision, and head tracking.

- o Notebook computers, which can use head-wearable devices to reduce power as well as expand the apparent screen size and increase privacy. Current notebook computers do not use microdisplays. Our products can apply not only to new models of notebook computers, but also as aftermarket attachments to older notebooks still in use. The display can be easily used as a second monitor on notebook computers for ease of editing multiple documents to provide multiple screens or for data privacy while traveling. It can also be used to provide larger screen capability for viewing spreadsheets or complex computer aided design

## Edgar Filing: EMAGIN CORP - Form 10KSB

(CAD) files. We expect to market our head-wearable displays to be used as plug-in peripherals to be compatible with most notebook computers. We believe that the SVGA-3D microdisplay is well suited for most portable PC headsets. Our microdisplays can be operated using the USB power source of most portable computers. This eliminates added power supplies, batteries, and rechargers and reduces system complexity and cost.

- o Handheld personal computers, whose small, direct view screens are often limitations, but which are now capable of running software applications that would benefit from a larger display. Microdisplays can be built into handheld computers to display more information content on virtual screens without forfeiting portability or adding the cost a larger direct view screen. Microdisplays are not currently used in this market. We believe that GPS viewers and other novel products are likely to develop as our displays become more available.
- o Highly compact wearable computers and personal digital assistants, or PDAs using video headsets as screens can be made possible by high-resolution microdisplays. A lightweight pocketsize computer that is less than one pound can potentially be created with a foldout keyboard, compact input device, or voice actuation and a headset that provides a near-desktop personal computer experience.

The combination of power efficiency, high resolution, low systems cost, brightness and compact size offered by our OLED-on-silicon microdisplays has not been made available to makers and integrators of existing entertainment and gaming video headset systems, notebook computers and handheld computers. We believe that our microdisplays will catalyze the growth of new products and applications such as lightweight wearable computer systems.

### Selected Applications by Market Sector

Sector	X	Representative Applications
Portable Computer Peripheral	X	Notebook and SuperSubnotebook computer headsets
	X	Miniature data viewers
Entertainment	X	Games
	X	Headset Television/DVDs
Industrial, Medical, & Administration	X	Surgery and Dentistry
	X	Industrial Control and Safety
	X	Emergency Services
	X	Inventory and Retail
	X	Institutional Control
	X	Maintenance (Industry & Consumer)
	X	Communications
	X	Finance
	X	Education and Training
Military	X	Communications
	X	Targeting and Enhanced Vision
	X	Night Vision
	X	Handheld & Headmount Equipment
	X	Body worn displays

Edgar Filing: EMAGIN CORP - Form 10KSB

	X	Avionics (Helmet mount)
	X	Ground and Water Vehicles
	X	Maintenance & Training
	X	Special Applications
-----		
Telecommunications, Handheld, and Small Instruments	X	Cell Phones/Headset phones
	X	Handheld & Portable Internet Viewers
	X	Smart Appliances & Instruments
-----		
Advanced Computer Applications	X	CAD/CAM
	X	Virtual Reality and Simulations
	X	Ultra-High Resolution
	X	Telepresence
-----		

Our Strategy

Our strategy is to establish and maintain a 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 leadership in both OLED-on-silicon technology and microdisplay lens technology. We aim to provide microdisplay and complimentary 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:

- o Leverage our superior technology to establish a leading market position. As the first to exploit OLED-on-silicon microdisplays, we believe that we enjoy a significant advantage in bringing this technology to market.
- o Develop products for large consumer markets via key relationships with OEMs. Our relationships with OEMs whose products use microdisplays have allowed us to identify initial microdisplay products to be produced for entertainment, industrial, and military headsets, to be followed by other applications such as digital cameras, camcorders and hand-held Internet and telecommunications appliances. We target markets which we believe to have long-term growth potential.
- o Optimize manufacturing efficiencies by outsourcing while protecting proprietary processes. We intend to 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 application and OLED sealing processes in-house. We believe that these areas are 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. This strategy will also enhance our ability to continue to optimize and customize processes and devices to meet customer needs. By performing the processes in-house we can continue to directly make improvements in the processes, which will improve device performance. We also retain the ability to customize certain aspects such as color balance, which is known as chromaticity, as well as specialized boards or interfaces, and to adjust other parameters at the customer's request. In the area of lenses and head-wearable displays, we intend to focus on design and development, while working with third parties for the manufacture and distribution of finished products. We intend to prototype new optical systems, provide customization of optical systems, and manufacture limited volumes at our subsidiary, Virtual

## Edgar Filing: EMAGIN CORP - Form 10KSB

Vision, but intend to outsource high volume manufacturing operations. There are numerous companies that provide these outsource services.

- o Build and maintain strong internal design capabilities. As more circuitry is added to OLED-on-silicon devices, the cost of the end product using the display can be decreased; therefore integrated circuit design capability will become increasingly important to us. To meet these requirements, we intend to develop in-house design capabilities. Building and maintaining this capacity 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 will also remain a part of our overall long term strategy.

### Our Strategic Relationships

Strategic relationships have been an important part of our research and development efforts to date and are an integral part of our plans for commercial product launch. We have forged strategic relationships with major OEMs and strategic suppliers. 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 better meet our customer's requirements. Moreover, we expect to provide microdisplays and Microviewers(TM) to some of these partners, thereby taking advantage of established distribution channels for our products.

Eastman Kodak is a technology partner in OLED development, OLED materials, and a potential future customer for both specialty market display systems and consumer market microdisplays. We license Eastman Kodak's OLED and optics technology portfolio. We have a nonexclusive; perpetual, worldwide license to use Eastman Kodak patented OLED technology and associated intellectual property in the development, use, manufacture, import and sale of microdisplays. The license covers emissive active matrix microdisplays with a diagonal size of less than 2 inches for all OLED display technology previously developed by Kodak. An annual minimum royalty is paid at the beginning of each calendar year and is fully creditable against the royalties we are obligated to pay based on net sales throughout the year. Eastman Kodak and eMagin have engaged in numerous discussions regarding potential product applications for eMagin's microdisplays by Eastman Kodak.

We have an agreement with Rohm Corporation of Japan to develop two new products: an enhanced version of our SVGA-3D microdisplay with new imbedded features for consumer head-mounted displays and high resolution games, and a new QVGA and/or VGA viewfinder microdisplay for camcorder and digital cameras, web phones, and low end games.

We are working cooperatively with the US Army and with several military system integrators to further characterize operation of our displays in rugged military environments.

We are a member of the United States Display Consortium, a cooperative agency of display and related technology manufacturers whose charter is to support continued progress of the display industry. We intend to continue to establish additional strategic relationships in the future.

### Our Technology Platforms

OLED-on-Silicon Technology

## Edgar Filing: EMAGIN CORP - Form 10KSB

Scientists working at Eastman Kodak invented OLEDs in the early 1980s. 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, OLED devices 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 existing technologies. OLED films may be coated on computer chips, permitting millions of individual low-voltage light sources to be built on silicon integrated circuits to produce single color, white or full-color display arrays. Many computer and video electronic system functions can be built directly into a silicon integrated circuit as part of the OLED display, resulting in an ultra-compact

14

system. We believe these features, together with the well-established silicon integrated circuit fabrication technology of the semiconductor industry, make our OLED-on-silicon microdisplays attractive for numerous applications.

We believe our technology licensing agreement with Eastman Kodak, coupled with our own intellectual property portfolio, gives us a leadership position in OLED and OLED-on-silicon microdisplay technology. Eastman Kodak provides OLED technology and we provide additional technology advancements that have enabled us to coat the silicon integrated circuits with OLEDs.

We have developed numerous and significant enhancements to OLED 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, up-emitting structure for our OLED-on-silicon devices that enables OLED displays to be built on opaque silicon integrated circuits rather than only on glass. Our OLED devices can emit full visible spectrum light that can be isolated with color filters to create full color images. Our microdisplay prototypes 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 in development offer future potential for even better performance for brightness, efficiency, and lifespan. Additionally, we have invested considerable work over several years to develop unique electronics control and drive designs for OLED-on-silicon microdisplays.

In addition to our OLED-on-silicon 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.

### Advantages of OLED Technology

We believe that our OLED-on-silicon technology provides significant advantages over existing solutions in our targeted microdisplay markets. We believe these key advantages will include:

- o Low manufacturing cost;
- o Low cost system solutions;
- o Wide angle light emission resulting in large apparent screen size;
- o Low power consumption for improved battery life and longer system life;



## Edgar Filing: EMAGIN CORP - Form 10KSB

- o High brightness for improved viewing;
- o High-speed performance resulting in clear video images;
- o Wide operating temperature range; and
- o Good environmental stability (vibration and humidity).

Low manufacturing cost. Many OLED-on-silicon microdisplays can be built on an 8-inch silicon wafer using existing automated OLED and color filter processing tools. The level of automation used lowers labor costs. Only a minute amount of OLED material is used in each OLED-on-silicon microdisplay so that material costs, other than the integrated circuit itself, are small. The number of displays per silicon wafer may be higher on OLEDs than on liquid crystal displays, or LCDs, because OLEDs do not require a space-wasting perimeter seal band.

Low cost systems solutions. In general, an OEM using OLED-on-silicon microdisplays will not need to purchase and incorporate lighting assemblies, color converter related Applications Specific Integrated Circuits, or ASICs, or beam splitter lenses as is the case in liquid crystal microdisplays, which also require illumination. Many important display-related system functions can be incorporated into an OLED-on-silicon microdisplay, reducing the size and cost of the system. Non-polarized light from OLEDs permit lenses for many OLED-on-silicon applications that are made of a single piece of molded plastic, which reduces size, weight and assembly cost when compared to the multipiece lens systems used for liquid crystal microdisplays. System cost relative to liquid crystal and liquid crystal on silicon, or LCOS competitive products is thus reduced. Because our displays are power efficient, they typically require less power at the system level than other display technologies at a given display size and brightness.

Wide-angle light emission simplifies optics for large apparent screen size. OLEDs emit light at most forward directions from each pixel. This permits the display to be placed close to the lens in compact optical systems. It also provides the added benefit of less angular dependence on the image quality relative to pupil and eye position when showing a large field of view, unlike reflective LCOS microdisplays. This results in less eye fatigue and makes it relatively easy to Low power consumption for improved battery life and longer system life. OLEDs emit light rather than transmitting it, so no power-consuming

15

backlight or front light, as required for liquid crystal displays, is required. OLEDs can be energy efficient because of their high efficiency light generation. Furthermore, OLEDs conserve power by powering only those pixels that are on while liquid crystal on silicon requires light at all pixels all the time. Most optical systems used for our OLEDs are highly efficient, permitting over 80% of the light to reach the eye, whereas reflective technologies such as liquid crystal on silicon require multiple beam splitters to get light to the display, and then into the optical system. This results in typically less than 25% light throughput efficiency in reflective microdisplay systems. Most important, we do not need a power-hungry video frame buffer, as required in liquid crystal frame-sequential color systems. Battery life can therefore be long.

High brightness for improved viewing. This feature can be of great value to military applications, where there is a need to see the computer image overlaid onto brightly lit real-life backgrounds such as desert sand, water reflections or sunlit clouds. The OLED can be operated over a large luminance range without loss of gray level control, permitting the displays to be used in a range of dark environments to very bright ambient applications. Since military simulation and situation awareness applications, including night vision, typically require

## Edgar Filing: EMAGIN CORP - Form 10KSB

large fields of view, the OLED's Lambertian optical characteristics make it an excellent choice.

High-speed performance resulting in clear video images. The OLEDs switch much more rapidly than liquid crystals or most cathode ray tubes, or CRTs. This results in smear-free video rate imagery and provides improved image quality for DVD playback applications. This eliminates visible image smear and makes practicable three-dimensional stereo imaging using a split frame rate. This advantage of our OLED-on-silicon is very important for 3-D stereovision gaming applications.

Flicker-free and no color breakup. Because the OLED-on-silicon stores brightness and color information at each pixel, the display can be run with no noticeable flicker and no color sequential breakup, even at low refresh rates. A lower refresh rate not only helps reduce power, but it also facilitates system integration. Color sequential breakup occurs in systems such as liquid crystal on silicon and some liquid crystal display microdisplays when red, green and blue frames are sequentially imaged in time for the eye to combine. Since the different color screens occur at different times, movement of the eye due to vibration or just fast pupil movement can create color bands at each dark-light edge, making the image unpleasant to view and making text difficult to read. For example, the liquid crystal on silicon display needs to run at least three times the "normal" frame rate or speed to produce color sequential images, which wastes power and makes for a difficult technological challenge as display resolutions increase.

Wide operating temperature range. Our OLEDs offer much less temperature sensitivity at both high and low temperatures than LCDs. LCDs are sluggish or non-operative much below freezing unless heaters are added and lose contrast above 50 degrees Celsius, while our OLEDs turn on instantly and can operate between -55 degrees Celsius and 130 degrees Celsius. We specify a smaller temperature range on most consumer products to accommodate lower cost packaging. This is an important characteristic for many portable products that may be used outdoors in many varying environmental conditions. It is especially important for military customers. Insensitivity to vibration, shock, and pressure are also important environmental control attributes.

### Complementary Lens and System Technologies

We have developed a wide range of technologies which complement our core OLED and lens technologies and which will enhance our competitive position in the microdisplay and head-wearable display markets. These include:

16

Lens technology. 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 lens technology for microdisplays and head-wearable display systems and hold key patents in these areas. Our lens technology permits our OLED-on-silicon 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.

We believe that the key advantages of our lens technology include:

- o Can be very low cost, with minimal assembly. A one piece, molded plastic optic attached to the microdisplay can serve many consumer-end-product markets. Since our process is plastic molding, our per unit production costs are low;
- o Allows a compact and lightweight lens system that can greatly magnify

## Edgar Filing: EMAGIN CORP - Form 10KSB

a microdisplay to produce a large field of view;

- o Can use single-piece molded microdisplay lenses to permit high light throughput making the display image brighter or permitting the use of less power for an acceptable brightness;
- o Can be designed to provide focusing to enable users with various eyesight qualities to view images clearly; and
- o Can optionally provide focal plane adjustment for simultaneous focusing of computer images and real world objects. For example, this characteristic is beneficial for word processing or spreadsheet applications where a person is typing data in from reference material. This feature can make it easier for people with moderately poor accommodation to use a head-wearable display as a portable computer-viewing accessory.

Head-wearable display technology. We have developed ergonomic technologies that make head-wearable displays easier to use in a wide variety of applications. For example, the use of our patented rotatable Eyeblocker(TM) provides a sharp image without requiring most users to squint. The Eyeblocker can also be moved to create an effective see-through appearance. To our knowledge, we have made the lightest weight, high-resolution head-wearable display with an over 35 degree diagonal field of view ever publicly demonstrated. We also have access to low cost, small size, high speed headtrackers to further enhance game and telepresence applications.

### Sales and Marketing

We primarily provide display components and Microviewer(TM) display-optic modules for OEMs to incorporate into their branded products and sell through their own well-established distribution channels. In addition, we market head-wearable displays directly to various vertical market channels, such as medical, industrial, and government customers. A typical buyer is a manufacturer of a product requiring a specific resolution of visual display or viewfinder for insertion into a product such as a portable DVD headset, a PC-gaming headset, or an instrument.

We market our services primarily in North America, Asia, and Europe through direct technical sales from our headquarters. Regular purchase orders are processed by our Customer Service Coordinator and technical questions related to product purchases or product applications are processed by our Technical Support Coordinator. Additional sales are generated through our sales office located in Japan. We are in the process of selecting worldwide distributors.

