

UNIVERSAL DISPLAY CORP \PA\  
Form 10-K  
March 14, 2008

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2007

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT  
OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 1-12031

UNIVERSAL DISPLAY CORPORATION  
(Exact name of registrant as specified in its charter)

Pennsylvania

23-2372688

(State or other jurisdiction of incorporation or organization)  
Employer Identification No.)

(I.R.S.

375 Phillips Boulevard, Ewing, New  
Jersey  
(Address of principal executive offices)

08618

(Zip Code)

Registrant's telephone number, including area code:

(609) 671-0980

Securities registered pursuant to Section 12(b) of the Act:

None

Securities registered pursuant to Section 12(g) of the Act:  
\$0.01 per share)

Common Stock (par value

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
Yes No X

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the



TABLE OF CONTENTS

PART I

ITEM 1. BUSINESS.....	2.....
ITEM 1A. RISK FACTORS.....	13.....
ITEM 1B. UNRESOLVED STAFF COMMENTS.....	19.....
ITEM 2. LEGAL PROCEEDINGS.....	19.....
ITEM 3. PROPERTIES.....	19.....
ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.....	20.....

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.....	22.....
ITEM 6. SELECTED FINANCIAL DATA .....	24.....
ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS .....	24.....
ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.....	31.....
ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA .....	31.....
ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.....	31.....
ITEM 9A. CONTROLS AND PROCEDURES .....	31.....
ITEM 9B. OTHER INFORMATION.....	32.....

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.....	32.....
ITEM 11. EXECUTIVE COMPENSATION .....	32.....
ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS .....	32.....
ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE .....	32.....

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES	
.....	33

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	
.....	33

CAUTIONARY STATEMENT  
CONCERNING FORWARD-LOOKING STATEMENTS

This report and the documents incorporated by reference in this report contain some “forward-looking statements.” Forward-looking statements concern possible or assumed future events, results and business outcomes. These statements often include words such as “believe,” “expect,” “anticipate,” “intend,” “plan,” “estimate,” “seek,” “will,” “may” expressions. These statements are based on assumptions that we have made in light of our experience in the industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances.

As you read and consider this report, you should not place undue reliance on any forward-looking statements. You should understand that these statements involve substantial risk and uncertainty and are not guarantees of future performance or results. They depend on many factors that are discussed further under Item 1A below (Risk Factors), including:

- the outcomes of our ongoing and future research and development activities, and those of others, relating to organic light emitting diode (OLED) technologies and materials;
- our ability to access future OLED technology developments of our academic and commercial research partners;
- the potential commercial applications of and future demand for our OLED technologies and materials, and of OLED products in general;
  - our ability to form and continue strategic relationships with manufacturers of OLED products;
- successful commercialization of products incorporating our OLED technologies and materials by OLED manufacturers, and their continued willingness to utilize our OLED technologies and materials;
- the comparative advantages and disadvantages of our OLED technologies and materials versus competing technologies and materials currently on the market;
  - the nature and potential advantages of any competing technologies that may be developed in the future;
    - our ability to compete against third parties with resources greater than ours;
- our ability to maintain and improve our competitive position following the expiration of our fundamental OLED patents;
- the adequacy of protections afforded to us by the patents that we own or license and the cost to us of maintaining and enforcing those patents;
- our ability to obtain, expand and maintain patent protection in the future, and to protect our unpatentable intellectual property;
- our exposure to and ability to withstand third-party claims and challenges to our patents and other intellectual property rights;
- the payments that we expect to receive under our existing contracts with OLED manufacturers and the terms of contracts that we expect to enter into with OLED manufacturers in the future;

- our future capital requirements and our ability to obtain additional financing if and when needed; and
- our future OLED technology licensing and OLED material revenues and results of operations.

Changes or developments in any of these areas could affect our financial results or results of operations, and could cause actual results to differ materially from those contemplated by any forward-looking statements.

All forward-looking statements speak only as of the date of this report or the documents incorporated by reference, as the case may be. We do not undertake any duty to update any of these forward-looking statements to reflect events or circumstances after the date of this report, or to reflect the occurrence of unanticipated events.

## PART I

### ITEM 1. BUSINESS

#### Our Company

We are a leader in the research, development and commercialization of organic light emitting diode, or OLED, technologies and materials. OLEDs are thin, lightweight and power-efficient solid-state devices that emit light, making them highly suitable for use in full-color displays and as lighting products. We believe that OLED displays have begun to capture a share of the growing flat panel display market because they offer potential advantages over competing display technologies with respect to brightness, power efficiency, viewing angle, video response time and manufacturing cost. We also believe that OLED lighting products have the potential to replace many existing light sources in the future because of their high efficiency, excellent color rendering index, low heat generation and novel form factors. Our technology leadership and intellectual property position should enable us to share in the revenues from OLED displays and lighting products as they enter mainstream consumer markets.

Our primary business strategy is to further develop and license our proprietary OLED technologies to manufacturers of products for display applications, such as cell phones, MP3 players, laptop computers and televisions, and specialty and general lighting products. In support of this objective, we also develop new OLED materials and sell materials to those product manufacturers. Through our internal research and development efforts and our relationships with world-class partners such as Princeton University, the University of Southern California, the University of Michigan, Motorola, Inc. and PPG Industries, Inc., we have established a significant portfolio of proprietary OLED technologies and materials. We currently own, exclusively license or have the sole right to sublicense more than 825 patents issued and pending worldwide.

In 2007, four manufacturers purchased our proprietary OLED materials for use in commercial OLED display products: Samsung SDI Co., Ltd. of South Korea, Chi Mei EL Corporation of Taiwan, Tohoku Pioneer Corporation of Japan, and LG.Philips LCD Co., Ltd. of South Korea (now known as LG Display). We also have entered into a patent license agreement with Samsung SDI, under which we began receiving royalties in 2007 based on Samsung SDI's commencement of sales of active matrix OLED display products. In addition, we are working with many other companies who are evaluating our OLED technologies and materials for possible use in commercial OLED display and lighting products, including Seiko Epson Corporation, Konica Minolta Technology Center, Inc. and Sony Corporation.

#### Market Overview

##### The Flat Panel Display Market

Flat panel displays are essential for a wide variety of portable consumer electronics products, such as cell phones, MP3 players, digital cameras and laptop computers. Due to their narrow profile and light weight, flat panel displays have also become the display of choice for larger product applications, such as desktop computer monitors and televisions.

Liquid crystal displays, or LCDs, currently dominate the flat panel display market. However, we believe that OLED displays are an attractive alternative to LCDs because they offer a number of potential advantages, including:

- a thinner profile and lighter weight;
- higher brightness and contrast ratios, leading to sharper picture images and graphics;

- wider viewing angles;
- faster response times for video;
- higher operating efficiencies, thereby reducing energy consumption; and
  - lower cost manufacturing methods and materials.

Based on these characteristics, product manufacturers are starting to adopt small-area OLED displays for use in portable electronic devices, such as cell phones and MP3 players. These manufacturers are also working to develop OLED displays for use in larger applications, such as computer monitors and televisions. We believe that if these efforts are successful, they could result in sizeable markets for OLED displays.

In addition, due to the inherent transparency of organic materials and through the use of transparent electrode technology, OLEDs eventually may enable the production of transparent displays for use in products such as automotive windshields and windows with embedded displays. Organic materials also make technically possible the development of flexible displays for use in an entirely new set of product applications, such as display devices that can be rolled up for storage.



## The Solid-State Lighting Market

Traditional incandescent light bulbs are inefficient because they convert only about 5% of the energy they consume into visible light, with the rest emerging as heat. Fluorescent lamps use excited gases, or plasmas, to achieve a higher energy conversion efficiency of about 20%. However, the color rendering index, or CRI, of most fluorescent lamps – how good their color is compared to an ideal light source – is inferior to that of an incandescent bulb. Fluorescent lamps also pose environmental concerns because they contain mercury.

Solid-state lighting relies on the direct conversion of electricity to visible white light using semiconductor materials. By avoiding the heat and plasma-producing processes of incandescent bulbs and fluorescent lamps, solid-state lighting products can have substantially higher energy conversion efficiencies, which in theory could approach 100%.

There are currently two basic types of solid-state lighting devices: inorganic light emitting diodes, or LEDs, and OLEDs. Current LEDs are very small in size (about one square millimeter) and are extremely bright. Having been developed about 25 years before OLEDs, they are already employed in various specialty lighting products, such as traffic lights, billboards, replacements for neon lighting and as border or accent lighting. However, their intense brightness makes them less desirable for general illumination and diffuse lighting applications.

OLEDs, on the other hand, are larger in size and can be viewed directly, without using diffusers that are required to temper the intense brightness of LEDs. OLEDs can be built on any suitable flat surface, including glass, plastic or metal foil, and could be cost-effective to manufacture in high volume. Given these characteristics, product manufacturers are working to develop OLEDs for diffuse specialty lighting applications and ultimately general illumination. If these efforts are successful, we believe that OLED lighting products could begin to be used for applications currently addressed by incandescent bulbs and fluorescent lamps.

## Our Competitive Strengths

We believe our position as one of the leading technology developers in the OLED industry is the direct result of our technological innovation. We have built an extensive intellectual property portfolio around our OLED technologies and materials, and are working diligently to enable our manufacturing partners to adopt our OLED technologies and materials for commercial usage. Our key competitive strengths include:

**Technology Leadership.** We are a recognized technology leader in the OLED industry. We and our research partners pioneered the development of our PHOLED™ phosphorescent OLED technologies, which can be used to produce OLEDs that are up to four times as efficient as traditional fluorescent OLEDs and significantly more efficient than current backlit LCDs. We believe that our PHOLED technologies are well-suited for industry usage in the commercial production of OLED displays and lighting products. Through our relationships with companies such as PPG Industries and our academic partners, we have also developed other important OLED technologies, as well as novel OLED materials that we believe will facilitate the adoption of our various OLED technologies by product manufacturers.

**Relationships with Leading Product Manufacturers.** We have established relationships with well-known manufacturers that are using, or are evaluating, our OLED technologies and materials for use in commercial products. In 2007, Samsung SDI, Chi Mei EL, Tohoku Pioneer and LG Display purchased our proprietary OLED materials for use in commercial OLED display products. In 2005, we entered into a license agreement with Samsung SDI for its manufacture of active matrix OLED display products, and in 2002 we entered into a cross-license agreement with DuPont Displays, Inc. for its manufacture of solution-processed OLED display products. We also licensed one of our ink-jet printing patents and certain related patent filings to Seiko Epson in 2006. We continue to work with many product manufacturers who are evaluating our OLED technologies and materials for use in commercial OLED displays and lighting products, including Seiko Epson, Konica Minolta and Sony.

**Broad Portfolio of Intellectual Property.** We believe that our extensive portfolio of patents, trade secrets and know-how provides us with a competitive advantage in the OLED industry. Through our internal development efforts and our relationships with Princeton University, the University of Southern California, the University of Michigan and Motorola, we own, exclusively license or have the sole right to sublicense more than 825 patents issued and pending worldwide related to our PHOLED and other OLED technologies and materials. We also continue to accumulate valuable trade secret information and technical know-how relating to our OLED technologies and materials.

**Focus on Licensing Our OLED Technologies.** We are focused on licensing our proprietary OLED technologies to product manufacturers on a non-exclusive basis. Our current business model does not involve the direct manufacture or sale of OLED display or lighting products. Instead, we seek license fees and royalties from OLED product manufacturers based on their sales of licensed products. We believe this business model allows us to concentrate on our core strengths of technology development and innovation, while at the same time providing significant operating leverage. We also believe that this approach may reduce potential competitive conflicts between us and our customers.

Leading Supplier of PHOLED Emitter Materials. We are the leading supplier of phosphorescent emitter materials to OLED product manufacturers. PPG Industries currently manufactures our proprietary emitter materials for us, which we then qualify and resell to OLED product manufacturers. We record revenues based on our sales of these materials to OLED product manufacturers. This allows us to maintain close technical and business relationships with the OLED product manufacturers purchasing our proprietary materials, which in turn further supports our technology licensing business.

Established U.S. Government Contracts to Fund Research and Development. In 2007, we started or continued working under approximately 13 research and development contracts with U.S. government agencies, such as the U.S. Department of the Army, the U.S. Department of the Navy and the U.S. Department of Energy. Under these contracts, the U.S. government funds a portion of our efforts to develop next-generation OLED technologies for applications such as flexible displays and solid-state lighting. This enables us to supplement our internal research and development budget with additional funding.

Experienced Management and Scientific Advisory Team. Our management team has significant experience in developing business models focused on licensing disruptive technologies in high growth industries. In addition, our management team has assembled a Scientific Advisory Board that includes some of the leading researchers in the OLED industry, such as Professor Stephen R. Forrest of the University of Michigan (formerly of Princeton University) and Professor Mark E. Thompson of the University of Southern California.

#### Our Business Strategy

Our current business strategy is to both promote and continue to expand our portfolio of OLED technologies and materials for widespread use in OLED displays and lighting products, and to generate revenues by licensing our OLED technologies and selling our proprietary OLED materials. We presently are focused on the following steps to implement our business strategy:

Target Leading Product Manufacturers. We are targeting leading manufacturers of flat panel displays and lighting products as potential commercial licensees of our OLED technologies and purchasers of our OLED materials. For example, in April 2005 we entered into a patent license agreement with Samsung SDI for its manufacture and sale of active-matrix OLED display products. In 2007, we also sold our proprietary phosphorescent OLED materials to Samsung SDI, Chi Mei EL, LG Display and Tohoku Pioneer for use in commercial OLED display products. We also provide technical assistance and support to several manufacturers of displays and lighting products who are evaluating our OLED technologies and materials, or utilizing them in product development and/or for pre-commercial product manufacturing. We concentrate on working closely with these manufacturers because we believe that the successful incorporation of our technologies and materials into commercial products is critical to their widespread adoption.

Enhance Our Existing Portfolio of PHOLED Technologies and Materials. We believe that a strong portfolio of proprietary OLED technologies and materials is critical to our success. Consequently, we are continually seeking to expand this portfolio through our internal development efforts, our collaborative relationships with academic and other research partners, and other strategic opportunities. One of our primary goals is to develop new and improved PHOLED technologies and materials with increased efficiencies, enhanced color gamut and extended lifetimes, which are compatible with different manufacturing methods, so that they can be used by various manufacturers in a broad array of OLED products.

Develop Next-Generation Organic Technologies. We continue to conduct research and development activities relating to next-generation OLED technologies. Our current research and development initiatives involve flexible OLED displays, transparent or top-emitting OLED displays, thin-film encapsulation for OLEDs and OLEDs for solid-state lighting. We also are funding research by our academic partners on the use of organic thin-film technology in applications such as organic lasers, organic TFTs, photodetectors and other related devices. Our focus on next-generation technologies is designed to enable us to continue our position as a leading provider of OLED and

other organic electronics technologies and materials as new markets emerge.

#### Business and Geographic Markets

We derive revenue from the following:

- technology research and development, including government contract work and collaborative R&D with third parties;
  - intellectual property and technology licensing; and
  - sales of OLED materials for evaluation, development and commercial manufacturing.

Most manufacturers of flat panel displays and lighting products who are or might potentially be interested in our OLED technologies and materials are currently located in foreign countries, particularly the Asia-Pacific region. Consequently, we receive a substantial portion of our revenues from external customers that are domiciled outside of the United States, and our business is heavily dependent on our relationships with these customers. In particular, two customers located in the Asia-Pacific region, Samsung SDI and Seiko Epson accounted for 34.9% and 11.2%, respectively, of our consolidated revenues for 2007.

For more information on our revenues, costs and expenses associated with our business, as well as a breakdown of revenues from domestic and foreign sources, please see our audited Consolidated Financial Statements and the notes thereto, as well as “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” included elsewhere in this report.

#### Our Phosphorescent OLED Technologies

Phosphorescent OLEDs utilize specialized materials and device structures that allow OLEDs to emit light through a process known as phosphorescence. Conversely, traditional fluorescent OLEDs emit light through an inherently less efficient process. Theory and experiment show that phosphorescent OLEDs exhibit device efficiencies up to four times higher than those exhibited by fluorescent OLEDs. Phosphorescence substantially reduces the power requirements of an OLED and is potentially useful for hand-held devices, such as mobile phones, where battery power is often a limiting factor. Phosphorescence is also important for large-area displays such as televisions, where higher device efficiency and lower heat generation may enable longer product lifetimes and increased energy efficiency.