17

As a market-driven company, we assess customer needs both quantitatively and qualitatively, through market research and direct communications. Because our microdisplays are the main functional component that defines many of our customers' end products, we work closely with potential customers to define our products to optimize the final design, typically on a senior engineer-to-engineer basis.

We identify companies with end products and applications for which we believe that our products will provide a system level solution and for which our products can be a key differentiator. We target both market leaders and select early adopter companies; their acceptance validates our technology and approach in the market. We believe successful marketing will require relationships with recognized consumer brand companies.

## Edgar Filing: EMAGIN CORP - Form 10KSB

We are now shipping monochrome and full color versions of our first two commercial microdisplay products. Our SVGA+ resolution OLED microdisplay, which contains 1.53 million picture elements, was specifically designed to meet the needs of several military, industrial, and medical customers based on marketing information obtained prior to the design phase of the display and was first offered for sampling in April 2001. Our stereovision-capable SVGA-3D microdisplay, which contains 1.44 million picture elements, was designed with the input of multiple customers to principally target the mobile personal computer and PC games markets, and was first shipped in February 2002. We expect to ship first quantities of our Z800 3D Visor personal viewer in the second quarter of 2005.

Near term sales efforts have been focused on our military, industrial, and medical customers. We have received production orders and design wins for both the SVGA+ and SVGA 3D displays. To date, we have shipped products and evaluation kits to more than 100 OEM customers. An OEM design cycle typically requires between 6 and 24 months, depending on the uniqueness of the market and the complexity of the end product. New product development may require several design iterations prior to commercialization. Some of our initial customers have completed their initial evaluation cycle and we are now receiving follow-on orders and notification of product purchase decisions. Several customers have indicated their intent to incorporate potentially high volumes of our microdisplays into consumer products through 2006, pending successful completion of their own product development efforts. We have also received notification that our microdisplays will be used as components in versions 1.0 and 2.0 of the US Army Land Warrior program and in the US Air Force Joint Strike Fighter program, among other programs. (See "Our Market Opportunity: Military; Commercial, Industrial, and Medical; and Consumer")

### 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 2004, 78% of our net revenue were to firms based in the United States and 22% were to international firms, compared to 70% domestic revenue and 30% international revenue during 2003. In 2004, we had two customers that individually accounted for more than 10% of our total net revenue. One customer accounted for 17% of total net revenue and the other accounted for 15%. In 2003, we had one customer that individually accounted for more than 10% of our total net revenue. This customer accounted for 21% of total net revenue.

### Backlog

The majority of our backlog consists of purchase agreements for delivery over the next 24 months. Most purchase orders are subject to rescheduling or cancellation by the customer with no or limited penalties. Because of the possibility of customer changes in delivery schedules or cancellations and potential delays in product shipments, our backlog as of a particular date may not be indicative of net sales for any succeeding period. Lack of working capital through the early part of 2004 delayed our ability to ship the full quantity of purchase agreements and purchase orders on hand, and has required negotiations with customers for delays in product launch schedules. Deliveries of wafers and other supplies played a negative roll in our 2004 shipments due to capacity and technical issues at our suppliers, such as our wafer supplier in Taiwan. Some customers have experienced delays in their expected product launch schedules due to their own product development delays not directly related to our microdisplays, such as optics. Some new eMagin products such as plastic prism optics, PC interfaces and cables may help customers begin their production more quickly, but there is no guarantee that this will occur.

## Edgar Filing: EMAGIN CORP - Form 10KSB

As of February 25, 2005 we had a backlog of purchase agreements of approximately \$28 million from 3 OEMs for purchases through 2007. We determined that one customer included in the previously reported backlog has incurred financial difficulties which will significantly delay or prevent completion of their HMD program, so we removed \$10 million from our backlog amount, some of which was replaced by increases from another customer. Our current backlog is comprised of 3 customers who are all in the process of completing their own design work.

### Research and Development

Near-to-the-eye virtual imaging and OLED technology are relatively new technologies that have considerable room for substantial improvements in luminance, life, power efficiency, voltage swing, design compactness, field of view, optical range of visibility, headtracking options, wireless control and many other parameters. We also anticipate that achieving reductions in manufacturing costs will require new technology developments. We anticipate that improving the performance, capability and cost of our products will provide an important competitive advantage in our fast moving, high technology marketplace. Past and current research activities include development of improved OLED and display device structures, developing and/or evaluating new materials (including the synthesis of new organic molecules), manufacturing equipment and process development, electronics design methodologies and new circuits and the development of new lenses and related systems. During 2002 and 2003 we focused primarily on near-term product development projects related to our transition from research to manufacturing. For example we developed a glass cover plate to ruggedize our displays to facilitate easier handling by our OEM customers. We also developed a new high luminance, high efficiency yellow monochrome OLED and adapted to our SVGA+ display for see-through optic applications and began sampling the yellow monochrome product in early 2003. However, in order to improve customer satisfaction and simultaneously maximize our margins, as well as to maintain competitive technology advantages, we believe that it is important to continue to engage in long-term research and development. During the past eight years, we have spent, net of U.S. government funding, approximately \$31 million on research and development. In 2004 we spent approximately \$0.9 million on research and development. In 2004 we continued to research more efficient materials and processes. We also developed fiber optic bundling technology to provide custom video sizes and resolutions, and created what we believe the world's highest resolution OLED display and the world's highest resolution microdisplay, the tiled UXGA display (1600x3x1200 pixels), and DUXGA (1600x3x2400 pixels).

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 (See "Strategic Relationships").

### Manufacturing Facilities

We 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. In 2004 we entered into an amended lease agreement which extends the term of this lease to May 31, 2009. We lease approximately 40,000 square feet of space housing our own equipment for OLED microdisplay fabrication and for research and development plus additional space for assembly and administrative offices. We also entered into lease agreement with IBM for a 16,300 square foot class 10 clean room space, along with additional, lower level clean room space.

## Edgar Filing: EMAGIN CORP - Form 10KSB

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 that our facility is capable of producing over 50,000 SVGA+ or SVGA-3D displays per month once we are manufacturing around the clock on a 24 hours a day, 7 days per week basis, with ample supplies and a fully loaded manufacturing line assuming good equipment up-time.

We lease additional non-clean room facilities for chemical mixing, cleaning, chemical systems, and glass/silicon cutting. OLED chemicals can be

19

purified in our facility with our own equipment, permitting the company to evaluate new chemicals in pilot production that are not yet available in suitable purity for OLED applications on the market.

Our display fabrication process starts with the silicon wafer, which is manufactured by a semiconductor foundry using conventional CMOS process. After a device is designed by a combination of internal and external designers with customer participation, we outsource wafer fabrication.

Our manufacturing process for OLED-on-silicon microdisplays has three main components: organic film deposition, organic film encapsulation (also known as sealing), and color filter processing. All steps are performed in semi-automated, hands-free environment suitable for high volume throughput. An automated cluster tool provides all OLED deposition steps in a highly controlled environment that is the centerpiece of our OLED fabrication. After wafer processing, each part is inspected using an automated inspection system, prior to shipment. We have electrical and optical instrumentation required to characterize the performance of our displays including photometric and color coordinate analysis. We are also equipped for integrated circuit and electronics design and display testing.

We also lease a facility in Redmond, Washington where we operate our system development effort and business development activities. The lease for this facility expires in May of 2005. The facilities are well suited for designing and building limited volume prototypes and small quantity industrial or government products. Cables and electronic interfaces have recently been produced to permit our OEM customers to more rapidly create products and shorten their time-to-market. We plan to outsource medium to high volume subsystem production to low cost plastics, lenses, and assembly manufacturers. We are currently using domestic and international outside manufacturers and we are investigating new outsource opportunities.

We believe that manufacturing efficiency is an important factor for success in the consumer markets. We believe that high yield and maximum utilization of our equipment set will be key for profitability. We believe that all of the main components for manufacturing success are in place, but we will require additional: (i) staff and training of employees for round the clock operation, (ii) inventory of integrated circuits and other raw materials, and (iii) maintenance and upgrades to the equipment set from time to time. The equipment required for initial profitable production is in place. Some equipment will be added when our production volume increases or as needed.

We intend to outsource certain capital-intensive portions of microdisplay production to minimize both our costs and time to market. Joint ventures are being considered for higher quantity OLED production off shore should suitable

## Edgar Filing: EMAGIN CORP - Form 10KSB

resources not be available for US expansion. We currently outsource all our integrated circuit fabrication while retaining the final metal, OLED application, color filter, OLED sealing, and sample packaging processes in-house.

### Intellectual Property

We have developed a significant intellectual property portfolio of patents, trade secrets and know-how, supported by our license from Eastman Kodak and our current patent portfolio.

Our license from Eastman Kodak gives us the right to use in miniature displays a portfolio in organic light emitting diode and optics technology, some of which are fundamental. Our agreement with Eastman Kodak provides for perpetual access to the OLED technology for our OLED-on-silicon applications, provided we remain active in the field and meet our contractual requirements to Eastman Kodak. We also generate intellectual property as a result of our internal research and development activities.

Our patents and patent applications cover a wide range of materials, device structures, processes, and fabrication techniques, such as methods of fabricating full color OLEDs. We believe that our patent applications relating to up-emitting structures on opaque substrates such as silicon wafers, which are critical for OLED microdisplays, and applications relating to the hermetic sealing of such structures are particularly important.

Our patents are concentrated in the following areas:

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

20

We also rely on proprietary technology, trade secrets, and know-how, which are not patented. To protect our rights in these areas, we require all employees, and where appropriate, contractors, consultants, advisors and collaborators to enter into confidentiality and non-competition agreements. There can be no assurance, however, that these agreements will provide meaningful protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use, misappropriation or disclosure of such trade secrets, know-how or other proprietary information.

We believe that our intellectual property portfolio, coupled with our strategic relationships and accumulated experience in the OLED field gives us an advantage over potential competitors.

### Competition

We may face competition in the OLED and microdisplay industry from a variety of companies and technologies. We believe that our key competition will

## Edgar Filing: EMAGIN CORP - Form 10KSB

come from liquid crystal on silicon microdisplays, or LCOS, also known as reflective liquid crystal displays. While we believe that OLED-on-silicon provides comparatively lower optics cost, larger apparent image size, reduced electronics cost and complexity, enhanced color, and improved power efficiency advantages over liquid crystal on silicon microdisplays, there is no assurance that these benefits will be realized or that liquid crystal on silicon manufacturers will not suitably improve these parameters. Companies pursuing liquid crystal on silicon technology include Microdisplay Corporation and Brillian Corporation, among others, although most of the companies are primarily focusing on projection microdisplays, which do not compete directly with the company. In certain markets, we may also face competition from developers of transmissive liquid crystal displays, such as those developed by Kopin, or laser scanning systems, such as those developed by Microvision Corporation.

To our knowledge, the only other company that has publicly stated plans to develop OLED microdisplays for near-eye applications is MicroEmissive Displays in Britain. We may also compete with potential licensees of Universal Display Corporation and Cambridge Display Corporation, each of which license OLED technology portfolios. Even though we could potentially license technology from these developers, potential competitors could also obtain such licenses and may do so at more favorable royalty rates. However, should they decide to embark on developing microdisplays on silicon, we believe that our progress to date in this area gives us a substantial head start.

Our microdisplays and head-wearable display systems may face competition on a price and performance basis from major manufacturers such as Sony and Seiko Epson. However, these companies use first generation liquid crystal on polysilicon technology and therefore, we believe that they may incorporate our technology into their products.

### Employees

As of February 25, 2005, we had a total of 72 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.

21

### ITEM 2. DESCRIPTION OF PROPERTY

Our principal executive offices are located at: 2070 Route 52, Hopewell Junction, New York 12533. We lease approximately 40,000 square feet of space from IBM, all of which is located in the same industrial park. Approximately 30,000 square feet of space houses our own equipment for OLED microdisplay fabrication, and for research and development plus additional space for assembly operations and storage. Approximately 10,000 square feet of space is used for administrative offices.

Our lease runs through May 31, 2009. As of December 31, 2004 our monthly rent was \$71,729 per month not including utilities. Our rent payments will increase 3% per year thereafter through the term of the lease. The average monthly rent over the 5 years is approximately \$74,000.

Our lenses and system development operation lease approximately 7,000 square feet of space in Redmond, Washington. The lease for this facility runs until May 2005, and we are currently in negotiation to renew the lease. The average monthly rent is \$4,000.

During March 2004 we upgraded our telecommunication system to a digital system, and our phone and fax numbers changed. eMagin Corporation's main telephone number is (845) 838-7900 and our main fax number is (845) 838-7901.



## Edgar Filing: EMAGIN CORP - Form 10KSB

Our website address is [www.emagin.com](http://www.emagin.com).

### ITEM 3. LEGAL PROCEEDINGS

We are not a party to any material legal proceedings.

### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITYHOLDERS.

None

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS AND SMALL BUSINESS ISSUER PURCHASES OF EQUITY SECURITIES .

Our common stock is traded on the American Stock Exchange under the symbol "EMA".

As of February 25, 2005, there were 463 holders of record of 81,798,903 shares of our common stock. This does not reflect those shares held beneficially or those shares held in "street" name.

We have never declared or paid cash dividends on our common stock. We currently anticipate that we will retain all future earnings to fund the operation of our business and do not anticipate paying dividends on our common stock in the foreseeable future.

The table below sets forth the high and low closing prices per share of our common stock for each full quarterly period in the last two fiscal years as reported on the American Stock Exchange.

	High	Low
2004		
First Quarter	3.15	1.40
Second Quarter	3.80	1.57
Third Quarter	1.73	0.75
Fourth Quarter	1.50	0.90
2003		
First Quarter	1.00	0.33
Second Quarter	0.85	0.50
Third Quarter	1.99	0.51
Fourth Quarter	1.74	1.15

On March 28, 2005, the last sale price for our Common Stock was \$0.94.

Edgar Filing: EMAGIN CORP - Form 10KSB

Plan category  As of December 31, 2004	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights	Number of s remaining av future i
	(a)	(b)	(c)
Equity compensation plans approved by security holders	10,546,162	\$ 1.05	428,
Equity compensation plans not approved by security holders	-	-	-
<b>Total</b>	<b>10,546,162</b>	<b>\$ 1.05</b>	<b>428,</b>

In addition to the plans listed, eMagin has issued inducement option compensation awards to new employees in accordance with the provisions of Section 711 of the American Stock Exchange Company Guide. The outstanding out-of-plan options as of December 31, 2004 are to purchase an aggregate total of 3,013,000 shares, vesting over five years at per share prices ranging from \$1.01 to \$2.77.

Recent Issuances of Unregistered Securities.

None

ITEM 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION

INTRODUCTION

The following discussion should be read in conjunction with the Financial Statements and Notes thereto. Our fiscal year ends December 31. This document contains certain forward-looking statements including, among others, anticipated trends in our financial condition and results of operations and our business strategy. (See "Factors Which May Affect Future Results"). These forward-looking statements are based largely on our current expectations and are subject to a number of risks and uncertainties. Actual results could differ materially from these forward-looking statements. Important factors to consider in evaluating such forward-looking statements include (i) changes in external factors or in our internal budgeting process which might impact trends in our results of operations; (ii) unanticipated working capital or other cash requirements; (iii) changes in our business strategy or an inability to execute our strategy due to unanticipated changes in the industries in which we operate; and (iv) various competitive market factors that may prevent us from competing successfully in the marketplace.

Overview

We design and manufacture miniature displays, which we refer to as OLED-on-silicon-microdisplays, and microdisplay modules for virtual imaging, primarily for incorporation into the products of other manufacturers. Microdisplays are typically smaller than many postage stamps, but when viewed through a magnifier they can contain all of the information appearing on a high-resolution personal computer screen. Our microdisplays use organic light emitting diodes, or OLEDs, which emit light themselves when a current is passed through the device. Our technology permits OLEDs to be coated onto silicon chips

## Edgar Filing: EMAGIN CORP - Form 10KSB

to produce high resolution OLED-on-silicon microdisplays.

We believe that our OLED-on-silicon microdisplays offer a number of advantages in near to the eye applications over other current microdisplay technologies, including lower power requirements, less weight, fast video speed without flicker, and wider viewing angles. In addition, many computer and video electronic system functions can be built directly into the OLED-on-silicon microdisplay, resulting in compact systems with lower expected overall system costs relative to alternate microdisplay technologies.

Since our inception in 1996, we derived the majority of our revenues from fees paid to us under research and development contracts, primarily with the U.S. federal government. We have devoted significant resources to the development and commercial launch of our products. We commenced limited initial sales of our SVGA+ microdisplay in May 2001 and commenced shipping samples of our SVGA-3D microdisplay in February 2002. As of December 31, 2004 since our inception, we have recognized an aggregate of approximately \$7.8 million from sales of our products, and have a backlog of more than \$28 million in products ordered for delivery through 2007. These products are being applied or considered for near-eye and headset applications in products such as entertainment and gaming headsets, handheld Internet and

24

telecommunication appliances, viewfinders, and wearable computers to be manufactured by original equipment manufacturer (OEM) customers. We have also shipped a limited number of prototypes of our eGlass II Head-wearable Display systems. In addition to marketing OLED-on-silicon microdisplays as components, we also offer microdisplays as an integrated package, which we call Microviewer that includes a compact lens for viewing the microdisplay and electronic interfaces to convert the signal from our customer's product into a viewable image on the microdisplay. Through our operations in Washington state we are also developing head-wearable displays that incorporate our Microviewer.

We license our core OLED technology from Eastman Kodak and we have developed our own technology to create high performance OLED-on-silicon microdisplays and related optical systems. We believe our technology licensing agreement with Eastman Kodak, coupled with our own intellectual property portfolio, gives us a leadership position in OLED and OLED-on-silicon microdisplay technology. We are the only company to demonstrate publicly and market full-color OLED-on-silicon microdisplays.

### Company History

Our history has been as a developmental stage company. As of January 1, 2003, we were no longer classified as a development stage company. We have transitioned to manufacturing our product and intend to significantly increase our marketing, sales, and research and development efforts, and expand our operating infrastructure. Most of our operating expenses are fixed in the near term. If we are unable to generate significant revenues, our net losses in any given period could be greater than expected.

### CRITICAL ACCOUNTING POLICIES

The Securities and Exchange Commission ("SEC") defines "critical accounting policies" as those that require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods.

Not all of the accounting policies require management to make difficult,

## Edgar Filing: EMAGIN CORP - Form 10KSB

subjective or complex judgments or estimates. However, the following policies could be deemed to be critical within the SEC definition.

### Revenue and Cost Recognition

Revenue on product sales is recognized when persuasive evidence of an arrangement exists, such as when a purchase order or contract is received from the customer, the price is fixed, title and risk of loss to the goods has changed and there is a reasonable assurance of collection of the sales proceeds. We obtain written purchase authorizations from our customers for a specified amount of product at a specified price and consider delivery to have occurred at the time of shipment. Revenue is recognized at shipment and we record a reserve for estimated sales returns, which is reflected as a reduction of revenue at the time of revenue recognition.

Revenues from research and development activities relating to firm fixed-price contracts are generally recognized on the percentage-of-completion method of accounting as costs are incurred (cost-to-cost basis). Revenues from research and development activities relating to cost-plus-fee contracts include costs incurred plus a portion of estimated fees or profits based on the relationship of costs incurred to total estimated costs. Contract costs include all direct material and labor costs and an allocation of allowable indirect costs as defined by each contract, as periodically adjusted to reflect revised agreed upon rates. These rates are subject to audit by the other party. Amounts can be billed on a bi-monthly basis. Billing is based on subjective cost investment factors.

### Use of estimates:

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. These estimates and assumptions relate to recording net revenue, collectibility of accounts receivable, useful lives and impairment of tangible and intangible assets, accruals, income taxes, inventory realization and other factors. Consequently, a change in conditions could affect these estimates.

### Fair value of financial instruments:

At December 31, 2004 the Company's cash, cash equivalents, accounts receivable and accounts payable are earned at cost which appropriates fair value due to the short-term nature of these instruments.

25

### Results of Operations

#### Year Ended December 31, 2004 Compared to Year Ended December 31, 2003

#### Revenues

Revenues increased by \$1.0 million to a total of \$3.6 million for the year ended December 31, 2004 from \$2.6 million for the year ended December 31, 2003, representing an increase of 39%. This increase was due primarily to many of our customers reaching commercial and pre-commercial stages with their systems. Our contract revenue decreased approximately \$0.3 million while our product revenue increased approximately \$1.3 million. Average unit sales price for displays decreased to \$372 in 2004 as compared to \$422 in 2003 as we increase our larger

## Edgar Filing: EMAGIN CORP - Form 10KSB

order fulfillment. Our current expectation is that revenue will continue to grow in 2005 if we successfully execute our business plan.

### Cost of Goods Sold

Cost of goods sold includes direct and indirect costs associated with production and inventory losses. In the year ended December 31, 2004 we recorded approximately \$6.0 million in cost of goods sold which resulted in a gross loss of \$2.4 million as compared to approximately \$5.1 million in costs of goods sold resulting in a gross loss of \$2.6 million in the year ended December 31, 2003. Although both revenue and costs of goods sold increased approximately \$1.0 million, our gross loss decreased to (66%) in 2004 from (99%) 2003. We currently operate two shifts, but we are currently making modifications to the production line and we are utilizing less than 10% of the line's capacity. Through the production line modifications and an increase in volume we expect to achieve gross margin improvements.

### Research and Development Expenses

Gross research and development expenses increased by \$0.9 million to a total of \$0.9 million for the year ended December 31, 2004 from \$19 thousand for the year ended December 31, 2003. The \$0.9 million increase in R&D expenses for the year ended December 31, 2004 reflects our renewed ability to invest in product improvement and new product lines. We expect research and development expenses to increase in the coming year as we move forward with the development of two new microdisplays and develop additional versions of our visor.

### Non-Cash Stock Based Compensation

Non-cash stock based compensation for the year ended December 31, 2004 decreased \$2.1 million to a total of \$88 thousand as compared to \$2.2 million for the year ended December 31, 2003. The amount of compensation recorded in 2004 was related to the balance of options issued in 2000 and re-priced during the merger. Non-cash stock-based compensation costs are the result of amortization of the intrinsic value ascribed for the issuance of stock options at the time of grant. The amortization was done over the vesting period of such options.

### Selling, General and Administrative Expenses

General and administrative expenses increased by \$0.8 million to a total of \$4.3 million for the year ended December 31, 2004 from \$3.5 million for the year ended December 31, 2003. The increase in selling, general and administrative expenses was due primarily to an increase in staff and personnel costs. We expect marketing, general and administrative expense to increase in future periods as we add to our staff, make additional investments in marketing activities and as we comply with the Sarbanes Oxley 404 requirements.

### Other Income (Expense)

Other expenses for 2004 were \$5 million for 2004 up from other income of \$3.6 million in 2003. The primary causes of the change were other income of \$4.6 million in 2003 related to a gain on debt settlement not repeated in 2004 and an increase in interest expense to \$5.1 million in 2004 up from \$1.3 million in 2003. The increase in interest expense for the nine months ended September 30, 2004 was attributable to three factors; (1) \$3.18 million of non-cash charges related to the value of the warrants issued to induce the holders of the \$7.825 million in Notes to agree to an early conversion of the Notes into common stock, (2) \$1,598,325 in non-cash charges related to the remaining unamortized debt

discount and beneficial conversion feature associated with the aforementioned Notes, and (3) \$74,637 in non-cash charges related to the write-off of the remaining unamortized deferred financing costs.

## Edgar Filing: EMAGIN CORP - Form 10KSB

Balance Sheet Data as of December 31,  
(In thousands)

	2004	2003
Cash and cash equivalents	\$ 13,457	\$ 1,054
Working capital	14,925	106
Total assets	18,436	3,749
Total liabilities	1,989	8,516
Total stockholders' equity	\$ 16,447	\$ (4,767)

### Liquidity and Capital Resources

#### Current Financial Position

We have approximately \$28 million of backlog represented by purchase agreements for our microdisplays to be delivered now through 2007. These agreements can be cancelled at any time without penalty. Management believes that the prospects for additional growth of microdisplay revenue remain high and that revenues derived from our new Z800 3D visor, which contain two microdisplays per system, should also contribute to revenue growth. As a result we anticipate that our largest use of cash in 2005 will be the funding of higher accounts receivable and inventory levels.

To support our projected sales for 2005 we have made strategic purchases of raw materials and hired additional production personnel in order to increase our plants realizable production capacity. We anticipate that as product is produced and shipped that expenses related to costs of goods sold will be our largest expense category in the coming year.

We currently anticipate that we will also continue to experience growth in our operating expenses throughout the coming year. In particular, we expect that salaries for employees would be the principle uses of cash followed by

27

outsourced costs related to new microdisplay designs and costs related to professional service such as those required to support certification requirements associated with Sarbanes Oxley section 404.

We also intend to purchase approximately \$3 million of capital equipment during 2005 to further increase our production capacity and enable us to be less sensitive to prolonged equipment downtime.

As of April, 13 2005 we have approximately \$10.9 million in cash and cash equivalents. Based on our current business plans we expect that this cash on hand will be sufficient to meet our cash requirements over the next 12 months.

Our cash requirements depend on numerous factors, including completion of our new product development activities, ability to commercialize our products, timely market acceptance of our products and our customer's product, and other factors. We expect to carefully devote capital resources to continue our development programs directed at commercializing our products in our target markets, hire and train additional staff, expand our research and development

## Edgar Filing: EMAGIN CORP - Form 10KSB

activities, develop and expand our manufacturing capacity and begin production activities. Any delays could change the cash requirements of the company. While we believe that we are in position to handle a significant production increase, there can be no assurance that we will not experience some issues relating to yield and throughput risk, as well as supply delivery risk that could result in production delays.

### CONTRACTUAL OBLIGATIONS

The following chart describes the outstanding contractual obligations of the Company as of December 31, 2004:

Contractual Obligations	Total	Payments due by period		
		1 Yr	2-3 Yrs	4-5 Yrs
Long-term debt	\$ -	\$ -	\$ -	\$ -
Capital lease obligations (a)	\$ 42,868	\$ 18,372	\$ 24,496	\$ -
Operating lease obligations	\$ 3,995,350	\$ 953,436	\$ 1,831,233	\$ 1,210,681
Purchase obligations (b)	\$ 2,613,073	\$ 2,613,073	\$ -	\$ -
Other long-term liabilities (c)	\$ 875,000	\$ 125,000	\$ 125,000	\$ 125,000
<b>Total</b>	<b>\$ 7,526,291</b>	<b>\$ 3,709,881</b>	<b>\$ 1,980,729</b>	<b>\$ 1,335,681</b>

- (a) Capital lease obligation includes interest not shown on the balance sheet.
- (b) The majority of purchase orders outstanding contain no cancellation fee except for minor re-stocking fees. The purchase obligations listed include \$740,000 in 2005 purchase orders for secured purchase obligations that carry the obligation to pay either in part or in full.
- (c) This amount represents the obligation for royalty payments.

### EFFECT OF RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

28

In November 2004, the FASB issued FAS No. 151, "An amendment of ARB No. 43, Chapter 4" This statement amends the guidance in ARB No. 43, Chapter 4, "Inventory Pricing", to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). This Statement requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal". In addition, this statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The statement is effective for fiscal years beginning after June 15, 2005 with early adoption permitted. eMagin is currently evaluating the requirements and impact of FAS No. 151, but at this point does not believe the adoption will have a material impact on its financial position, cash flows or results of operations.

FASB Statement 123R (Revision 2004), "Share-Based Payment", was issued in December 2004 and is effective for reporting periods beginning after December 31, 2005. The new statement requires all share-based payments to employees to be recognized in the financial statements based on their fair values. The Company currently accounts for its share-based payments to employees under the intrinsic value method of accounting set forth in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issues to Employees". Additionally, the company complies with the stock-based employer compensation disclosure requirements of

## Edgar Filing: EMAGIN CORP - Form 10KSB

SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure, an amendment of FASB Statement No. 123". The Company will adopt the new statement in its financial statements for the quarter ending March 31, 2006.

### Factors Which May Affect Future Results

In evaluating our business, prospective investors and shareholders should carefully consider the risks factors, any of which could have a material adverse impact on our business, operating results and financial condition and result in a complete loss of your investment.

29

### RISKS RELATED TO OUR FINANCIAL RESULTS

WE HAVE A HISTORY OF LOSSES SINCE OUR INCEPTION AND MAY INCUR LOSSES FOR THE FORESEEABLE FUTURE.

Accumulated losses excluding non-cash transactions as of December 31, 2004, were \$47 million and acquisition related non-cash transactions were \$102 million, which resulted in an accumulated net loss of \$149 million, the majority of which was related to the March 2000 merger and the subsequent write-down of our goodwill. The non-cash losses were dominated by the amortization and write-down of goodwill and purchased intangibles and write-down of acquired in process research and development related to the March 2000 acquisition, and also included some non-cash stock-based compensation. We have not yet achieved profitability and we can give no assurances that we will achieve profitability within the foreseeable future as we fund operating and capital expenditures in areas such as establishment and expansion of markets, sales and marketing, operating equipment and research and development. We cannot assure investors that we will ever achieve or sustain profitability or that our operating losses will not increase in the future.

WE MAY NOT BE ABLE TO EXECUTE OUR BUSINESS PLAN AND MAY NOT GENERATE CASH FROM OPERATIONS

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 would be required 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. To the extent that operating expenses increase or we need additional funds to make acquisitions, develop new technologies or acquire strategic assets, the need for additional funding may be accelerated and there can be no assurances that any such additional funding can be obtained on terms acceptable to us, if at all. If we were not able to generate sufficient capital, either from operations or through additional debt or equity financing, to fund our current operations, we would be forced to significantly reduce or delay our plans for continued research and development and expansion. This could significantly reduce the value of our securities.

### RISKS RELATED TO MANUFACTURING

THE MANUFACTURE OF OLED-ON-SILICON IS NEW AND OLED MICRODISPLAYS HAVE NOT BEEN PRODUCED IN SIGNIFICANT QUANTITIES.

If we are unable to produce our products in sufficient quantity, we will be unable to attract customers. In addition, we cannot assure you that once we commence volume production we will attain yields at high throughput that will result in profitable gross margins or that we will not experience manufacturing problems which could result in delays in delivery of orders or product introductions.



## Edgar Filing: EMAGIN CORP - Form 10KSB

WE ARE DEPENDENT ON A SINGLE MANUFACTURING LINE.

We initially expect to 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. 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 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. In order to meet the requirements of certain OEMs for multiple manufacturing sites, we will have to expend capital to secure additional sites and may not be able to manage multiple sites successfully.

WE EXPECT TO DEPEND ON SEMICONDUCTOR CONTRACT MANUFACTURERS TO SUPPLY OUR SILICON INTEGRATED CIRCUITS AND OTHER SUPPLIERS OF KEY COMPONENTS, MATERIALS AND SERVICES.