We have a strong intellectual property portfolio surrounding our existing PHOLED phosphorescent OLED technologies and materials. We also conduct work to develop new and improved PHOLED technologies and materials, and to enhance our intellectual property position. In 2007, we announced continued advances in the development of our proprietary PHOLED materials and device architectures. We also established commercial supply relationships with Chi Mei EL and LG Display to use our PHOLED materials for their manufacture of OLED displays on glass. In addition, we continued to work closely with customers evaluating and qualifying our proprietary PHOLED materials for commercial usage, and with other material suppliers to match our PHOLED emitters with their phosphorescent hosts and other OLED materials.

#### Our Additional Proprietary OLED Technologies

Our research, development and commercialization efforts also encompass a number of other OLED device and manufacturing technologies, including the following:

**TOLED™ Transparent OLEDs.** We have developed a technology for the fabrication of OLEDs that have transparent cathodes. Conventional OLEDs use a reflective metal cathode and a transparent anode. In contrast, TOLEDs use a transparent cathode and either a transparent, or reflective or opaque metal anode. TOLEDs utilizing transparent cathodes and reflective metal anodes are known as “top-emission” OLEDs. In a “top-emission” active-matrix OLED, light is emitted without having to travel through much of the device electronics where a significant portion of the usable light is lost. This results in OLED displays having image qualities and lifetimes superior to those of conventional active-matrix OLEDs. TOLEDs utilizing transparent cathodes and transparent anodes may also be useful in novel flat panel display applications requiring semi- transparency or transparency, such as graphical displays in automotive windshields.

**FOLED™ Flexible OLEDs.** We are working on a number of technologies required for the fabrication of OLEDs on flexible substrates. Most OLED and other flat panel displays are built on rigid substrates such as glass. In contrast, FOLEDs are OLEDs built on non-rigid substrates such as plastic or metal foil. FOLEDs are intended to be either conformable to specific shapes or repeatedly bent or flexed. Eventually, FOLEDs may be capable of being rolled into a cylinder, similar to a window shade. These features create the possibility of new flat panel display product

applications that do not exist today, such as a portable, roll-up Internet connectivity and communications device. Manufacturers also may be able to produce FOLEDs using more efficient continuous, or roll-to-roll, processing methods. We currently are conducting research and development on FOLED technologies internally, under several of our U.S. government programs and in connection with the government-sponsored Flexible Display Center at Arizona State University.

OVPD™ Organic Vapor Phase Deposition. The standard approach for manufacturing a small molecule OLED, including a PHOLED, is based on a vacuum thermal evaporation, or VTE, process. With a VTE process, the thin layers of organic material in an OLED are deposited in a high-vacuum environment. An alternate approach for manufacturing a small molecule OLED is based on OVPD. In contrast to the VTE process, the OVPD process utilizes a carrier gas stream in a hot walled reactor in a low pressure environment to deposit the layers of organic material in an OLED. The OVPD process may offer advantages over the VTE process through more efficient materials utilization and enhanced deposition control. We have partnered with Aixtron AG, a leading manufacturer of metal-organic chemical vapor deposition equipment, to develop and qualify equipment for the fabrication of OLED displays utilizing the OVPD process.

P2OLED™ Printable Phosphorescent OLEDs. OLEDs can be manufactured using other processes as well. Another method involves preparing solutions of the various organic materials in an OLED that can be solution-processed by techniques such as spin coating or inkjet printing onto the substrate. Solution-processing methods, and inkjet printing in particular, have the potential to be lower cost approaches to OLED manufacturing and scalable to large area displays. Over the past several years, we have worked on P2OLEDs under Joint Development Agreements with Seiko Epson, and we have collaborated with Mitsubishi Chemical Corporation to develop and evaluate novel P2OLED materials. In December 2007, in collaboration with Seiko Epson, we announced significant advances in P2OLED material lifetimes that may be useful for ink-jet printing.

OVJP™ Organic Vapor Jet Printing. Our groundbreaking OVJP technology is another direct printing method for the manufacture of OLEDs. As a direct printing technique, OVJP technology has the potential to offer high deposition rates for any size or shaped OLED. In addition, OVJP technology avoids the OLED material wastage associated with use of a shadow mask (i.e., the waste of material that deposits on the shadow mask itself when fabricating an OLED). By comparison to inkjet printing, an OVJP process does not use solvents and therefore the OLED materials utilized are not limited by their viscosity or solvent solubility. We are working on developing our proprietary OVJP technology in collaboration with Professor Forrest of the University of Michigan under a U.S. Department of Energy (DOE) Solid State Lighting program. We are currently qualifying a prototype OVJP tool that was recently installed at our Ewing, New Jersey facility. We plan to use this tool to build prototype white PHOLED lighting panels for delivery under our DOE program.

#### Our Strategic Relationships with Product Manufacturers

We have established evaluation, technology development, licensing and material supply relationships with numerous manufacturers of displays and lighting products. As of December 31, 2007, we had entered into 32 such relationships, three of which were newly established in 2007. These relationships generally are directed towards tailoring our proprietary OLED technologies and materials for use by each individual manufacturer. Our ultimate objective is to license our OLED technologies and sell our OLED materials to these manufacturers for their commercial production of OLED products. Our key relationships with product manufacturers in 2007 included the following:

**Samsung SDI.** In April 2005, we entered into an OLED Patent License Agreement with Samsung SDI. Under this agreement, we granted Samsung SDI license rights to make and sell active-matrix OLED displays. Beginning in the fourth quarter of 2006 and throughout 2007, we supplied several of our proprietary PHOLED materials to Samsung SDI for use in the manufacture of these OLED displays. We also continue to supply other of our proprietary PHOLED materials to Samsung SDI for evaluation and development activities under a separate agreement that has been in place since July 2001.

**Chi Mei EL.** In April 2007, we entered into an agreement to supply our proprietary PHOLED materials and technologies to Chi Mei EL for use in its manufacture of commercial AMOLED display products. The agreement runs through the end of 2008, and we will recognize commercial chemical sales and license fee revenues from our supply of material to Chi Mei EL.

**LG Display.** In May 2007, we entered into an agreement to supply LG Display with our proprietary PHOLED materials for use in AMOLED display products. The agreement runs through June 2008, and we will recognize commercial chemical sales and license fee revenues from our supply of this material to LG Display. In May 2007, we also demonstrated with LG Display the world's first high-resolution AMOLED display built on flexible metal foil using amorphous-Silicon (a-Si) backplane technology.

**Sony.** We have been supporting Sony in its development of active-matrix OLED display products under various agreements since February 2001. We are currently operating under an evaluation agreement with Sony that has been in place since February 2005. That agreement enables us to sell our proprietary PHOLED materials to Sony for evaluation.

**Seiko Epson.** In December 2004, we entered into a joint development agreement with Seiko Epson. Under this agreement, we have been conducting development activities with Seiko Epson relating to the application of our proprietary PHOLED technologies and materials to ink-jet printing processes used by Seiko Epson. In December 2007, we reported significant progress in red, green and blue P2OLED device performance in spin-coated devices and ink-jet printed devices. We also supply our proprietary PHOLED materials to Seiko Epson for evaluation and for use under this development program, and in July 2006 we licensed one of our ink-jet printing patents and certain related patent filings to Seiko Epson.

Tohoku Pioneer. In August 2003, we began supplying our proprietary red PHOLED material to Tohoku Pioneer, a subsidiary of Pioneer Corporation, for the commercial production of a passive-matrix OLED display product. Tohoku Pioneer continued purchasing this material from us in 2007.

Konica Minolta. In September 2005, we entered into an agreement with Konica Minolta for the joint development of high-efficiency white OLEDs for application as backlights. In June 2006, Konica Minolta announced that it had developed a white OLED that used our red and green PHOLED materials. Konica Minolta has continued to purchase PHOLED materials from us under our agreement.

DuPont Displays. In December 2005, we completed work under a Joint Development Agreement with DuPont Displays for the development of novel phosphorescent materials and device structures for solution-processed OLEDs. In December 2002, we entered into a Cross-License Agreement with DuPont Displays for its manufacture of solution-processed OLED display products. As of December 31, 2007, we had not received any royalties from DuPont under that agreement.



## Our OLED Materials Supply Business

In support of our primary objective of licensing our OLED technologies, we supply our proprietary OLED materials to display manufacturers and others. We device-qualify our materials before shipment in order to ensure the materials meet required specifications. We believe that our inventory-carrying practices, along with the terms under which we sell our OLED materials (including payment terms) are typical for the markets in which we operate.

## PPG Industries

We have maintained a close working relationship with PPG Industries since October 2000. Under our original agreements, PPG Industries conducted OLED materials development work for us and supplied us with our proprietary OLED materials. Our relationship with PPG Industries on the development of OLED materials changed in 2006, at which time we assumed sole responsibility over OLED materials development activities. In connection with that change, we hired four chemists from the PPG Industries' OLED materials development team to work for us in our newly constructed synthetic chemistry laboratories.

Our new OLED Materials Supply and Service Agreement with PPG Industries went into effect in January 2006. Under that agreement, PPG Industries remains responsible, under our direction, for manufacturing scale-up of our proprietary OLED materials, and for supplying us with those materials for research and development, and for resale to our customers, both for their evaluation and for use in commercial OLED products. Through our collaboration with PPG Industries, key raw materials are sourced from multiple suppliers to ensure that we are able to meet the needs of our customers on a timely basis. We recently extended the term of the OLED Materials Supply and Service Agreement through December 2011.

## Our OLED Material Customers

In 2007, we continued supplying our proprietary PHOLED materials to Samsung SDI for use in its commercial AMOLED display products. In September 2007, Samsung SDI commenced volume production of AMOLED displays for its worldwide customer base of handset and personal electronic manufacturers. Samsung SDI's customers for these products have included some well-known consumer electronics companies, such as Sony Ericsson Mobile Communications AB, Toshiba Corporation, Hitachi, Ltd., Sanyo Electric Co., Ltd., Kyocera Corporation and Nokia Corporation.

In 2007, we began supplying our proprietary PHOLED materials to Chi Mei EL for use in commercial AMOLED display products that were launched during the third quarter. We also continued supplying our proprietary PHOLED materials to Tohoku Pioneer for use in commercial passive-matrix OLED display products, and we began supplying one of our proprietary PHOLED materials to LG Display for its use in AMOLED display products. Throughout the year, we supplied these and other of our proprietary OLED materials to various other product manufacturers for evaluation and for purposes of development, manufacturing qualification and product testing.

## Collaborations with other OLED Material Manufacturers

We continued our non-exclusive collaborative relationships with other manufacturers of OLED materials during 2007. These included relationships with Nippon Steel Chemical Company (NSCC) and Idemitsu Kosan Co., Ltd., both of which are focused on matching our proprietary PHOLED emitters with the host and other OLED materials of these companies. In 2007, we also continued our relationship with Mitsubishi Chemical Company relating to solution-processible P2OLED materials. We believe that collaborative relationships such as these are important for ensuring success of the OLED industry and broader adoption of our PHOLED and other OLED technologies.

## Research and Development

Our research and development activities are focused on the advancement of our OLED technologies and materials for displays, lighting and other applications. We conduct this research and development both internally and through various relationships with our commercial business partners and academic institutions. In the years 2007, 2006 and 2005, we spent approximately \$20,909,262, \$19,562,004, and \$18,798,024, respectively, on both internal and third-party sponsored research and development activities with respect to our various OLED technologies and materials.

7

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### Internal Development Efforts

We conduct a substantial portion of our OLED development activities at our state-of-the-art development and testing facility in Ewing, New Jersey. At this 40,200 square-foot facility, we perform technology development, including device and process optimization, prototype fabrication, manufacturing scale-up studies, process and product testing, characterization and reliability studies, and technology transfer with our business partners.

Our Ewing facility houses six OLED deposition systems, including a full-color flexible OLED system, a system for fabricating solution-processible OLEDs, an OVPD organic vapor phase deposition system and an OVJP organic vapor jet printing system. In addition, the facility contains equipment for substrate patterning, organic material deposition, display packaging, module assembly and extensive testing in Class 100 and 100,000 clean rooms and opto-electronic test laboratories.

In 2006, we opened state-of-the-art synthetic chemistry laboratories at our Ewing facility. In these laboratories, our scientists conduct OLED materials research and make small quantities of new materials that we then test in OLED devices. Prior to opening these laboratories, we conducted this materials research in laboratory space that we leased in Princeton, New Jersey.

As of December 31, 2007, we employed a team of 39 research scientists, engineers and laboratory technicians at our Ewing facility. This team includes chemists, physicists, engineers with electrical, chemical and mechanical backgrounds, and highly-trained experimentalists. Six members of our R&D team were newly-hired in 2007.

### University Sponsored Research

We have long-standing relationships with Princeton University and the University of Southern California (USC), dating back to 1993, for the conduct of research relating to our OLED and other organic thin-film technologies and materials for applications such as displays and lighting. This research has been performed at Princeton University under the direction of Dr. Forrest and at USC under the direction of Dr. Thompson. In 2006, Dr. Forrest transferred to the University of Michigan, where we continue to fund his research.

We funded research at Princeton University under a Research Agreement executed with the Trustees of Princeton University in August 1997. The 1997 Research Agreement was allowed to expire in July 2007, after Dr. Forrest had transferred to the University of Michigan. We have exclusive license rights to all OLED and other thin-film organic electronic patents (other than for organic photovoltaic solar cells) arising out of research conducted under that agreement.

In connection with Dr. Forrest's transfer to the University of Michigan, in May 2006 we entered into a new Sponsored Research Agreement with USC under which we are funding organic electronics research being conducted by Drs. Forrest and Thompson. Work by Dr. Forrest is being funded through a subcontract between USC and the University of Michigan, and the arrangement currently runs through April 2009. We reimburse the universities for actual costs incurred for sponsored research conducted under this agreement, up to a maximum of \$4,936,296 over the three-year agreement term. As with the 1997 Research Agreement, we have exclusive license rights to all OLED and thin-film organic electronic patents (other than for organic photovoltaic solar cells) arising out of this research.

In October 2005, we entered into a separate Sponsored Research Agreement with Princeton University to fund research under the direction of Dr. Sigurd Wagner on thin-film encapsulation and fabrication of OLED devices. In March 2007, we extended this agreement through September 2008. Like our other relationships with Princeton University, we have exclusive license rights to all patents arising out of the research.

In December 2004, we entered into a Sponsored Research Agreement with the Yuen Tjing Ling Industrial Research Institute of National Taiwan University (TLIRI). Under that agreement, we funded a research program under the

direction of Dr. Ken-Tsung Wong relating to new OLED materials. We have exclusive rights to all intellectual property developed under that program. The program ran through February 2008.

In April 2004, we entered into a Contract Research Agreement with the Chitose Institute of Science and Technology of Japan (CIST). Under that agreement, we funded a research program headed by Dr. Chihaya Adachi relating to high-efficiency OLED materials and devices. We were granted exclusive rights to all intellectual property developed under this program. This relationship with CIST ended in March 2006 when Dr. Adachi transferred to Kyushu University. However, we have continued our relationship with Dr. Adachi under a separate consulting arrangement that currently runs through March 2009.

In March 2006, we entered into a Research Agreement with Kyung Hee University to sponsor a research program on flexible, amorphous silicon TFT backplane technology. The program was directed by Dr. Jin Jang and continued for one year. In August 2007, we entered into a second Research Agreement with Kyung Hee University to sponsor further research in this area. This research is also being directed by Dr. Jang and the new program runs through August 2008.

## Aixtron

In July 2000, we entered into a Development and License Agreement with Aixtron AG of Aachen, Germany to jointly develop and commercialize equipment for the manufacture of OLEDs using the OVPD process. Under the Development and License Agreement, we granted Aixtron an exclusive license to produce and sell its equipment for the manufacture of OLEDs and other devices using our proprietary OVPD process. Aixtron is required to pay us royalties on its sales of this equipment. Purchasers of the equipment also must obtain rights to use our proprietary OVPD process to manufacture OLEDs and other devices using the equipment, which they may do through us or Aixtron. If these rights are granted through Aixtron, Aixtron is required to make additional payments to us under our agreement.