30

We do not manufacture the silicon integrated circuits on which we incorporate our OLED technology. Instead, we expect to provide the design layouts to semiconductor contract manufacturers who will manufacture the integrated circuits on silicon wafers. We also expect to depend on suppliers of a variety of other components and services, including circuit boards, graphic integrated circuits, passive components, materials and chemicals, and equipment support. Our inability to obtain sufficient quantities of high quality silicon integrated circuits or other necessary components, 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.

RISKS RELATED TO OUR INTELLECTUAL PROPERTY

We rely on our license agreement with Eastman Kodak for the development of our products, and the termination of this license, Eastman Kodak's licensing of its OLED technology to others for microdisplay applications, or the sublicensing by Eastman Kodak of our OLED technology to third parties, could have a material adverse impact on our business.

Our principal products under development utilize OLED technology that we license from Eastman Kodak. We rely upon Eastman Kodak to protect and enforce key patents held by Eastman Kodak, relating to OLED display technology. Eastman Kodak's patents expire at various times in the future. Our license with Eastman Kodak could terminate if we fail to perform any material term or covenant under the license agreement. Since our license from Eastman Kodak is non-exclusive, Eastman Kodak could also elect to become a competitor itself or to license OLED technology for microdisplay applications to others who have the potential to compete with us. The occurrence of any of these events could have a material adverse impact on our business.

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

## Edgar Filing: EMAGIN CORP - Form 10KSB

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, our technology may be available to licensees of Eastman Kodak, and protection of our intellectual property rights may be limited in certain foreign countries. We may be required to expend significant resources to monitor and police our intellectual property rights. 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. We have not been 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.

### RISKS RELATED TO THE MICRODISPLAY INDUSTRY

THE COMMERCIAL SUCCESS OF THE MICRODISPLAY INDUSTRY DEPENDS ON THE WIDESPREAD MARKET ACCEPTANCE OF MICRODISPLAY SYSTEMS PRODUCTS.

The market for microdisplays is emerging. Our success will 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 viewfinder microdisplay market sector is well established with entrenched competitors with whom we must compete.

THE MICRODISPLAY SYSTEMS BUSINESS IS INTENSELY COMPETITIVE.

31

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:

- o our success in designing, manufacturing and delivering expected new products, including those implementing new technologies on a timely basis;
- o our ability to address the needs of our customers and the quality of our customer services;
- o the quality, performance, reliability, features, ease of use and pricing of our products;
- o successful expansion of our manufacturing capabilities;
- o our efficiency of production, and ability to manufacture and ship

## Edgar Filing: EMAGIN CORP - Form 10KSB

products on time;

- o the rate at which original equipment manufacturing customers incorporate our product solutions into their own products;
- o the market acceptance of our customers' products; and
- o 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 IS CYCLICAL.

The display industry is characterized by fabrication facilities that require large capital expenditures and long lead times for supplies and the subsequent processing time, leading to frequent mismatches between supply and demand. 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.

COMPETING PRODUCTS MAY GET TO MARKET SOONER THAN OURS.

Our competitors are investing substantial resources in the development and manufacture of microdisplay systems using alternative technologies such as reflective liquid crystal displays (LCDs), LCD-on-Silicon ("LCOS") microdisplays, active matrix electroluminescence and scanning image systems, and transmissive active matrix LCDs.

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 attempting to obtain a share of the various markets in which our microdisplay products have the potential to compete.

OUR PRODUCTS ARE SUBJECT TO LENGTHY OEM DEVELOPMENT PERIODS.

We plan to 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

32

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. 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.

OUR PRODUCTS WILL LIKELY EXPERIENCE RAPIDLY DECLINING UNIT PRICES.

## Edgar Filing: EMAGIN CORP - Form 10KSB

In the markets in which we expect to compete, prices of established products tend to decline significantly over time. In order to maintain our profit margins over the long term, we believe that we will need to continuously develop 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 nor is there any assurance 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, increasing our sales volumes or adjusting our product mix. If we fail to do so, our results of operations would 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 retaining or attracting new personnel may have a materially adverse affect on our business and our operating results. In addition, difficulties in hiring and retaining technical personnel could delay the implementation of our business plan.

#### 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, including Gary W. Jones, our chief executive officer. We 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 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.

#### WE GENERALLY DO NOT HAVE LONG-TERM CONTRACTS WITH OUR CUSTOMERS.

Our business is operated on the basis of short-term purchase orders and we cannot guarantee that we will be able to obtain long-term contracts for some time. Our current purchase agreements can be cancelled or revised without penalty, depending on the circumstances. In the absence of a backlog of orders that can only be canceled with penalty, we plan production on the basis of internally generated forecasts of demand, 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 the Company 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 OLED-ON-SILICON TECHNOLOGY.

Our prospects will be significantly affected by our ability to develop strategic alliances with OEMs for incorporation of our OLED-on-silicon 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 would 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 a foreign entity. Some customers in other countries have longer receivable periods or warranty periods. In addition, many of the OEMs that are the most likely long-term purchasers of our microdisplays are located abroad exposing 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 give 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.

RISKS RELATED TO OUR STOCK

THE SUBSTANTIAL NUMBER OF SHARES THAT ARE OR WILL BE ELIGIBLE FOR SALE COULD

## Edgar Filing: EMAGIN CORP - Form 10KSB

CAUSE OUR COMMON STOCK PRICE TO DECLINE EVEN IF THE COMPANY 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 February 20, 2005, we have outstanding (i) options to purchase 14,262,162 shares; and (ii) warrants to purchase 19,119,289 shares of common stock; and (iii) 0 shares of common stock underlying convertible securities.

WE HAVE A STAGGERED BOARD OF DIRECTORS AND OTHER ANTI-TAKEOVER PROVISIONS, WHICH COULD INHIBIT POTENTIAL INVESTORS OR DELAY OR PREVENT A CHANGE OF CONTROL THAT MAY FAVOR YOU.

34

Our Board of Directors is divided into three classes and our Board members are elected for terms that are staggered. This could discourage the efforts by others to obtain control of the company. Some of the provisions of our certificate of incorporation, our bylaws and Delaware law could, together or separately, discourage potential acquisition proposals or delay or prevent a change in control. In particular, our board of directors is authorized to issue up to 10,000,000 shares of preferred stock (less any outstanding shares of preferred stock) with rights and privileges that might be senior to our common stock, without the consent of the holders of the common stock.

35

### ITEM 7. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

#### FINANCIAL STATEMENT INDEX

Report of Independent Registered Public Accounting Firm.....	
Consolidated Balance Sheet as of December 31, 2004 .....	
Consolidated Statement of Operations for the years ended December 31, 2004 and 2003 .....	
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2004 and 2003 .....	
Consolidated Statement of Cash Flows for the years ended December 31, 2004 and 2003 .....	
Notes to the Consolidated Financial Statements .....	

F-1

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders

# Edgar Filing: EMAGIN CORP - Form 10KSB

eMagin Corporation

We have audited the accompanying consolidated balance sheet of eMagin Corporation and subsidiary (the "Company") as of December 31, 2004, and the related consolidated statements of operations, stockholders' equity and cash flows for the years ended December 31, 2004 and 2003. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

In our opinion, the financial statements enumerated above present fairly, in all material respects, the consolidated financial position of eMagin Corporation and subsidiary as of December 31, 2004 and the consolidated results of their operations and their consolidated cash flows for the years ended December 31, 2004 and 2003 in conformity with accounting principles generally accepted in the United States of America.

/s/  
Eisner LLP  
New York, New York  
February 11, 2005

F-2

## eMagin Corporation and Subsidiary Consolidated Balance Sheet December 31, 2004

### ASSETS

#### Current assets:

Cash and cash equivalents	\$ 13,457,4
Accounts receivable, net	535,7
Prepaid expenses and other current assets	879,8
Inventory	2,017,8
Total current assets	16,890,9
Equipment and leasehold improvements, net	1,304,4
Intangible assets, net	54,1
Other long-term assets	186,2
Total assets	\$ 18,435,7

Edgar Filing: EMAGIN CORP - Form 10KSB

LIABILITIES

Current liabilities:

Accounts payable	\$ 822,3
Accrued payroll and benefits	674,2
Other accrued expenses, net	356,7
Advanced payments	64,1
Current portion of capitalized lease obligations	14,0
Other current liabilities	34,7

-----

Total current liabilities 1,966,3

-----

Capitalized lease obligations 22,1

-----

Total liabilities 1,988,5

Commitments and contingencies

STOCKHOLDERS' EQUITY

Preferred Stock - authorized 10,000,000 shares, none issued	
Common Stock - \$.001 par value, authorized 200,000,000 shares, issued and outstanding 79,638,817 shares	79,6
Paid-in surplus	165,398,9
Accumulated deficit	(149,031,3)

-----

Total stockholders' equity 16,447,2

-----

Total liabilities and stockholders' equity \$ 18,435,7

See notes to consolidated financial statements

F-3

eMagin Corporation and Subsidiary  
Consolidated Statements of Operations

	Year Ended December 31, 2004	2003
	-----	-----
Revenue:		
Product revenue	\$ 3,501,621	\$ 2,213,29
Contract revenue	108,000	364,80
Sales returns and allowances	(16,754)	
	-----	-----
Total revenue, net	3,592,867	2,578,09
Cost of goods sold	5,966,181	5,141,44
	-----	-----
Gross loss	(2,373,314)	(2,563,34)
	-----	-----
Costs and expenses:		
Research and development	897,969	18,81
Stock based compensation	87,565	2,183,41



Edgar Filing: EMAGIN CORP - Form 10KSB

Selling, general and administrative	4,340,129	3,529,04
	-----	-----
Total costs and expenses, net	5,325,663	5,731,27
	-----	-----
Other income (expense):		
Gain on debt settlement	-	4,637,99
Interest expense	(5,087,057)	(1,283,25
Other income, net	75,296	216,57
	-----	-----
Total other (expense) income	(5,011,761)	3,571,30
	-----	-----
Net loss	\$ (12,710,738)	\$ (4,723,31
	=====	=====
Basic and diluted net loss per common share	\$ (0.20)	\$ (0.1
	=====	=====
Weighted average outstanding common stock	64,278,144	35,998,43
	=====	=====

See notes to consolidated financial statements

F-4

eMagin Corporation and Subsidiary  
Consolidated Statements of Stockholders' Equity

	Common Shares	Common Stock	Deferred Compensation	Paid-in Surplus	Accumulated Deficit
	-----	-----	-----	-----	-----
Balance - December 31, 2002	30,854,980	\$ 30,854	\$ (462,983)	\$119,221,276	\$ (131,597,2
Conversion of debt to equity	6,101,972	6,102	-	4,447,996	
Debt settlement	1,997,840	1,998	-	1,409,971	
Exercise of warrants	1,479,900	1,480	-	1,136,595	
Cashless exercise of warrants	270,910	271	-	(271)	
Original issue discount on financing	-	-	-	1,383,203	
Beneficial conversion on financing	-	-	-	616,797	
Stock issued for services	656,435	656	-	561,302	
Options exercised	846,793	847	-	279,199	
Issuance of equity for interest and penalties	486,582	486	-	734,841	
Amortization of deferred compensation	-	-	375,418	-	
Stock option compensation	-	-	-	1,808,000	
Net loss for period	-	-	-	-	(4,723,3
	-----	-----	-----	-----	-----
Balance - December 31, 2003	42,695,412	42,694	(87,565)	131,598,910	(136,320,5
Sale of equity	16,408,364	16,409	-	16,368,162	
Conversion of debt to equity	11,394,621	11,395	-	8,556,029	
Issuance of warrants for early conversion of debt to equity	-	-	-	3,180,000	
Exercise of warrants	3,533,348	3,534	-	3,785,927	
Options exercised	5,221,052	5,221	-	1,379,263	
Stock issued for services	386,020	386	-	530,645	

Edgar Filing: EMAGIN CORP - Form 10KSB

Amortization of deferred compensation	-	-	87,565	-	-
Net loss for period	-	-	-	-	(12,710,738)

Balance - December 31, 2004	79,638,817	\$79,639	\$ -	\$165,398,936	\$(149,031,300)
-----------------------------	------------	----------	------	---------------	-----------------

See notes to consolidated financial statements

F-5

eMagin Corporation and Subsidiary  
Consolidated Statements of Cash Flows

	Year Ended December 31, 2004	2003
Cash flows from operating activities:		
Net loss	\$(12,710,738)	\$ (4,723,300)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	619,582	884,200
Amortization of financing fees	7,863	37,200
Bad debt expense	466,923	
Non-cash stock based compensation	87,565	2,183,400
Non-cash interest related charges	5,094,005	1,255,700
Gain on debt settlement	-	(4,637,900)
Stock issued for services	531,031	531,000
Changes in:		
Trade receivables	(234,133)	(528,400)
Unbilled costs and estimated profits on contracts in progress	75,359	50,000
Inventory	(1,742,469)	(24,400)
Prepaid expenses and other current assets	(400,393)	(276,100)
Other long-term assets	(99,351)	112,500
Advanced payments	(58,166)	122,300
Deferred revenue	-	(30,400)
Accounts payable, accrued expenses and accrued payroll	(49,789)	(185,700)
Other current liabilities	16,754	(5,400)
Net cash used in operating activities	(8,395,957)	(5,204,100)
Cash flows used in investing activities:		
Purchase of equipment	(720,805)	(1,120,200)
Cash flows from financing activities:		
Proceeds from sales of common stock, net of issuance costs	16,384,571	
Proceeds from exercise of stock options and warrants	5,173,945	1,418,100
Proceeds from long- and short-term debt	-	6,000,000
Payments of long- and short-term debt	(38,184)	(122,700)
Net cash provided by financing activities	21,520,332	7,295,300
Net increase in cash and cash equivalents	12,403,570	970,900
Cash and cash equivalents - beginning of year	1,053,895	82,900
Cash and cash equivalents - end of year	\$ 13,457,465	\$ 1,053,800

Edgar Filing: EMAGIN CORP - Form 10KSB

	=====	=====
Cash paid for interest	\$ 7,927	\$ 15,6
	=====	=====
Non-cash transactions:		
Conversion of debt to equity	\$ 8,567,424	\$ 4,454,0
Issuance of equity for penalties on interest	\$ -	\$ 735,3
Issuance of equity for settlement of accounts payable	\$ -	\$ 1,411,9

See notes to consolidated financial statements

F-6

eMAGIN CORPORATION AND SUBSIDIARY  
Notes to Consolidated Financial Statements  
December 31, 2004 and 2003

Note A - NATURE OF BUSINESS

eMagin Corporation is a developer and manufacturer of optical systems and microdisplays for use in the electronics industry. eMagin's wholly-owned subsidiary, Virtual Vision Inc., develops and markets microdisplay systems and optics technology for commercial, industrial and military applications.

Note B - SIGNIFICANT ACCOUNTING POLICIES

[1] Principles of consolidation:

The accompanying consolidated financial statements include the accounts of eMagin Corporation and its wholly owned subsidiary, Virtual Vision, Inc. (collectively the "Company"). Inter-company transactions and balances are eliminated in consolidation.

[2] Revenue and cost recognition:

Revenue is recognized when products are shipped and risk of loss is transferred to customers, net of allowances for anticipated returns. The Company's revenue-earning activities generally involve delivering products and revenues are considered to be earned when the Company has completed the process by which it is entitled to such revenues. Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the selling price is fixed or determinable and collection is reasonably assured.

The Company also earns revenues from certain R&D activities under both firm fixed-price contracts and cost-type contracts, including some cost-plus-fee contracts. Revenues relating to firm fixed-price contracts are generally recognized on the percentage-of-completion method of accounting as costs are incurred (cost-to-cost basis). Revenues on cost-plus-fee contracts include costs incurred plus a portion of estimated fees or profits based on the relationship of costs incurred to total estimated costs. Contract costs include all direct material and labor costs and an allocation of allowable indirect costs as defined by each contract, as periodically adjusted to reflect revised agreed upon rates. These rates are subject to audit by the other party. Amounts can be billed on a bi-monthly basis.