Aixtron has reported to us the delivery of six OVPD systems since July 2002. These include two second-generation systems, one of which was sold to the Fraunhofer Institute for Photonic Microsystems (IPMS) in Dresden, Germany in November 2007, and the other of which was sold to RiTdisplay Corporation of Taiwan in April 2003. We record royalty income from Aixtron's sales of these various systems in the quarter in which Aixtron notifies us of the sale and the related royalties are due.

## U.S. Government-Funded Research

We have entered into several U.S. government contracts and subcontracts to fund a portion of our efforts to develop next-generation OLED technologies and materials for applications such as flexible displays and energy-efficient solid-state lighting. These include, among others, Small Business Innovation Research (SBIR) Phase I program contracts for the demonstration of technical merit and feasibility and SBIR Phase II program contracts for continued research and development and the fabrication of prototypes. On contracts for which we are the prime contractor, we subcontract portions of the work to various entities and institutions, including Princeton University, the University of Southern California, the University of Michigan, L-3 Communications Corporation — Display Systems (L-3DS), the Palo Alto Research Center (PARC), a subsidiary of Xerox Corporation, Vitex Systems, Inc. and LG Display. All of our government contracts and subcontracts are subject to termination at the election of the contracting governmental agency. Our government contracts include, among others, the following:

- **OLED Displays on Flexible Metal Foil Substrates.** We continued our work during 2007 to develop and deliver next-generation prototype OLED displays on flexible metal foil substrates for the U.S. Army Communications-Electronics Research Development and Engineering Center (CERDEC), the Air Force Research Laboratory and the U.S. Department of the Navy. For 2007, these four government agencies provided us with \$1,737,000 in funding for the program under several government contracts and one subcontract with L-3DS. In 2007, we delivered to these various government agencies several full-color, active-matrix OLED display prototypes on flexible metal foil that were developed under the program. Our contractual commitments to conduct further work under this program currently run until November 2008.
- **Infrared OLED Displays for Night-Vision Applications.** In 2007, we continued working under an SBIR Phase II program contract from CERDEC for the development of a flexible OLED display containing infrared-emitting OLED pixels that would be visible through night vision goggles. We will complete work under the contract upon delivering a prototype infrared-emitting OLED display to CERDEC in March 2008. For 2007, we received \$413,274 in funding under this program.
- **Novel Encapsulation Technology for Flexible OLEDs.** In 2007, we continued our work under an SBIR Phase II program contract from the U.S. Army Research Laboratory (ARL) to develop innovative encapsulation technology for flexible OLEDs. Using technology pioneered at Princeton University, we have demonstrated the feasibility of a novel encapsulation process based on plasma-enhanced chemical vapor deposition (PECVD), which is an important element on the development roadmap for flexible OLED displays. We received \$457,264 in funding from ARL for 2007 under this contract. The program

is currently scheduled to run through September 2008.

- **OLEDs for High-Efficiency White Lighting.** Our work on behalf of the U.S. Department of Energy (DOE) to develop technical approaches for using our proprietary PHOLED and other OLED technologies for high-efficiency white lighting applications continued in 2007. For the year, the DOE provided us with \$1,197,810 in funding for this work under three SBIR Phase II program contracts and two SBIR Phase I program contracts. Two of the SBIR Phase I programs were completed in March 2007, and the others are currently scheduled for completion between March 2008 and August 2009.
- **OVJP Technology for Lighting Applications.** In 2007, we continued our work on behalf of the DOE to develop our proprietary OVJP organic vapor jet printing technology for the printing of striped OLEDs for lighting applications. Funding to us under this DOE Solid State Lighting program totaled \$696,962 for 2007. The program is currently funded through June 2008. At the conclusion of the program, we are expected to deliver to the DOE prototype OLED devices, wherein the OLED materials are deposited in red, green and blue stripes using the OVJP process and the resulting device generates white light.

#### The Army Flexible Display Center

We have been a charter member of The Army Flexible Display Center (FDC) since its establishment at Arizona State University in December 2004. The FDC is being supported through a \$51.5 million Cooperative Agreement between Arizona State University and the U.S. Army Research Laboratory. The goal of the FDC is to develop flexible, low power, light-weight, information displays for future usage by soldiers and for other military and commercial applications. We believe our involvement with the FDC enhances our flexible OLED display technology development efforts.

## The United States Display Consortium

We are a member of the United States Display Consortium (USDC), a cooperative industry and governmental effort aimed at developing an infrastructure to support North American flat panel display manufacturing. The USDC's role is to provide a common platform for flat panel display manufacturers, developers, users and the manufacturing equipment and supplier base. It has more than 100 members, as well as support from ARL. We are one of 12 members with representation on the Governing Board of the USDC and we actively participate on its Technical Council. Our President, Steven Abramson, previously served as Vice-Chairman of the USDC's Governing Board.

## Intellectual Property

Along with our personnel, our primary and most fundamental assets are patents and other intellectual property. This includes numerous U.S. and foreign patents and patent applications that we own, exclusively license or have the sole right to sublicense. It also includes a substantial body of trade secrets and technical know-how that we have accumulated over time.

## Our Patents

Our research and development activities, conducted both internally and through collaborative programs with our partners, have resulted in the filing of a substantial number of patent applications relating to our OLED technologies and materials. As of December 31, 2007, we owned, through assignment to us alone or jointly with others, 101 issued and pending patents in the U.S., together with numerous counterparts filed in various foreign countries. These patents will start expiring in 2020.

## Patents We License from Princeton University, the University of Southern California and the University of Michigan

We exclusively license the bulk of our patent rights, including our key PHOLED technology patents, under an Amended License Agreement we executed with the Trustees of Princeton University and the University of Southern California (USC) in October 1997. Based on Dr. Forrest's transfer to the University of Michigan, in January 2006 the University of Michigan was added as a party to this agreement. As of December 31, 2007, the patent rights we license from these universities included 200 issued and pending patents in the U.S., together with numerous counterparts filed in various foreign countries. These patents will start expiring in 2014, but our key PHOLED technology patents licensed from these universities will not start expiring until 2017.

Under the Amended License Agreement, Princeton University, USC and the University of Michigan granted us worldwide, exclusive license rights to specified patents and patent applications relating to OLED technologies and materials. Our license rights also extend to any patent rights arising out of the research conducted by Princeton University, USC or the University of Michigan under our various research agreements with these entities. We are free to sublicense to third parties all or any portion of our patent rights under the Amended License Agreement. The term of the Amended License Agreement is perpetual, though it is subject to termination for an uncured material breach or default by us, or if we become bankrupt or insolvent.

Princeton University is primarily responsible for the filing, prosecution and maintenance of all patent rights licensed to us under the Amended License Agreement pursuant to an Interinstitutional Agreement between Princeton University, USC and the University of Michigan. However, we manage this process and have the right to instruct patent counsel on specific matters to be covered in any patent applications filed by Princeton University. We are required to bear all costs associated with the filing, prosecution and maintenance of these patent rights.

We are required under the Amended License Agreement to pay Princeton University royalties for licensed products sold by us or our sublicensees. These royalties amount to 3% of the net sales price for licensed products sold by us and 3% of the revenues we receive for licensed products sold by our sublicensees. These royalty rates are subject to

renegotiation for products not reasonably conceivable as arising out of the research agreements if Princeton University reasonably determines that the royalty rates payable with respect to these products are not fair and competitive. Princeton University shares portions of these royalties with USC and the University of Michigan under their Interinstitutional Agreement.

We have a minimum royalty obligation of \$100,000 per year during the term of the Amended License Agreement. We paid Princeton University royalties under the Amended License Agreement of \$163,007 for 2007, \$177,436 for 2006 and \$110,098 for 2005. We also are required under the Amended License Agreement to use commercially reasonable efforts to bring the licensed OLED technology to market. However, this requirement is deemed satisfied if we invest a minimum of \$800,000 per year in research, development, commercialization or patenting efforts respecting the patent rights licensed to us under the Amended License Agreement.



## Patents We License from Motorola

In September 2000, we entered into a License Agreement with Motorola whereby Motorola granted us perpetual license rights to what are now 74 issued U.S. patents relating to Motorola's OLED technologies, together with numerous foreign counterparts in various countries. These patents will start expiring in 2012. We have the right to freely sublicense these patents to third parties and, with limited exceptions, Motorola has agreed not to license these patents to others in the OLED industry. Motorola remains responsible for the prosecution and maintenance of all patent rights licensed to us under the License Agreement, including all associated costs. Motorola is obligated to keep us informed as to the status of these activities.

We are required under the License Agreement to pay Motorola annual royalties on gross revenues received by us on account of our sales of OLED products or components, or from our OLED technology licensees, whether or not these revenues relate specifically to inventions claimed in the patent rights licensed from Motorola. We have the option to pay these royalties to Motorola in either all cash or 50% cash and 50% shares of our common stock.

The royalty due to Motorola for the year ended December 31, 2007 was \$132,839. We satisfied this royalty obligation by issuing 3,801 shares of our common stock to Motorola on March 6, 2007 and by paying Motorola \$66,436 in cash on March 7, 2008. The number of shares of common stock used to pay the stock portion of the royalty was equal to approximately 50% of the total royalty due divided by the average daily closing price per share of our common stock on the NASDAQ Global Market over the 10 trading days ended two business days prior to the date of payment.

In connection with our execution of the License Agreement, in 2000 we issued to Motorola 200,000 shares of our common stock, 300,000 shares of our Series B Convertible Preferred Stock, and seven-year warrants to purchase an additional 150,000 shares of our common stock at an exercise price of \$21.60 per share. These warrants became exercisable on September 29, 2001, and expired unexercised on September 29, 2007. On October 6, 2004, all 300,000 shares of the Series B Convertible Preferred Stock were converted into 418,916 shares of our common stock, and Motorola has since sold all of these shares.

## Intellectual Property Developed under Our Government Contracts

We and our subcontractors have developed and may continue to develop patentable OLED technology inventions under our various U.S. government contracts and subcontracts. Under these arrangements, we or our subcontractors generally can elect to take title to any patents on these inventions, and to control the manner in which these patents are licensed to third parties. However, the U.S. government reserves rights to these inventions and associated technical data that could restrict our ability to market them to the government for military and other applications, or to third parties for commercial applications. In addition, if the U.S. government determines that we or our subcontractors have not taken effective steps to achieve practical application of these inventions in any field of use in a reasonable time, the government may require that we or our subcontractors license these inventions to third parties in that field of use.

## Trade Secrets and Technical Know-How

We have accumulated, and continue to accumulate, a substantial amount of trade secret information and technical know-how relating to OLED technologies and materials. Where practicable, we share portions of this information and know-how with display manufacturers and other business partners on a confidential basis. We also employ various methods to protect this information and know-how from unauthorized use or disclosure, although no such methods can afford complete protection. Moreover, because we derive some of this information and know-how from academic institutions such as Princeton University, USC and the University of Michigan, there is an increased potential for public disclosure.

## Competition

The industry in which we operate is highly competitive. We compete against alternative flat panel display technologies, in particular LCDs, as well as other OLED technologies. We also compete in the lighting market against incumbent technologies, such as incandescent bulbs and fluorescent lamps, and emerging technologies, such as inorganic LEDs.

#### Flat Panel Display Industry Competitors

Numerous domestic and foreign companies have developed or are developing LCD, plasma and other flat panel display technologies that compete with our OLED display technologies. We believe that OLED display technologies ultimately can compete with LCDs and other display technologies for many product applications on the basis of lower power consumption, better contrast ratios, faster video rates and lower manufacturing cost. However, other companies may succeed in continuing to improve these competing display technologies, or in developing new display technologies, that are superior to OLED display technologies in various respects. We cannot predict the timing or extent to which such improvements or developments may occur.

### Lighting Industry Competitors

Traditional incandescent bulbs and fluorescent lamps are well-entrenched products in the lighting industry. In addition, compact fluorescent lamps and solid-state LEDs have recently been introduced into the market and would compete with OLED lighting products. Having attributes different than fluorescent lamps and LEDs, OLEDs may compete directly with these products for certain lighting applications. However, manufacturers of LEDs and compact fluorescent lamps may succeed in more broadly adapting their products to various lighting applications, or others may develop competing solid-state lighting technologies that are superior to OLEDs. Again, we cannot predict whether or when this might occur.

### OLED Technology and Materials Competitors

Eastman Kodak Company has licensed its competing fluorescent OLED technology and other patents to a number of display manufacturers, several of whom are presently manufacturing OLED products. Cambridge Display Technology, Ltd., which recently was acquired by Sumitomo Chemical Company, also has licensed its competing polymer OLED technology and sells its polymer OLED materials to display manufacturers. Many display manufacturers themselves are engaged in research, development and commercialization activities with respect to OLED technologies and materials. In addition, other material manufacturers, such as Idemitsu Kosan Co., Ltd., Merck KGaA and BASF Corporation, are selling or sampling OLED materials to the same customers to whom we sell our proprietary PHOLED materials.

Our existing business relationships with Samsung SDI and other product manufacturers suggest that our OLED technologies and materials, particularly our PHOLED technologies and materials, may achieve some level of market penetration in the flat panel display and lighting industries. However, our competitors may succeed in improving their competing OLED technologies and materials so as to render them superior to ours. We cannot be sure of the extent to which product manufacturers ultimately will adopt our OLED technologies and materials for the production of commercial flat panel displays and lighting products.

### Employees

As of December 31, 2007, we had 62 full-time employees and two part-time employees, none of whom are unionized. We believe that relations with our employees are good.

### Our Company History

Our corporation was organized under the laws of the Commonwealth of Pennsylvania in April 1985. Our business was commenced in June 1994 by a company then known as Universal Display Corporation, which had been incorporated under the laws of the State of New Jersey. On June 22, 1995, a wholly-owned subsidiary of ours merged into this New Jersey corporation. The surviving corporation in this merger became a wholly-owned subsidiary of ours and changed its name to UDC, Inc. Simultaneous with the consummation of this merger, we changed our name to Universal Display Corporation. UDC, Inc. now functions as an operating subsidiary of ours and has overlapping officers and directors. In January 2008, we also formed a second wholly-owned subsidiary, Universal Display Corporation Hong Kong, Ltd.

### Our Compliance with Environmental Protection Laws

We are not aware of any material effects that compliance with Federal, State or local environmental protection laws or regulations will have on our business. We have not expended material amounts to comply with any environmental protection laws or regulations and do not anticipate having to do so in the foreseeable future.

### Our Internet Site

Our Internet website can be found at [www.universaldisplay.com](http://www.universaldisplay.com). Through our website, free of charge, you can access our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K and any amendments to those reports that we may file with or furnish to the SEC. These materials are made available through our website as soon as reasonably practicable after we electronically file the material with the SEC.

ITEM 1A. RISK FACTORS

The following factors, as well as other factors affecting our operating results and financial condition, could cause our actual future results and financial condition to differ materially from those projected.

If our OLED technologies and materials are not feasible for broad-based product applications, we may never generate revenues sufficient to support ongoing operations.

Our main business strategy is to license our OLED technologies and sell our OLED materials to manufacturers for incorporation into the flat panel display and lighting products that they sell. Consequently, our success depends on the ability and willingness of these manufacturers to develop, manufacture and sell commercial products integrating our technologies and materials.

Before product manufacturers will agree to utilize our OLED technologies and materials for wide-scale commercial production, they will likely require us to demonstrate to their satisfaction that our OLED technologies and materials are feasible for broad-based product applications. This, in turn, may require additional advances in our technologies and materials, as well as those of others, for applications in a number of areas, including, without limitation, advances with respect to the development of:

- OLED materials with sufficient lifetimes, brightness and color coordinates for full-color OLED displays and general lighting products;
- more robust OLED materials for use in large-scale, more demanding manufacturing environments; and
- scalable and cost-effective methods and technologies for the fabrication of OLED products.

We cannot be certain that these advances will ever occur, and hence our OLED technologies and materials may never be feasible for broad-based product applications.

Even if our OLED technologies are technically feasible, they may not be adopted by product manufacturers.

The potential size, timing and viability of market opportunities targeted by us are uncertain at this time. Market acceptance of our OLED technologies will depend, in part, upon these technologies providing benefits comparable or superior to current display and lighting technologies at an advantageous cost to manufacturers, and the adoption of products incorporating these technologies by consumers. Many potential licensees of our OLED technologies manufacture flat panel displays and lighting products utilizing competing technologies, and may, therefore, be reluctant to redesign their products or manufacturing processes to incorporate our OLED technologies.