[3] Research and development expenses:

Research and development costs are expensed as incurred.

## Edgar Filing: EMAGIN CORP - Form 10KSB

### [4] Cash and cash equivalents:

All highly liquid instruments with an original maturity of three months or less at the date of purchase are considered to be cash equivalents.

### [5] Accounts receivable:

The majority of commercial accounts receivable are due from Original Equipment Manufacturers ("OEM"s). Credit is extended based on evaluation of a customers' financial condition and, generally, collateral is not required. Accounts receivable are payable in U.S. dollars, are due within 30-90 days and are stated at amounts due from customers net of an allowance for doubtful accounts. Any account outstanding longer than the contractual payment terms is considered past due. The Company determines the allowance by considering a number of factors, including the length of time trade accounts receivable are past due, eMagin's previous loss history, the customer's current ability to pay its obligation, and the condition of the general economy and the industry as a whole. The Company writes off accounts receivable when they become uncollectable, and if any payments are subsequently received on such receivables, are reported as a reduction of bad debt expense in the year the payment is received.

### [6] Allowance for doubtful accounts:

F-7

The allowance for doubtful accounts reflects an estimate of probable losses inherent in the accounts receivable balance. The allowance is determined based on known troubled accounts, historical experience, and other currently available evidence.

### [7] Inventory:

Inventory is stated at the lower of cost or market. Cost is determined using the first-in first-out method. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories. The Company regularly reviews inventory quantities on hand, future purchase commitments with our suppliers, and the estimated utility of the inventory. If our review indicates a reduction in utility below carrying value, we reduce the inventory to a new cost basis.

### [8] Equipment and leasehold improvements:

Equipment and leasehold improvements are stated at cost. Depreciation on equipment is calculated using the straight-line method of depreciation over its estimated useful life. Amortization of leasehold improvements is calculated by using the straight-line method over the shorter of their estimated useful lives or lease terms. Expenditures for maintenance and repairs are charged to expense as incurred.

In accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", eMagin performs impairment tests on its long-lived assets, when circumstances indicate that their carrying amounts may not be recoverable. If required, recoverability is tested by comparing the estimated future undiscounted cash flows of the asset or asset group to its carrying value. Impairment losses, if any, are recognized based on the excess of the assets' carrying amounts over their estimated fair values.

### [9] Income taxes:

Deferred income taxes are recorded by applying enacted statutory tax rates to temporary differences between the financial statement carrying amounts and the tax bases of existing assets expected to apply to taxable income in the years

## Edgar Filing: EMAGIN CORP - Form 10KSB

that the asset is to be recovered, and liabilities. At December 31, 2004 and 2003,, the Company has net deferred tax assets of approximately \$59 million, and \$57 million, respectively, primarily resulting from the future tax benefit of net operating loss carryforwards discussed below and temporary differences relating to amortization of intangible assets. Such net deferred tax assets are fully offset by a valuation allowance due to the uncertainty as to their realizability.

### [10] Loss per common share:

In accordance with SFAS No. 128, "Basic Earnings Per Share", net loss per common share amounts ("basic EPS") is computed by dividing net loss by the weighted average number of common shares outstanding and excluding any potential dilution. Net loss per common share amounts assuming dilution ("diluted EPS") is computed by reflecting the potential dilution from the exercise of stock options and warrants. Common equivalent shares have been excluded from the computation of diluted EPS for all periods presented as their effect is antidilutive. The years ended December 31, 2004 and 2003 do not include options and warrants to purchase 14,464,123 and 21,725,607, respectively, of common equivalent shares, as their effect would be antidilutive.

### [11] Comprehensive income (loss):

SFAS No. 130, "Reporting Comprehensive Income", requires companies to report all changes in equity during a period, except those resulting from investment by owners and distributions to owners, for the period in which they are recognized. Comprehensive income (loss) is the total of net income (loss) and other comprehensive income (loss) items, such as unrealized gains or losses on securities classified as available-for-sale and foreign currency translation adjustments. Comprehensive income (loss) must be reported on the face of the annual financial statements. The Company's operations did not give rise to any material items includable in comprehensive income (loss), which were not already in net loss for the years ended December 31, 2004 and 2003. Accordingly, the Company's comprehensive loss is the same as its net income (loss) for the periods presented.

F-8

### [12] Stock-based compensation:

The Company has elected to apply Accounting Principals Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees", and related interpretations in accounting for its stock-based compensation plans. Accordingly, the Company records expense for employee stock compensation plans equal to the excess of the market price of the underlying the Company shares at the date of grant over the exercise price.

As of December 31, 2004, the Company has outstanding options to purchase 13,559,162 shares. Under APB No. 25, when the exercise price of employee stock options equals the market price of the underlying stock on the date of grant no compensation expense is recorded. The Company discloses information relating to the fair value of stock-based compensation awards in accordance with Statement of Financial Accounting Standards No.123 ("SFAS No. 123"), "Accounting for Stock-Based Compensation". The following table illustrates the effect on net loss and loss per share as if the Company had applied the fair value recognition provision of SFAS No. 123. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions used for grants in 2004 and 2003, respectively: (1) average expected volatility of 95% and 100%, (2) average risk-free interest rates of 3.94% and 3.52%, and (3) expected lives of 5-7 years and 7-10 years and (4) dividends of 0% and 0%.

Edgar Filing: EMAGIN CORP - Form 10KSB

The pro forma amounts that are disclosed in accordance with SFAS No. 123 reflect the portion of the estimated fair values of awards that were earned during the years ended December 31, 2004 and 2003. The weighted average fair value per option was \$1.57 and \$0.76 for options granted in 2004 and 2003, respectively.

	2004
	(in
Net loss	\$ (12,711
Stock-based employee compensation expense included in reported net loss	88
Stock-based employee compensation expense determined under fair value method	(6,777
	-----
Pro forma net loss	\$ (19,40
	=====
Net loss per share:	
Basic and diluted, as reported	\$ (0.2
Basic and diluted, pro forma	\$ (0.3

[13] Fair value of financial instruments:

At December 31, 2004 the Company's cash, cash equivalents, accounts receivable and accounts payable are earned at cost which appropriates fair value due to the short-term nature of these instruments.

[14] Use of estimates:

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. These estimates and assumptions relate to recording net revenue, collectibility of accounts receivable, useful lives and impairment of tangible and intangible assets, accruals, income taxes, inventory realization and other factors. Consequently, a change in conditions could affect these estimates.

[15] Reclassifications:

Certain amounts in the 2003 financial statements have been reclassified to conform to the 2004 presentation.

F-8

Note C - RECEIVABLES

Receivables at December 31, 2004 consist of the following:

Trade receivables	\$ 1,282,117
Contract receivables	25,000
	-----
Total	1,307,117
Less allowance for doubtful accounts	(771,369)
	-----
Net receivables	\$ 535,748
	=====

## Edgar Filing: EMAGIN CORP - Form 10KSB

### Note D - INVENTORY

The components of inventories as of December 31, 2004 are as follows:

Raw materials	\$ 1,420,612
Work in process	168,645
Finished goods	428,629
	-----
Total Inventory	\$ 2,017,886
	=====

### Note E - EQUIPMENT AND LEASEHOLD IMPROVEMENTS

Equipment and leasehold improvements and their estimated lives are as follows at December 31, 2004:

	Useful Lives	
Computer hardware and software	3	\$ 582,389
Lab and factory equipment	3	2,730,497
Furniture, fixtures and office equipment	10	145,812
Capital leases	3	66,075
Leasehold improvements	(a)	472,512
Construction In Progress	0	74,450
		-----
Total Fixed Assets		4,071,735
Less accumulated depreciation		(2,767,270)
		-----
Equipment and leasehold improvements		\$ 1,304,465
		=====

(a) The shorter of either the life of the lease, or the useful life of the asset.

### Note F - DEBT

Debt consisted of a capitalized leased obligation as of December 31, 2004:

a	Current portion	\$ 14,080
b	Long-term portion	22,177
		-----
	Total	\$ 36,257
		=====

### Note G - DEBT SETTLEMENT AND DEBT CONVERSION

In 2003, the Company entered into settlements and restructuring agreements with certain of eMagin's creditors, pursuant to which the creditors agreed to accept shares of eMagin's common stock in full or partial satisfaction of the amount owed to them, or which allowed us to either make discounted payments to them or

F-9

to make payments under more favorable payment terms than previously were in place. As a result of the above transactions, the Company recorded \$4,637,993 as a gain on settlement of debt for the year ended December 31, 2003. No such settlements were made in the year ended December 31, 2004.

## Edgar Filing: EMAGIN CORP - Form 10KSB

In February 2004, we entered into an agreement whereby the holders of our Secured Convertible Notes (the "Notes"), which were due in November 2005, agreed to an early conversion of all of the \$7.825 million principal amount of the Notes, together with the \$742,424 of accrued interest on the Notes, into 11,394,621 shares of common stock of eMagin. On the date of the conversion the Company recorded, \$1,598,335 in interest expense related to the unamortized debt discount and beneficial conversion feature and \$74,637 in interest expense related to the write-off of deferred financing costs.

In consideration of the Note holders agreeing to the early conversion of the Notes, eMagin issued the Note holders warrants to purchase an aggregate of 2.5 million shares of common stock (the "Warrants"), which Warrants are exercisable at a price of \$2.76 per share. 1.5 million of the Warrants, "D warrants", are exercisable until December 31, 2005. The remaining 1.0 million of the Warrants, "E warrants", are exercisable until June 10, 2008. Using the Black Scholes method of valuating warrants, an expense totaling \$3.18 million was recorded in interest expense in the first quarter of 2004 to record an estimated value for these warrants. The fair value of the warrants was estimated at \$2.30 using the Black-Scholes option-pricing model with the following assumptions for the two sets of warrants: (1) average expected volatility of 100%, (2) average risk-free interest rates of 3.52%, (3) dividends of 0%, and (4) Average Term (in days) of 670 for the D warrants and 1,460 for the E warrants.

### Note H - INCOME TAXES

The difference between the statutory federal income tax rate on the Company's pre-tax income and the Company's effective income tax rate is summarized as follows:

	2004	2003
U.S. Federal income tax provision (benefit)		
at federal statutory rate	(35)%	(35)%
Change in valuation allowance	35 %	35 %
	0 %	0 %
	0 %	0 %

Significant components of eMagin's deferred tax assets as of December 31, 2004 are as follows (numbers are in thousands):

Net operating losses	\$ 39,262
Goodwill and other intangibles	19,894
Allowance for doubtful accounts	274
Deferred payroll	25
Accrued vacation pay	81
	-----
Total	59,536
Less valuation allowance	(59,536)
	-----
Net Deferred Tax Asset	\$ 0
	=====

As of December 31, 2004, eMagin has federal and state net operating loss carryforwards of approximately \$98 million that will be available to offset future taxable income, if any, through December 2019. The utilization of net operating losses is subject to a substantial limitation due to the change of



## Edgar Filing: EMAGIN CORP - Form 10KSB

ownership provisions under Section 382 of the Internal Revenue Code and similar state provisions. Such limitation may result in the expiration of the net operating losses before their utilization. A valuation allowance has been established to reserve for the deferred tax assets arising from the net operating losses and other temporary differences due to the uncertainty that their benefit will be realized in the future. The valuation allowance increased approximately \$2,869,000 and \$27,169,000 for the years ended December 31, 2004 and 2003, respectively.

F-10

In 2003, in connection with the restructuring of its indebtedness (see Note G), the Company realized income of \$4,637,993. Under Section 108 of the Internal Revenue Code, this income is excludable for federal income tax purposes to the extent that the amount of the Company's liabilities immediately before the restructuring exceeds the fair market value of its assets as a going concern at such time. The Company estimates the entire \$4,637,993 is excludable under this exception.

Pursuant to Section 108 of the Internal Revenue Code, the excluded income reduces the Company's tax attributes as of January 1, 2005. Such reduction is first applied to reduce net operating loss carryforwards.

### Note I - STOCKHOLDERS' EQUITY

The authorized common stock of the Company consists of 200,000,000 shares with a par value of \$0.001 per share.

In April of 2003, the Company converted a \$1,000,000 loan plus interest to Travelers in common shares totaling 2,137,757 at a conversion price from the original agreement of approximately \$0.53 per share, based on the market value of our common stock on the date the agreement was entered into (see Note G).

The Company also converted a \$3,000,000 loan plus interest to SK Corporation in common shares totaling 2,495,833 at a conversion price from the original agreement of approximately \$1.28 per share, based on the market value of our common stock on the date the agreement was entered into (see Note G).

In September 2003, the Company converted two Series B Convertible Debentures in the amount of \$121,739 each into 1,468,382 share of the Company's common stock at a conversion price from the original note purchase agreement of \$0.18 per share. This transaction included a write-down of the unamortized beneficial conversion feature at the time of conversion.

In 2003, the Company received approximately \$1.1 million for the exercise of 1,479,900 warrants to purchase shares of common stock. The Company also issued 270,910 common shares in cashless exercises of warrants in exchange for 579,329 warrant shares.

In 2003, the Company negotiated settlements of amounts due and amounts for future services, rendered via issuance of 656,435 shares of common stock. As such, the Company recorded the fair value of the services received and receivable in the future of \$561,958 in selling, general and administrative expenses, prepaid expenses and reduction of accounts payable.

During 2003, the Company received \$280,046 for the exercise of options to purchase 846,793 shares of common stock.

The Company's April 25, 2003 Registration Rights Agreement, which was entered into in connection with the Company's April 2003 financing, required the Company to file a registration statement with the Securities and Exchange Commission no later than 30 calendar days after the closing of the April 2003 financing. The

## Edgar Filing: EMAGIN CORP - Form 10KSB

Company was not able to file the registration statement within the required period and caused a default under the registration Rights Agreement. As a result of this default, the Company was required to issue an additional 486,582 common shares for penalties and interest pursuant to the Registration Rights Agreement. For the year ended December 31, 2003, the Company recorded a charge to earnings of \$735,324 for the penalties and interest. The Company filed its registration statement in July of 2003.

In connection with the April 2003 financing, eMagin issued 387,496 warrants for expenses related to the offering. These warrants were issued to Larkspur Capital Corporation, a company in which one of the Company's directors is the managing director.

On January 9, 2004, we entered into a Securities Purchase Agreement with several accredited institutional and private investors whereby such investors purchased an aggregate of 3,333,363 shares of common stock and 4,312,212 warrant shares for an aggregate purchase price of \$4,200,039.

The shares of common stock were priced at a 20% discount to the average closing price of the stock from December 30, 2003 to January 6, 2004, which ranged from \$1.38 to \$1.94 per share during the period for an average closing price of \$1.26 per share. In addition, the investors received warrants to purchase an aggregate of 2,000,019 shares of common stock (subject to anti-dilution adjustments) exercisable at a price of \$1.74 per share for a period of five (5) years. The warrants were priced at a 10% premium to the average closing price of the stock for the pricing period.

F-11

In connection with the Securities Purchase Agreement, eMagin also issued additional warrants to the investors to acquire an aggregate of 2,312,193 shares of common stock. 1,206,914 of such warrants are exercisable, within 6 months from the effective date of the registration statement covering these securities, at a price of \$1.74 per share (a 10% premium to the average closing price of the stock for the pricing period), and 1,105,279 of such warrants are exercisable within 12 months from the effective date of the registration statement covering these securities, at a price of \$1.90 per share (a 20% premium to the average closing price of the stock for the pricing period).