During the entire product development process for a new product, we face the risk that our technology will fail to meet the manufacturer's technical, performance or cost requirements or will be replaced by a competing product or alternative technology. For example, we are aware that some of our licensees and prospective licensees have entered into arrangements with our competitors regarding the development of competing technologies. Even if we offer technologies that are satisfactory to a product manufacturer, the manufacturer may choose to delay or terminate its product development efforts for reasons unrelated to our technologies.

Mass production of OLED products will require the availability of suitable manufacturing equipment, components and materials, many of which are available only from a limited number of suppliers. In addition, there may be a number of other technologies that manufacturers need to utilize to be used in conjunction with our OLED technologies in order to bring OLED products containing them to the market. Thus, even if our OLED technologies are a viable alternative to competing approaches, if product manufacturers are unable to obtain access to this equipment and these components, materials and other technologies, they may not utilize our OLED technologies.

There are numerous potential alternatives to OLEDs, which may limit our ability to commercialize our OLED technologies and materials.

The flat panel display market is currently, and will likely continue to be for some time, dominated by displays based on LCD technology. Numerous companies are making substantial investments in, and conducting research to improve characteristics of, LCDs. Plasma and other competing flat panel display technologies have been, or are being, developed. A similar situation exists in the solid-state lighting market, which is currently dominated by LED products. Advances in any of these various technologies may overcome their current limitations and permit them to become the leading technologies in their field, either of which could limit the potential market for products utilizing our OLED technologies and materials. This, in turn, would cause product manufacturers to avoid entering into commercial relationships with us, or to terminate or not renew their existing relationships with us.

Other OLED technologies may be more successful or cost-effective than ours, which may limit the commercial adoption of our OLED technologies and materials.

Our competitors have developed OLED technologies that differ from or compete with our OLED technologies. In particular, competing fluorescent OLED technology, which entered the marketplace prior to ours, may become entrenched in the industry before our OLED technologies have a chance to become widely utilized. Moreover, our competitors may succeed in developing new OLED technologies that are more cost-effective or have fewer limitations than our OLED technologies. If our OLED technologies, and particularly our phosphorescent OLED technology, are unable to capture a substantial portion of the OLED product market, our business strategy may fail.

If we fail to make advances in our OLED research and development activities, we might not succeed in commercializing our OLED technologies and materials.

Further advances in our OLED technologies and materials depend, in part, on the success of the research and development work we conduct, both alone and with our research partners. We cannot be certain that this work will yield additional advances in the research and development of these technologies and materials.

Our research and development efforts remain subject to all of the risks associated with the development of new products based on emerging and innovative technologies, including, without limitation, unanticipated technical or other problems and the possible insufficiency of funds for completing development of these products. Technical problems may result in delays and cause us to incur additional expenses that would increase our losses. If we cannot complete research and development of our OLED technologies and materials successfully, or if we experience delays in completing research and development of our OLED technologies and materials for use in potential commercial applications, particularly after incurring significant expenditures, our business may fail.

If we cannot form and maintain lasting business relationships with OLED product manufacturers, our business strategy will fail.

Our business strategy ultimately depends upon our development and maintenance of commercial licensing and material supply relationships with high-volume manufacturers of OLED products. We have entered into only a limited number of such relationships. Our other relationships with product manufacturers currently are limited to technology development and the evaluation of our OLED technologies and materials for possible use in commercial products. Some or all of these relationships may not succeed or, even if they are successful, may not result in the product manufacturers entering into commercial licensing and material supply relationships with us.

Under our existing technology development and evaluation agreements, we are working with manufacturers to incorporate our technologies into their commercial products. However, these technology development and evaluation agreements typically last for limited periods of time, such that our relationships with the product manufacturers will expire unless they continually are renewed. These manufacturers may not agree to renew their relationships with us on a continuing basis. In addition, we regularly continue working with manufacturers evaluating our OLED technologies and materials after our existing agreements with them have expired while we are attempting to negotiate contract extensions or new agreements with them. Should our relationships with the various product manufacturers not continue or be renewed, or if we are not able to identify other product manufacturers and enter into contracts with them, our business would suffer.

Our ability to enter into additional commercial licensing and material supply relationships, or to maintain our existing technology development and evaluation relationships, may require us to make financial or other commitments. We might not be able, for financial or other reasons, to enter into or continue these relationships on commercially acceptable terms, or at all. Failure to do so may cause our business strategy to fail.

Conflicts may arise with our licensees or joint development partners, resulting in renegotiation or termination of, or litigation related to, our agreements with them. This would adversely affect our revenues.

Conflicts could arise between us and our licensees or joint development partners as to royalty rates, milestone payments or other commercial terms. Similarly, we may disagree with our licensees or joint development partners as to which party owns or has the right to commercialize intellectual property that is developed during the course of the relationship or as to other non-commercial terms. If such a conflict were to arise, a licensee or joint development partner might attempt to compel renegotiation of certain terms of their agreement or terminate their agreement entirely, and we might lose the royalty revenues and other benefits of the agreement. Either we or the licensee or joint development partner might initiate litigation to determine commercial obligations, establish intellectual property rights or resolve other disputes under the agreement. Such litigation could be costly to us and require substantial attention of

management. If we were unsuccessful in such litigation, we could lose the commercial benefits of the agreement, be liable for other financial damages and suffer losses of intellectual property or other rights that are the subject of dispute. Any of these adverse outcomes could cause our business strategy to fail.

If we cannot obtain and maintain appropriate patent and other intellectual property rights protection for our OLED technologies and materials, our business will suffer.

The value of our OLED technologies and materials is dependent on our ability to secure and maintain appropriate patent and other intellectual property rights protection. Although we own or license many patents respecting our OLED technologies and materials that have already been issued, there can be no assurance that additional patents applied for will be obtained, or that any of these patents, once issued, will afford commercially significant protection for our OLED technologies and materials, or will be found valid if challenged. Moreover, we have not obtained patent protection for some of our OLED technologies and materials in all foreign countries in which OLED products or materials might be manufactured or sold. In any event, the patent laws of other countries may differ from those of the United States as to the patentability of our OLED technologies and materials and the degree of protection afforded.



The strength of our current intellectual property position results primarily from the essential nature of our fundamental patents covering phosphorescent OLED devices and certain materials utilized in these devices. Our existing fundamental phosphorescent OLED patents expire in 2017 and 2019. While we hold a wide range of additional patents and patent applications whose expiration dates extend (and in the case of patent applications, will extend) beyond 2019, many of which are also of key importance in the OLED industry, none are of an equally essential nature as our fundamental patents, and therefore our competitive position after 2019 may be less certain.

We may become engaged in litigation to protect or enforce our patent and other intellectual property rights, or in International Trade Commission proceedings to abate the importation of goods that would compete unfairly with those of our licensees. In addition, we are participating in or have participated in, and will likely have to participate in the future in, interference or reexamination proceedings before the U.S. Patent and Trademark Office, and opposition, nullity or other proceedings before foreign patent offices, with respect to our patents or patent applications. All of these actions place our patents and other intellectual property rights at risk and may result in substantial costs to us as well as a diversion of management attention. Moreover, if successful, these actions could result in the loss of patent or other intellectual property rights protection for the key OLED technologies and materials on which our business depends.

In addition, we rely in part on unpatented proprietary technologies, and others may independently develop the same or similar technologies or otherwise obtain access to our unpatented technologies. To protect our trade secrets, know-how and other proprietary information, we require employees, consultants, financial advisors and strategic partners to enter into confidentiality agreements. These agreements may not ultimately provide meaningful protection for our trade secrets, know-how or other proprietary information. In particular, we may not be able to fully or adequately protect our proprietary information as we conduct discussions with potential strategic partners. If we are unable to protect the proprietary nature of our technologies, it will harm our business.

We or our licensees may incur substantial costs or lose important rights as a result of litigation or other proceedings relating to our patent and other intellectual property rights.