The Company also entered into a registration rights agreement with the aforementioned investors with respect to the common stock issued and common stock issuable upon the exercise of the warrants. The Company filed a registration statement for the sale of the shares sold and the shares underlying the warrants which went effective February 12, 2004.

In February 2004, the Company and all of the holders of the Secured Convertible Notes (the "Notes"), which were due in November 2005, entered into an agreement whereby the holders agreed to an early conversion of 100% of the principal amount of the Notes aggregating \$7.825 million, together with all of the accrued interest of approximately \$742,000 on the Notes, into 11,394,621 shares of the Company's common stock. The listing of the shares issuable pursuant to such agreement was approved by the American Stock Exchange.

In consideration of the Noteholders agreeing to the early conversion of the Notes, eMagin agreed to issue the Noteholders warrants to purchase an aggregate of 2.5 million shares of common stock (the "warrants"), which warrants are exercisable at a price of \$2.76 per share. 1.5 million of the warrants (series D warrants) are exercisable until the later of (i) twelve (12) months from the date upon which a registration statement covering the shares issuable upon exercise of the Warrants is declared effective by the Securities and Exchange Commission, or (ii) December 31, 2005. The remaining 1.0 million of the warrants

## Edgar Filing: EMAGIN CORP - Form 10KSB

(series E warrants) are exercisable until four (4) years from the date upon which the registration statement covering such shares is declared effective by the Securities and Exchange Commission. Using the Black Scholes method of valuating warrants, an expense totaling \$3.18 million was recorded in interest expense during 2004 to record an estimated fair value of these warrants. The fair value of the warrants, \$3.18 million, was estimated at \$2.30 using the Black-Scholes option-pricing model with the following assumptions for the two sets of warrants: (1) average expected volatility of 100%, (2) average risk-free interest rates of 3.52%, (3) dividends of 0%, and (4) Average Term (in days) of 670 for the series D warrants and 1,460 for the series E warrants.

In connection with the above conversion, eMagin also entered into a Registration Rights Agreement with the holders of the Notes providing the holders with certain registration rights under the Securities Act of 1933, as amended, with respect to the common stock issuable upon exercise of the warrants.

### F-12

In August 2004, the Company and certain of the holders of its outstanding Class A, B and C common stock purchase warrants entered into an agreement pursuant to which the Company and the holders of the warrants agreed to the \$0.90 re-pricing and exercise of Class A, B and C common stock purchase warrants. As a condition to the transaction, the holders of the warrants agreed to limit the right of participation that they were granted in January 9, 2004. As a result of the transaction, the holders agreed to re-price and exercise approximately, 2,099,894 Class A, B and/or C common stock purchase warrants for an aggregate of \$1,889,900.

On October 21, 2004, the Company entered into a Securities Purchase Agreement, pursuant to which we sold and issued 10,334,525 shares of common stock, and series F common stock warrants to purchase 5,129,762 our common stock for an aggregate purchase price of \$10,772,500. The Common Shares were priced at \$1.05. The Common Shares and the shares underlying the warrants were drawn-down off of a shelf registration statement which was filed by the Company on May 5, 2004, and declared effective by the Securities and Exchange Commission on June 10, 2004. Net proceeds received after deducting expenses was approximately \$9.75 million.

The Series F Warrants are exercisable from April 25, 2005 until April 25, 2010 at an exercise price of \$1.21 per share, subject to adjustment upon the occurrence of specific events, including stock dividends, stock splits, combinations or reclassifications of our common stock or distributions of cash or other assets. In addition, the Series F Warrants contain provisions protecting against dilution resulting from the sale of additional shares of our common stock for less than the exercise price of the Series F Warrants, or the market price of the common stock, on the date of such issuance or sale.

On October 28, 2004, we entered into a Securities Purchase Agreement, pursuant to which we sold and issued 2,740,476 shares of common stock, and series F common stock purchase warrants to purchase our common stock to purchasers for an aggregate purchase price of \$2,877,500. The common stock shares were priced at \$1.05. The common shares and the shares underlying the warrants were drawn-down off of a shelf registration statement which was filed by us on May 5, 2004, and declared effective by the Securities and Exchange Commission on June 10, 2004. Net proceeds received after deducting expenses was approximately \$2.65 million.

The Series F Warrants are exercisable from April 25, 2005 until April 25, 2010 to purchase up to 1,370,238 shares of common stock at an exercise price of \$1.21 per share, subject to adjustment upon the occurrence of specific events, including stock dividends, stock splits, combinations or reclassifications of our common stock or distributions of cash or other assets. In addition, the Series F Warrants contain provisions protecting against dilution resulting from

## Edgar Filing: EMAGIN CORP - Form 10KSB

the sale of additional shares of our common stock for less than the exercise price of the Series F Warrants, or the market price of the common stock, on the date of such issuance or sale.

As a result of the above transaction, 1,213,352 warrants, the outstanding Series A Common Stock Purchase Warrants, that were issued to participants of the Securities Purchase Agreement dated January 9, 2004 were re-priced from \$1.74 to \$1.05.

The Company paid a Placement Agent \$814,000, a fee equal to 6% of the gross proceeds of these offerings.

In addition, the Company engaged Larkspur Capital Corporation, a Related Party, to act as an adviser in connection with the sale of these securities. For such services, the Company paid Larkspur Capital Corporation a fee of \$136,500, an amount equal to 1% of the gross proceeds of these offerings and 93,255 warrants.

In 2004, the Company received \$5,173,945 for the exercise of 5,221,052 options and 3,533,348 warrants.

The Company also issued 386,020 shares of common stock for the payment of \$531,031 for services rendered and to be rendered in the future. As such, the Company recorded the fair value of the services rendered in selling, general and administrative expenses in the accompanying audited consolidated statement of operations for the year ended December 31, 2004.

F-13

### Note J - STOCK COMPENSATION

#### [1] Stock option plans:

In 1994, the Company established the 1994 Stock Plan (the "1994 Plan"), which has been assumed by eMagin. The plan provided for the granting of options to purchase an aggregate of 1,286,000 shares of the common stock to employees and consultants of FED. This Plan expired in 2004.

In 2000, the Company established the 2000 Stock Option Plan (the "2000 Plan"). The Plan permits the granting of options and stock purchase rights to employees and consultants of the Company. The 2000 Plan allows for the grant of incentive stock options meeting the requirements of Section 422 of the Internal Revenue Code of 1986 (the "Code") or non-qualified stock options which are not intended to meet such requirements.

In 2003, eMagin established the 2003 Stock Option Plan (the "2003 Plan"). The 2003 Plan provided for the granting of options to purchase an aggregate of 9,200,000 shares of the common stock to employees and consultants. On July 2, 2003, the shareholders approved the plan and the 2003 Plan was subsequently amended by the Board of Directors on July 2, 2003 to reduce the number of additional shares that may be provided for issuance under the "evergreen" provisions of the 2003 Plan. The amended 2003 Plan provides for an increase of 2,000,000 shares in January 2004 and an annual increase on January 1 of each year for a period of nine (9) years commencing on January 1, 2005 of 3% of the diluted shares outstanding.

Vesting terms of the options range from immediate vesting to a ratable vesting period of 5 years. Option activity for the years ended December 31, 2004 and 2003 are summarized as follows:

Weighted

Edgar Filing: EMAGIN CORP - Form 10KSB

	Shares	Average Exercise Price
Outstanding at December 31, 2002	5,893,085	\$ 0.75
2003 Options granted	7,528,676	0.42
2003 Options exercised	(846,793)	0.33
2003 Options canceled	(413,198)	2.14
Outstanding at December 31, 2003	12,161,770	\$ 0.53
2004 Options granted	6,779,900	1.60
2004 Options exercised	(5,221,052)	0.27
2004 Options forfeited	(161,456)	2.27
Outstanding at December 31, 2004	13,559,162	\$ 1.14

At December 31, 2004, there were 428,849 shares available for grant under the 2003 Plan and the 2000 Plan.

The following table summarizes information about stock options outstanding at December 31, 2004:

F-14

Range of Exercise Prices	Options Outstanding			Options Number Exercisable
	Number Outstanding	Weighted Average Remaining Contractual Life (In Years)	Weighted Average Exercise Price	
\$ 0.18 - \$ 1.02	5,993,909	4.72	\$ 0.53	5,270,401
\$ 1.21 - \$ 1.96	6,594,753	5.58	1.62	1,206,270
\$ 2.10 - \$ 6.30	970,500	5.96	2.33	88,417
	13,559,162		\$ 1.14	6,565,087

[2] Stock based compensation:

Non-cash stock-based compensation expense represents expenses associated with stock option grants to the Company's officers and employees at below fair market value as additional compensation for their services and to induce them to lock-up their options for a longer time than would normally be specified under the Company's standard option grant. Deferred compensation is amortized over the remaining vesting period of the underlying options.

[3] Warrants:

At December 31, 2004, 21,618,229 warrants to purchase shares of common stock are outstanding and exercisable at exercise prices ranging from \$0.43 to \$2.76 and expiration dates ranging from January 14, 2005 to February 27, 2012.

Weighted  
Average

Edgar Filing: EMAGIN CORP - Form 10KSB

	Shares	Exercise Price
	-----	-----
Outstanding at December 31, 2002	6,894,153	\$ 0.93
2003 Warrants granted	8,137,417	0.82
2003 Warrants exercised	(2,059,229)	0.78
2003 Warrants expired	(636,052)	2.75
	-----	-----
Outstanding at December 31, 2003	12,336,289	\$ 0.80
2004 Warrants granted	13,355,866	1.69
2004 Warrants exercised	(3,533,348)	1.52
2004 Warrants expired	(540,578)	1.12
	-----	-----
Outstanding at December 31, 2004	21,618,229	\$ 1.14
	=====	=====

Note K - RECENTLY ISSUED ACCOUNTING STANDARDS

In November 2004, the FASB issued FAS No. 151, "An amendment of ARB No. 43, Chapter 4" This statement amends the guidance in ARB No. 43, Chapter 4, "Inventory Pricing", to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). This Statement requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal". In addition, this statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The statement is effective for fiscal years beginning after June 15, 2005 with early adoption permitted. eMagin is currently evaluating the requirements and impact of FAS No. 151, but at this point does not believe the adoption will have a material impact on its financial position, cash flows or results of operations.

FASB Statement 123R (Revision 2004), "Share-Based Payment", was issued in December 2004 and is effective for public entities that file as small business issuers as of the first interim or annual reporting period that begins after December 31, 2005. The new statement requires all share-based payments to employees to be recognized in the financial statements based on their fair values. The Company currently accounts for its share-based payments to employees under the intrinsic value method of accounting set forth in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issues to Employees". Additionally, the company complies with the stock-based employer compensation disclosure requirements of SFAS No. 148, "Accounting for Stock-Based Compensation - Transition and Disclosure, an amendment of FASB Statement No. 123". The Company plans to adopt the new statement in its financial statements for the quarter ending March 31 2006. Although the impact cannot be ascertained at this time, the Company believes this will have a material impact on its financial statements and result of operations.

F-15

Note L - COMMITMENTS AND CONTINGENCIES

[1] Royalties:

The Company, in accordance with a royalty agreement, is obligated to make minimum annual royalty payments to a corporation commencing January 1, 2001. The minimum annual royalty, of \$31,500 per year, due under this agreement commences in the first year of the agreement, and increases to minimum royalty payments of \$125,000 in 2006. Under this agreement, the Company must pay a certain

## Edgar Filing: EMAGIN CORP - Form 10KSB

percentage of net sales of certain products, which percentages are defined in the agreement. The percentages are on a sliding scale depending on the amount of sales generated. Any minimum royalties paid may be credited against the amounts due based on the percentage of sales. The royalty agreement terminates upon the expiration of the last-to-expire issued patent.

For the years ended December 31, 2004 and 2003, royalty expense of approximately \$193,775 and \$115,000 respectively, is included in cost of goods sold.

### [2] Operating leases:

The Company leases certain office facilities and office, lab and factory equipment under operating leases expiring through 2009. Certain leases provide for payments of monthly operating expenses. The future minimum lease payments through 2009 are as follows:

Year ending December 31,	
2005	\$ 953,436
2006	902,085
2007	929,148
2008	957,022
2009	253,658
	-----
Total	\$ 3,995,350
	=====

Rent expense for the years ended December 31, 2004 and 2003 was approximately \$769,766 and \$839,738, respectively. eMagin's lease with IBM expires in March 2009. eMagin's lease with Redson Building Partners was paid in common stock valued at \$48,000 for the 2004 rent and expires May 31, 2005.

### [3] Employee benefit plans:

eMagin has a defined contribution plan (the 401(k) Plan) under Section 401(k) of the Internal Revenue Code, which is available to all employees who meet established eligibility requirements. Employee contributions are generally limited to 15% of the employee's compensation. Under the provisions of the 401(k) Plan, eMagin may match a portion of the participating employees' contributions. There was no matching contribution to the 401(k) Plan for the years ended December 31, 2004 and 2003.

### [4] Legal proceedings

The Company is subject to various claims and proceedings in the ordinary course of business. The Company believes that none of these current claims or proceedings individually or in the aggregate, will have a material adverse impact on the Company; results of operations, cash flows or financial condition, although it can make no assurances in this regard.

### Note M - Related Party Transactions

On February 27, 2002, eMagin Corporation and a group of several accredited institutional and individual investors entered into a Securities Purchase Agreement providing for the issuance and sale to the investors of (i) an aggregate of approximately 3.6 million shares of our common stock, and (ii) warrants exercisable for a period of three (3) years from the Closing Date for an aggregate of approximately 1.4 million shares of eMagin's common stock (subject to certain customary anti-dilution adjustments) (see Note I). Rainbow Gate Corporation, a corporation in which Mortimer D.A. Sackler is the investment manager, invested \$500,000 in the Company under the agreement and received pursuant to such investment (i) 723,275 shares of eMagin's common stock, and

## Edgar Filing: EMAGIN CORP - Form 10KSB

(ii) warrants exercisable for 289,310 shares of eMagin's common stock. Mr. Sackler is currently a beneficial owner of more than five percent of the outstanding shares of eMagin's common stock.

On June 20, 2002, the Company entered into a \$0.2 million Secured Note Purchase Agreement with Mortimer D.A. Sackler (the "Bridge Note") (see Note F(c)). The secured note accrues interest at 11% per annum and was originally due to mature on June 30, 2003 and was amended as a result of a financing we completed in April 2003. The Company also granted warrants, exercisable for a period of five years, to purchase 300,000 shares of common stock with an exercise price of

F-16

\$0.4257 per share to the investor, provided, however, this warrant may not be exercised by the investor so long as the investor is the beneficial owner, directly or indirectly, of more than ten percent (10%) of the common stock of eMagin for purposes of Section 16 of the Securities Exchange Act 1934. The fair value of the warrants issued to this Investor, which approximated \$84,000, has been recorded as original issue discount, resulting in a reduction in the carrying value of this debt. The original issue discount was amortized into interest expense over the period of the debt. Pursuant to the April 2003 financing described below, the investor agreed, to (a) amend the secured note issued to them, (b) terminate the security agreement dated June 20, 2002 that was entered into in connection with the purchase of the original secured notes and allow the investors to enter into a new security agreement with him on a pari passu basis in order for eMagin to continue its operations as a developer of virtual imaging technology, and (c) simultaneously participate in the new financing. The amendments to the note included (i) amending the note issued on June 20, 2002 so as to provide that the note shall be convertible and will have the same conversion price as the notes issued pursuant to the April 2003 secured note purchase agreement, (ii) extending the maturity dates of the note from June 30, 2003 to November 1, 2005, and (iii) revising and clarifying certain of the other terms and conditions of the note, including provisions relating to interest payments, conversions, default and assignment of the note.

On April 25, 2003, eMagin Corporation and a group of several accredited institutional and individual investors (collectively, the "Investors") entered into a Restructuring Agreement whereby Investors agreed to lend eMagin \$6,000,000 in exchange for (i) the issuance of \$6,000,000 principal amount of 9.00% Secured Convertible Promissory Notes due on November 1, 2005 (the "Secured

Notes") and (ii) Warrants (the "Warrants") to purchase an aggregate of 7,749,921 shares of common stock of eMagin (subject to certain customary anti-dilution adjustments), which Warrants are exercisable for a period of three (3) years. Mr. Rivkin, who at the time of the transaction was a member of our Board of Directors, participated as an investor in the transaction and invested \$125,000 in the Company. In return for such investment, Mr. Rivkin received (i) a Secured Convertible Promissory Note in an aggregate principal amount of \$125,000, and (ii) warrants exercisable for 161,456 shares of eMagin's common shares. In addition, Stillwater LLC, an entity controlled by Mr. Mortimer D.A. Sackler, agreed to invest an aggregate of \$2,600,000 under the transaction and will receive (i) Secured Convertible Promissory Notes in an aggregate principal amount of \$2,600,000, and (ii) warrants exercisable for 3,358,300 of our common shares. As part of the transactions, Messrs. Sackler and Rivkin, who were the holders of an aggregate of \$1,325,000 principal amount of secured notes that were purchased pursuant to a secured note purchase agreement entered into as of November 27, 2001 (collectively, the "Original Secured Notes"), and Mr. Sackler, who additionally was the holder of a \$200,000 principal Bridge Note, agreed to (a) amend their respective Original Secured Notes and Bridge Note issued to them, (b) terminate the Security Agreement dated November 20, 2001 that was entered into in connection with the purchase of the Original Secured Notes and



## Edgar Filing: EMAGIN CORP - Form 10KSB

the Security Agreements dated June 20, 2002 that were entered into in connection with the purchase of the Bridge Note and allow the new investors to enter into a New Security Agreement (as defined below) with them on a pari passu basis in order for the Company to continue its operations as a developer of virtual imaging technology. The amendments to the Original Secured Notes and Bridge Note included (i) amending the Bridge Note so as to provide that the Bridge Note shall be convertible and will have the same conversion price as the Notes issued pursuant to the Secured Note Purchase Agreement, (ii) extending the maturity dates of the Original Secured Notes and Bridge Note from June 30, 2003 to November 1, 2005, and (iii) revising and clarifying certain of the other terms and conditions of the Original Secured Notes and Bridge Note, including provisions relating to interest payments, conversions, default and assignments of the Original Secured Notes and Bridge Note. On April 25, 2003, Mr. Sackler transferred all of his holdings in the Company to Stillwater LLC, a limited liability company in which Mr. Sackler is the sole member.

eMagin is party to a financial advisory and investment banking agreement with Larkspur Capital Corporation. Paul Cronson, a director of eMagin, is a founder and shareholder of Larkspur Capital Corporation. Larkspur Capital Corporation received as compensation for financial advisory and investment banking services in connection with the January 2004 private placement a cash fee of 6 3/4% of the funds raised and warrants to purchase eMagin shares of common stock equal to 2.5% of the cash netted to eMagin. \$283,503 and 43,651 common stock purchase warrants exercisable at \$2.41 per share which expire in January 2009, were paid under the terms of the agreement.

A family member of an outside director of eMagin participated in the Securities Purchase Agreement in January 2004's private placement in the amount of \$90,000.

eMagin is party to a financial advisory and investment banking agreement with Larkspur Capital Corporation "Larkspur". Paul Cronson, an outside director of eMagin, is a founder and shareholder of Larkspur. Larkspur received as compensation for financial advisory and investment banking services in connection with the January 2004 private placement a cash fee of 6 3/4% of the funds raised and warrants to purchase eMagin shares of common stock equal to 2.5% of the cash netted to eMagin. \$283,503 and 43,651 common stock purchase warrants exercisable at \$2.41 per share which expire in January 2009, were paid under the terms of the agreement.

F-17

Stillwater LLC, a limited liability company and a beneficial owner of more than five percent of the outstanding shares of eMagin's common stock, held an aggregate of \$4 million of the notes converted in February 2004. Ginola Limited, a beneficial owner of more than five percent of the outstanding shares of eMagin's common stock, held an aggregate of \$1.3 million of the notes which were converted.

An outside director of eMagin, held \$250,000 of the notes converted.

A family member of an outside director of eMagin participated in the re-pricing of the Securities Purchase Agreement in August. 2,099,894 warrants were re-priced and exercised. The family member re-priced and exercised 25,862 B warrants and 23,684 C warrants.

Paul Cronson, an outside director of eMagin, is a founder and shareholder of Larkspur was engaged as advisor in connection with the sale of the securities sold in October 2004 and received a fee of \$136,500.

Note - N Concentrations

In 2004, we had two customers that individually accounted for more than 10% of

## Edgar Filing: EMAGIN CORP - Form 10KSB

our total sales. One customer accounted for 17% of net revenues and the other accounted for 15%. For the year ended December 31, 2003, one company represented approximately 21% of net revenues.

For the year ended December 31, 2004, approximately 78% of the Company's net revenues were made to customers in the United States and approximately 22% of the Company's net revenues were made to international customers. For the year ended December 31, 2003, approximately 70% of the Company's net revenues were made to customers in the United States and approximately 30% of the Company's net revenues were made to international customers.

At December 31, 2004, there were 3 customers which comprised 50% of the outstanding accounts receivable.

The Company purchases principally all of its silicon wafers from Taiwan Semiconductor Manufacturing Company Ltd.

F-18

### ITEM 8. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

### ITEM 8A. CONTROLS AND PROCEDURES

As of the end of the period covered by this report, we conducted an evaluation, under the supervision and with the participation of our chief executive officer and chief financial officer of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Exchange Act). Based upon this evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. There was no change in our internal controls or in other factors that could affect these controls during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

### ITEM 8B. OTHER INFORMATION

None.

36

## PART III

### ITEM 9. DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS; COMPLIANCE WITH SECTION 16(a) OF THE EXCHANGE ACT.

Our executive officers and directors, and their ages and positions are:

Name	Age	Position
Gary W. Jones	49	Chairman, Chief Executive Officer
John Atherly	46	Chief Financial Officer
Dr. K. C. Park	67	Executive Vice President, Interna
Susan K. Jones	53	Chief Marketing and Strategy Offi
Claude Charles (1)	67	Director

## Edgar Filing: EMAGIN CORP - Form 10KSB

Paul Cronson (1)	47	Director
Jacob (Jack) Goldman (2*) (3)	82	Director
Rear Admiral Thomas Paulsen, USN (Ret.) (2)	68	Director
Jack Rivkin (1*) (3*)	64	Director
Dr. Jill Wittels (2)	55	Director

- (1) Audit Committee
- (2) Governance and Nominating Committee
- (3) Compensation Committee
- (\* ) Committee chairman

Gary W. Jones has served as Chairman, Chief Executive Officer, and President of eMagin since 1992, and as Acting Chief Financial Officer from August 2002 to June 2004. Mr. Jones has over 20 years of experience in both public and private companies in the areas of business development, high volume manufacturing, product development, research, and marketing. Prior to founding FED Corporation/eMagin Corporation, Mr. Jones served as Director of the Device Development and Processing division at MCNC Center for Microelectronics in North Carolina from 1985 to 1992. From 1977 to 1985 Mr. Jones managed both semiconductor manufacturing and research and development programs at Texas Instruments. Mr. Jones received a B.S. in electrical engineering and physics from Purdue University. Mr. Jones has served as a member of the Executive Committee of the Board of the United States Display Consortium.

John Atherly has served as Chief Financial Officer since June of 2004. Before joining eMagin Corporation, Mr. Atherly worked for Click2learn, Inc., a NASDAQ listed enterprise Software Company from 1990 - 2004. He held the positions of Vice President of Finance and CFO for approximately 8 years and prior to that held the positions of Director of Finance and Controller. During his 14 years with Click2learn Mr. Atherly managed the firm's finance and administration, human resources, IT and manufacturing organizations. From 1987 to 1990, Mr. Atherly was a Finance and Operations Manager at MicroDisk Services, a manufacturing firm serving the software industry. Mr. Atherly holds a BA in Business Administration from the University of Washington.

Dr. K.C. Park was re-named Executive Vice President of International Operations in 2004. Previously he held the position of President of our wholly owned subsidiary, Virtual Vision, Inc., from 2002 to 2004 after serving as our Executive Vice President of International Operations from 1998 to 2002. During his twenty-seven year tenure with IBM he managed flat panel display and semiconductor programs at the IBM Watson Research Center, directed the corporate display programs at the IBM Corporate Headquarters, and established Technical Operations in IBM Korea and served as Senior Managing Director. Dr. Park joined LG Electronics in 1993 as Executive Vice President and initiated and led corporate-wide efforts to shift the major emphasis of the corporation into multimedia. Dr. Park holds a B.S. from the University of Minnesota, an M.S. from MIT, and a Ph.D. in Solid State Chemistry from the University of Minnesota and an MBA from New York University.

Susan K. Jones has served as Executive Vice President and Secretary since 1992, and assumed responsibility of Chief Marketing and Strategy Officer in 2001. Ms. Jones has 25 years of industrial experience, including senior research, management, and marketing assignments at Texas Instruments and Merck, Sharp, & Dohme Pharmaceuticals. Ms. Jones serves on the boards or chairs committees for industry organizations including IEEE, SPIE, and SID. Ms. Jones served as a director of eMagin Corporation from 1993 to 2000 and is a director of Virtual Vision, Inc. Ms. Jones graduated from Lamar University with a B.S. in chemistry and biology, holds more than a dozen patents, and has authored more than 100 papers and talks.

## Edgar Filing: EMAGIN CORP - Form 10KSB

Claude Charles has served as a director since April of 2000. Mr. Charles has served as President of Great Tangley Corporation since 1999. From 1996 to 1998 Mr. Charles was Chairman of Equinox Group Holdings in Singapore. Mr. Charles has also served as a director and in senior executive positions at SG Warburg and Co. Ltd., Peregrine Investment Holdings, Trident International Finance Ltd., and Dow Banking Corporation. Mr. Charles holds a B.S. in economics from the Wharton School at the University of Pennsylvania and a M.S. in international finance from Columbia University.

Paul Cronson has served as a director since July of 2003. Mr. Cronson is Managing Director of Larkspur Capital Corporation, which he founded in 1992. Larkspur is a broker dealer that is a member of the National Association of Securities Dealers and advises companies seeking private equity or debt. Mr. Cronson's career in finance began in 1979 at Laidlaw, Adams Peck where he worked in asset management and corporate finance. From 1983 to 1985, Mr. Cronson worked with Samuel Montagu Co., Inc. in London, where he marketed eurobond issuers and structured transactions. Subsequently from 1985 to 1987, he was employed by Chase Investment Bank Ltd., where he structured international debt securities and he developed "synthetic asset" products using derivatives. Returning to the U.S., he joined Peter Sharp Co., where he managed a real estate portfolio, structured financings and assisted with capital market investments from until 1992. Mr. Cronson received his BA from Columbia College in 1979, and his MBA from Columbia University School of Business Administration in 1982. He is on the Board of Umbanet, in New York City, a private company specializing in email based distributed applications and secure messaging.

Dr. Jack Goldman joined our board of directors in February of 2003. Dr. Goldman is the retired senior vice-president for R&D and chief technical officer of the Xerox Corporation. While at Xerox, he founded and directed the celebrated Xerox PARC laboratory. Prior to joining Xerox, Dr. Goldman was Director of Ford Motor Company's Scientific Research Laboratory. He also served as Visiting Edwin Webster Professor at MIT. Dr. Goldman presently serves on the Boards of Directors of Umbanet Inc. and Medis Technologies Inc., and he has served on the Boards of Xerox, General Instrument Corp., United Brands, Intermagnetics General, GAF and Bank Leumi USA. He has also been active in government and professional advisory roles including service on the US Dept. of Commerce Technical Advisory Board, chairman of Statutory Visiting Committee of The National Bureau of Standards (National Institute of Standards and Technology), vice-president of the American Association for the Advancement of Science and president of the Connecticut Academy of Science and Engineering.

Admiral Thomas Paulsen has served as a director since July 2003. Admiral Thomas Paulsen served for over 34 years in the US Navy in Command Control, Communications and Intelligence (C3I), Telecommunications, Network Systems Operations, Computers and Computer Systems Operations until his retirement in 1994 as a Rear Admiral. He then served as Chief Information Officer for Williams Telecommunications. Admiral Paulsen has served as a director Umbanet, Inc. since 2002. Since 2000, Admiral Paulsen has served on the Board of Governors of the Institute of Knowledge Management, George Washington University. Since 1994, he has served as the Chairman of the Advisory Board and President Emeritus of the Center for Advanced Technologies (CAT) and a Managing Partner on the National Knowledge and Intellectual Property Management Taskforce, a not-for-profit company headquartered in Dallas, Texas, and is a member of the Board of Governors for the Japanese American National Museum, Los Angeles, California.

Jack Rivkin has served as a director since June of 1996. Mr. Rivkin is Executive Vice President and Chief Investment Officer of Neuberger Berman, a Lehman Brothers Company. He previously served as Executive Vice President of Citigroup Investments Inc., through which the Travelers Group investments in the Company were managed. He also served as Vice Chairman and a director of Smith

## Edgar Filing: EMAGIN CORP - Form 10KSB

Barney, and held positions at Procter and Gamble, Mitchell Hutchins, Paine Webber and Lehman Brothers. Mr. Rivkin holds an engineering degree in metallurgy from the Colorado School of Mines and an MBA from Harvard University.

38

Dr. Jill Wittels has served as a director since July 2003. Since February 2001, Dr. Wittels has been the Corporate Vice President, Business Development for L-3 Communications, a merchant supplier of intelligence, surveillance and reconnaissance systems and products, secure communications systems and products, avionics and ocean products, training devices and services, microwave components and telemetry, instrumentations, space and navigation products. Dr. Wittels has over 25 years of management, engineering and leadership experience. Prior to L-3 Communications, Dr. Wittels worked for 21 years with BAE Systems and its predecessor companies, including Lockheed Martin, Loral and Honeywell. Most recently, she served as vice president and general manager of BAE Systems' Information and Electronic Warfare Systems/Infrared and Imaging Systems division. Dr. Wittels began her career as a systems engineer and has also served as a Congressional Fellow for the American Physical Society, a research associate at Massachusetts Institute of Technology and a senior visiting scientist for the National Academy of Sciences. Dr. Wittels received a Bachelor of Science degree in Physics from MIT in 1970 and received a PhD in Physics from MIT in 1975. She serves on the Board of Overseers for the Department of Energy's Fermi National Accelerator Lab, is a member of the American Physical Society and a member of the American Astronomical Society. Dr. Wittels presently serves on the Boards of Directors of Innovative Micro Technology Inc. and of Millivision Inc.

General Information Concerning the Board of Directors. The Board of Directors of eMagin is classified into three classes: Class A, Class B and Class C. Each Class A director will hold office until the 2005 Annual Meeting of our stockholders. Currently, Mr. Gary Jones and Mr. Jack Rivkin are the Class A directors. Each Class B director will hold office until the 2006 Annual Meeting. Mr. Paul Cronson and Admiral Thomas Paulsen are Class B directors. Class C directors will hold office until the 2004 Annual Meeting. Currently, Mr. Claude Charles, Dr. Jill Wittels and Dr. Jacob Goldman are the Class C directors. In each case, each director will hold office until his successor is duly elected or appointed and qualified in the manner provided in eMagin's Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws, or as otherwise provided by applicable law.

Additional information required by this item will be contained under the captions "Election of Class C Directors", "Section 16(a) Beneficial Ownership Reporting Compliance" and "Executive Compensation" in eMagin's definitive proxy statement with respect to our 2004 Annual Meeting of Stockholders to be filed with the SEC (the "Proxy Statement"), and is hereby incorporated by reference.

### Code of Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer. The Code of Business Conduct and Ethics will be posted on our website at <http://www.emagin.com/investors>.

We intend to satisfy the disclosure requirement under Item 10 of Form 8-K regarding an amendment to, or waiver from, a provision of this Code of Business Conduct and Ethics by posting such information on our website, at the address and location specified above and, to the extent required by the listing standards of the American Stock Exchange, by filing a Current Report on Form 8-K with the SEC, disclosing such information.

Edgar Filing: EMAGIN CORP - Form 10KSB

ITEM 10. EXECUTIVE COMPENSATION

Summary compensation table for named executive officers  
 The following table provides information about the total compensation for services in all capacities to the Company or its subsidiary for the last three fiscal years of those persons who at December 31, 2004, were (i) the Chief Executive Officer of the Company and (ii) the other most highly compensated executive officers of the Company whose total annual salary and bonus exceeded \$100,000 (collectively, the "named executive officers").

Name and Positions	Year	Salary	Bonus	Other Annual Compensation
Gary W. Jones President, Chief Executive Officer Chairman, Director	2004	305,090	-	(1) 46,636
	2003	305,090	-	-
	2002	297,260	-	-
Susan K. Jones Executive Vice President, Chief Strategy and Marketing Officer, and Secretary	2004	245,933	-	(2) -
	2003	245,933	-	-
	2002	239,621	-	-
K.C. Park Executive Vice President of International Operations	2004	168,000	-	(3) 17,200
	2003	168,000	-	-
	2002	175,000	-	-
John Atherly Chief Financial Officer	2004	105,000	-	(4) -
	2003	N/A	-	-
	2002	N/A	-	-
Rick Haug Vice President, Display Manufacturing Operations	2004	156,000	-	(5) -
	2003	156,000	-	(5) -
	2002	156,000	-	(5) -

(1) In 2004, Mr. Jones was paid a base salary 305,090, the balance of deferred pay in the amount of \$140,798, as well as a reimbursement for relocation expenses of \$46,636. Mr. Jones was paid the balance of his deferred pay through the application of these amounts to the exercise of options. In May 2004, Mr. Jones was granted 1,200,000 shares as part of a company-wide bonus program.

(2) In 2004, Ms. Jones was paid a base salary of \$245,933 and the balance of deferred pay in the amount of \$110,134. Ms. Jones was paid the balance of her deferred pay through the application of these amounts to the exercise of options. In May 2004, Ms. Jones was granted 750,000 shares as part of a company-wide bonus program.

(3) In 2004, Dr. Park was paid a base salary of \$168,000, the balance of deferred pay in the amount of \$63,190, as well as a reimbursement for relocation expenses of \$17,200. Mr. Park was paid the balance of his deferred pay through the application of these amounts to the exercise of options. In May 2004, Dr. Park was granted 300,000 shares as part of a company-wide bonus program.

## Edgar Filing: EMAGIN CORP - Form 10KSB

(4) Mr. Atherly's base salary is \$210,00. He joined eMagin Corporation in June 2004 and was paid a salary of \$105,000. He was granted 750,000 shares as part of his hiring package. Of these 750,000 option shares granted, 500,000 shares vest quarterly over a period of five years. 250,000 shares are target incentive options based on successful completion of four consecutive EBITA positive quarters.

(5) In 2004, Mr. Haug was paid a base salary of \$156,000 and the balance of deferred pay in the amount of \$44,835. \$10,000 of which was paid through the application of this amount to the exercise of options. In 2003, he earned a total of \$156,000 where he received partial payment of his salary of \$126,111 plus a partial payment of deferred 2002 salary of \$29,889. In 2003, Mr. Haug was granted 164,394 option shares for continuing to defer the balance of his pay. In 2002, Mr. Haug earned a total of \$156,000 of which \$42,287 was deferred. In October 2002, Mr. Haug was awarded 617,228 option shares which were issued in July of 2003 after shareholder approval.

40

### Options/SARs Grants During Last Fiscal Year

The following table provides information related to options granted to our named executive officers during the fiscal year ended December 31, 2004.

Name	Number of Securities Underlying Options Granted	% of Total Options Granted in Fiscal 2004	Exercise Price (\$/Share)	Expiration Date
Gary W. Jones (1)	1,200,000	18%	\$1.81	5/17/04
Susan K Jones (1)	750,000	11%	\$1.81	5/17/04
John Atherly (2)	500,000	7%	\$1.69	6/16/04
John Atherly (2)	250,000	4%	N/A (3)	6/16/04
Dr. K.C. Park (1)	300,000	4%	\$1.79	5/10/04
Rick Haug (1)	120,000	2%	\$1.69	6/16/04

- (1) Options awarded as part of a company-wide bonus program.  
 (2) Options awarded as inducement option compensation award to new employees.  
 (3) Issued as a performance based award. The named employee must achieve EBITDA profitability for 4 consecutive quarters with the options priced at the most recent American Stock Exchange closing trade price of the stock before the accomplishment is reported in a 10K or 10Q.

### Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option Value

The following table provides information regarding the aggregate number of options exercised during the fiscal year ended December 31, 2004 by each of the named executive officers and the number of shares subject to both exercisable and unexercisable stock options as of December 31, 2004. The common stock price at December 31, 2004 was \$1.19 per share.

Shares Acquired on	Value	# of Securities Underlying Unexercised Options at FY-End	Value of In-the-Money Options
--------------------	-------	--	-------------------------------

Edgar Filing: EMAGIN CORP - Form 10KSB

=====	Exercise =====	Realized (1) =====	Exercisable =====	Unexercisable =====	Exercisable =====
Gary Jones	2,792,666	\$3,870,534	1,460,604	1,200,000	\$ 911,469
Susan K. Jones	1,531,796	\$2,123,445	1,648,377	750,000	\$ 604,641
Dr. K.C. Park	215,057	\$ 177,467	1,027,318	300,000	\$ 700,603
Richard Haug	91,777	\$ 171,164	920,774	120,000	\$ 621,583
John Atherly (2)	-	\$ -	-	750,000	\$ -

(1) Value Realized is calculated based upon the spread between the market value of the common stock on the date of exercise minus the exercise price. The Company received \$1,175,447 upon exercise of the options.

(2) Performance based award is not exercisable at December 31, 2004. The value of this award cannot be ascertained at this date due to the fact that the exercise price will not be determined until the target is reached.

Compliance with internal Revenue Code Section 162(m) disallows a tax deduction to publicly held companies for compensation paid to certain of their executive officers to the extent that such compensation exceeds \$1.0 million per covered officer in any fiscal year. The limitation applies only to compensation that is not qualified performance based compensation under the IRS code.

41

ITEM 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The other information required by this Item will be contained in the Proxy Statement under the caption "Security Ownership of Certain Beneficial Owners and Management" and is hereby incorporated by reference thereto.

ITEM 12. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Information required by this item will be contained in the Proxy Statement under the caption "Certain Transactions", and is hereby incorporated by reference thereto.

42

ITEM 13. EXHIBITS, LIST, AND REPORTS ON FORM 8-K

(a) Index to Exhibits

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 Articles of Incorporation (incorporated by reference to exhibit 99.2 to the Registrant's Definitive Proxy Statement filed on June 14, 2001).



## Edgar Filing: EMAGIN CORP - Form 10KSB

- 3.2 Amended Articles of Incorporation (incorporated by reference to exhibit A to the Registrant's Definitive Proxy Statement filed on June 13, 2003).
- 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).
- 4.1 Form of Warrant dated as of April 25, 2003 (incorporated by reference to exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on April 28, 2003).
- 4.2 Form of Series A Common Stock Purchase Warrant dated as of January 9, 2004 (incorporated by reference to exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on January 9, 2004).
- 4.3 Form of Series B Common Stock Purchase Warrant dated as of January 9, 2004 (incorporated by reference to exhibit 4.2 to the Registrant's Current Report on Form 8-K filed on January 9, 2004).
- 4.4 Form of Series C Common Stock Purchase Warrant dated as of January 9, 2004 (incorporated by reference to exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on January 9, 2004).
- 4.5 Form of Series D Warrant (incorporated by reference to exhibit 4.1 to the Registrant's current report on Form 8-K filed on March 4, 2004).
- 4.6 Form of Series E Warrant (incorporated by reference to exhibit 4.2 to the Registrant's current report on Form 8-K filed on March 4, 2004).
- 10.1 2000 Stock Option Plan, (incorporated by reference to exhibit 99.1 to the Registrant's Registration Statement on Form S-8 filed on March 14, 2000).\*
- 10.2 Form of Agreement for Stock Option Grant pursuant to 2003 Stock Option Plan (incorporated by reference to exhibit 99.2 to the Registrant's Registration Statement on Form S-8 filed on March 14, 2000).\*
- 10.3 Nonexclusive Field of Use License Agreement relating to OLED Technology for miniature, high resolution displays between the Eastman Kodak Company and FED Corporation dated March 29, 1999 (incorporated by reference to exhibit 10.6 to the Registrant's Annual Report on Form 10-K/A for the year ended December 31, 2000 filed on April 30, 2001).
- 10.4 Amendment Number 1 to the Nonexclusive Field of Use License Agreement relating to the OLED Technology for miniature, high resolution displays between the Eastman Kodak Company and FED Corporation dated March 16, 2000 (incorporated by reference to exhibit 10.7 to the Registrant's Annual Report on Form 10-K/A for the year ended December 31, 2000 filed on April 30, 2001).
- 10.5 Lease between International Business Machines Corporation and FED Corporation dated May 28, 1999 (incorporated by reference to exhibit 10.9 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 filed on March 30, 2001),
- 10.6 Amendment Number 1 to the Lease between International Business Machines Corporation and FED Corporation dated July 9, 1999

## Edgar Filing: EMAGIN CORP - Form 10KSB

(incorporated by reference to exhibit 10.8 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 filed on March 30, 2001).

- 10.7 Amendment Number 2 to the Lease between International Business Machines Corporation and FED Corporation dated January 29, 2001 (incorporated by reference to exhibit 10.11 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 filed on March 30, 2001).
- 10.8 Amendment Number 3 to Lease between International Business Machines Corporation and FED Corporation dated May 28, 2002.
- 10.9 Amendment Number 4 to Lease between International Business Machines Corporation and FED Corporation dated December 14, 2004.
- 10.10 Registration Rights Agreement dated as of April 25, 2003 by and among eMagin and certain initial investors identified on the signature pages thereto (incorporated by reference to exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on April 28, 2003).
- 10.11 Securities Purchase Agreement dated as of January 9, 2004 by and among eMagin and the investors identified on the signature pages thereto (incorporated by reference to exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 9, 2004).
- 10.12 Registration Rights Agreement dated as of January 9, 2004 by and among eMagin and certain initial investors identified on the signature pages thereto (incorporated by reference to exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on January 9, 2004).
- 10.13 Master Amendment Agreement dated as of February 17, 2004 by and among eMagin and the investors identified on the signature pages thereto (incorporated by reference to exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on March 4, 2004).
- 10.14 Registration Rights Agreement dated as of February 17, 2004 by and among eMagin and certain initial investors identified on the signature pages thereto (incorporated by reference to exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on March 4, 2004).
- 10.15 Letter Agreement amending the Master Amendment Agreement dated as of March 1, 2004 by and among eMagin and the parties to the Master Amendment Agreement (incorporated by reference to exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on March 4, 2004).
- 10.16 Lease between International Business Machines Corporation and FED Corporation dated May 28, 1999, as filed in the Registrant's Form 10-K/A for the year ended December 31, 2000 incorporated by reference herein.
- 10.17 Amendment Number 2 to the Lease between International Business Machines Corporation and FED Corporation dated January 29, 2001, as filed in the Registrant's Form 10-K/A for the year ended December 31, 2000 incorporated by reference herein.
- 10.18 Secured Note Purchase Agreement entered into as of November 27, 2001, by and among eMagin Corporation and certain investors named therein, as filed in the Registrant's Form 8-K dated December 18, 2001 incorporated herein by reference.

## Edgar Filing: EMAGIN CORP - Form 10KSB

- 10.19 Securities Purchase Agreement dated as of April 25, 2003 by and among eMagin and the investors identified on the signature pages thereto, filed April 28, 2003, as filed in the Registrant's Form 8-K incorporated herein by reference.
- 10.20 Registration Rights Agreement dated as of April 25, 2003 by and among eMagin and certain initial investors identified on the signature pages thereto filed April 28, 2003, as filed in the Registrant's Form 8-K incorporated herein by reference.
- 10.21 Securities Purchase Agreement dated as of January 9, 2004 by and among eMagin and the investors identified on the signature pages thereto, filed January 9, 2004, as filed in the Registrant's Form 8-K incorporated herein by reference.
- 10.22 Registration Rights Agreement dated as of January 9, 2004 by and among eMagin and certain initial investors identified on the signature pages thereto. Incorporated herein by reference to our January 9, 2004 Form 8-K.
- 10.23 Master Amendment Agreement dated as of February 17, 2004 by and among eMagin and the investors identified on the signature pages thereto, filed March 4, 2004, as filed in the Registrant's Form 8-K incorporated herein by reference.
- 10.24 Registration Rights Agreement dated as of February 17, 2004 by and among eMagin and certain initial investors identified on the signature pages thereto, filed March 4, 2004, as filed in the Registrant's Form 8-K incorporated herein by reference.
- 10.25 Letter Agreement amending the Master Amendment Agreement dated as of March 1, 2004 by and among eMagin and the parties to the Master Amendment Agreement, filed March 4, 2004, as filed in the Registrant's Form 8-K incorporated herein by reference.
- 23.1 Consent of Independent Certified Public Accountant.
- 31.1 Certification by Chief Executive Officer pursuant to Sarbanes Oxley Section 302.
- 31.2 Certification by Chief Financial Officer pursuant to Sarbanes Oxley Section 302.
- 32.1 Certification by Chief Executive Officer pursuant to 18 U.S. C. Section 1350.
- 32.2 Certification by Chief Financial Officer pursuant to 18 U.S. C. Section 1350.

\* Each of the Exhibits noted by an asterisk is a management compensatory plan or arrangement.

### ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this item will be contained in the Proxy Statement under the caption "Auditors' Fees," and is hereby incorporated by reference thereto.

Edgar Filing: EMAGIN CORP - Form 10KSB

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this day \_\_\_ of April, 2005.

EMAGIN CORPORATION

BY: /s/ Gary Jones  
-----  
Gary Jones  
CHIEF EXECUTIVE OFFICER,  
PRESIDENT

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

NAME	TITLE	DATE
/s/ Gary Jones ----- Gary Jones	President, Chief Executive Officer, and Director	April 15, 2005
----- John Atherly	Chief Financial Officer	April 15, 2005
/s/ Claude Charles ----- Claude Charles	Director	April 15, 2005
/s/ Paul Cronson ----- Paul Cronson	Director	April 15, 2005
----- Dr. Jacob E Goldman	Director	April 15, 2005
----- Thomas Paulsen	Director	April 15, 2005
/s/ Jack Rivkin ----- Jack Rivkin	Director	April 15, 2005
/s/ Jill Wittels ----- Jill Wittels	Director	April 15, 2005