There are a number of other companies and organizations that have been issued patents and are filing patent applications relating to OLED technologies and materials, including, without limitation, Eastman Kodak Company, Cambridge Display Technology (recently acquired by Sumitomo Chemical Company), Fuji Film Co., Ltd., Canon, Inc., Pioneer Corporation, Semiconductor Energy Laboratories Co. Idemitsu Kosan Co., Ltd. and Mitsubishi Chemical Corporation. As a result, there may be issued patents or pending patent applications of third parties that would be infringed by the use of our OLED technologies or materials, thus subjecting our licensees to possible suits for patent infringement in the future. Such lawsuits could result in our licensees being liable for damages or require our licensees to obtain additional licenses that could increase the cost of their products, which might have an adverse affect on their sales and thus our royalties or cause them to seek to renegotiate our royalty rates.

In addition, we may be required from time-to-time to assert our intellectual property rights by instituting legal proceedings against others. We cannot assure you that we will be successful in enforcing our patents in any lawsuits we may commence. Defendants in any litigation we may commence to enforce our patents may attempt to establish that our patents are invalid or are unenforceable. Thus, any patent litigation we commence could lead to a determination that one or more of our patents are invalid or unenforceable. If a third party succeeds in invalidating one or more of our patents, that party and others could compete more effectively against us. Our ability to derive licensing revenues from products or technologies covered by these patents would also be adversely affected.

Whether our licensees are defending the assertion of third-party intellectual property rights against their businesses arising as a result of the use of our technology, or we are asserting our own intellectual property rights against others, such litigation can be complex, costly, protracted and highly disruptive to our or our licensees' business operations by diverting the attention and energies of management and key technical personnel. As a result, the pendency or adverse outcome of any intellectual property litigation to which we or our licensees are subject could disrupt business

operations, require the incurrence of substantial costs and subject us or our licensees to significant liabilities, each of which could severely harm our business.

Plaintiffs in intellectual property cases often seek injunctive relief in addition to money damages. Any intellectual property litigation commenced against our licensees could force them to take actions that could be harmful to their business and thus to our royalties, including the following:

- stop selling their products that incorporate or otherwise use technology that contains our allegedly infringing intellectual property;
- attempt to obtain a license to the relevant third-party intellectual property, which may not be available on reasonable terms or at all; or
- attempt to redesign their products to remove our allegedly infringing intellectual property to avoid infringement of the third-party intellectual property.

If our licensees are forced to take any of the foregoing actions, they may be unable to manufacture and sell their products that incorporate our technology at a profit or at all. Furthermore, the measure of damages in intellectual property litigation can be complex, and is often subjective or uncertain. If our licensees were to be found liable for infringement of proprietary rights of a third party, the amount of damages they might have to pay could be substantial and is difficult to predict. Decreased sales of our licensees' products incorporating our technology would have an adverse effect on our royalty revenues under existing licenses. Any necessity to procure rights to the third-party technology might cause our existing licensees to renegotiate the royalty terms of their license with us to compensate for this increase in their cost of production or, in certain cases, to terminate their license with us entirely. Were this renegotiation to occur, it would likely harm our ability to compete for new licensees and have an adverse effect on the terms of the royalty arrangements we could enter into with any new licensees.

As is commonplace in technology companies, we employ individuals who were previously employed at other technology companies. To the extent our employees are involved in research areas that are similar to those areas in which they were involved at their former employers, we may be subject to claims that such employees or we have, inadvertently or otherwise, used or disclosed the alleged trade secrets or other proprietary information of the former employers. Litigation may be necessary to defend against such claims. The costs associated with these actions or the loss of rights critical to our or our licensees' business could negatively impact our revenues or cause our business to fail.

A 2007 U.S. Supreme Court decision may raise the standards for all patent applicants and holders for patentability.

On April 30, 2007, the U.S. Supreme Court, in *KSR International Co. vs. Teleflex, Inc.*, mandated a more expansive and flexible approach towards a determination as to whether a patent is obvious and invalid. This ruling may make it more difficult for patent holders to secure or maintain existing patents. At the present time, we are unable to predict the impact, if any, that this recent ruling will have on our currently issued or future patents. As a result of the Supreme Court ruling, however, it may be more difficult for us to defend our currently issued patents or to obtain additional patents in the future. If we are unable to defend our currently issued patents, or to obtain new patents for any reason, our business would suffer.

We have a history of losses and may never be profitable.

Since inception, we have incurred significant losses and we expect to incur losses until such time, if ever, as we are able to achieve sufficient levels of revenue from the commercial exploitation of our OLED technologies and materials to support our operations. This may never occur because:

- OLED technologies might not be adopted for broad commercial usage;
- markets for flat panel displays and solid-state lighting products utilizing OLED technologies may be limited; and
- amounts we can charge for access to our OLED technologies and materials may not be sufficient for us to make a profit.

We may require additional funding in the future in order to continue our business.

Our capital requirements have been and will continue to be significant. We may require additional funding in the future for the research, development and commercialization of our OLED technologies and materials, to obtain and maintain patents and other intellectual property rights in these technologies and materials, and for working capital and other purposes, the timing and amount of which are difficult to ascertain. Our cash on hand may not be sufficient to meet all of our future needs. When we need additional funds, such funds may not be available on commercially reasonable terms or at all. If we cannot obtain more money when needed, our business might fail. Additionally, if we attempt to raise money in an offering of shares of our common stock, preferred stock, warrants or depositary shares, or

if we engage in acquisitions involving the issuance of such securities, the issuance of these shares will dilute our then-existing shareholders.

Many of our competitors have greater resources, which may make it difficult for us to compete successfully against them.

The flat panel display and solid-state lighting industries are characterized by intense competition. Many of our competitors have better name recognition and greater financial, technical, marketing, personnel and research capabilities than us. Because of these differences, we may never be able to compete successfully in these markets.

The consumer electronics industry has historically experienced significant downturns, which may adversely affect the demand for and pricing of our OLED technologies and materials.

Because we do not sell any products to consumers, our success depends upon the ability and continuing willingness of our licensees to manufacture and sell products utilizing our technologies and materials, and the widespread acceptance of those products. Any slowdown in the demand for our licensees' products would adversely affect our royalty revenues and thus our business. The markets for flat panel displays and lighting products are highly competitive. Success in the market for end-user products that may integrate our OLED technologies and materials also depends on factors beyond the control of our licensees and us, including the cyclical and seasonal nature of the end-user markets that our licensees serve, as well as industry and general economic conditions.

The markets that we hope to penetrate have experienced significant periodic downturns, often in connection with, or in anticipation of, declines in general economic conditions. These downturns have been characterized by lower product demand, production overcapacity and erosion of average selling prices. Our business strategy is dependent on manufacturers building and selling products that incorporate our OLED technologies and materials. Industry-wide fluctuations and downturns in the demand for flat panel displays and solid-state lighting products could cause significant harm to our business.

We rely solely on PPG Industries to manufacture the OLED materials we use and sell to product manufacturers.

Our business prospects depend significantly on our ability to obtain proprietary OLED materials for our own use and for sale to product manufacturers. Our agreement with PPG Industries provides us with a source for these materials for development and evaluation purposes, as well as for commercial purposes. This agreement, however, is scheduled to expire on December 31, 2011. Our inability to continue obtaining these OLED materials from PPG Industries or another source would have a material adverse effect on our revenues from sales of these materials, as well as on our ability to perform development work and to support those product manufacturers currently evaluating our OLED technologies and materials for possible commercial use.

Because the vast majority of OLED product manufacturers are located in the Asia-Pacific region, we are subject to international operational, financial, legal and political risks which may negatively impact our operations.

Many of our licensees and prospective licensees have a majority of their operations in countries other than the United States, particularly in the Asia-Pacific region. Risks associated with our doing business outside of the United States include, without limitation:

- compliance with a wide variety of foreign laws and regulations;
- legal uncertainties regarding taxes, tariffs, quotas, export controls, export licenses and other trade barriers;
- economic instability in the countries of our licensees, causing delays or reductions in orders for their products and therefore our royalties;
- political instability in the countries in which our licensees operate, particularly in South Korea relating to its disputes with North Korea and in Taiwan relating to its disputes with China;
- difficulties in collecting accounts receivable and longer accounts receivable payment cycles; and
- potentially adverse tax consequences.

Any of these factors could impair our ability to license our OLED technologies and sell our OLED materials, thereby harming our business.

The U.S. government has rights to our OLED technologies that might prevent us from realizing the benefits of these technologies.

The U.S. government, through various government agencies, has provided and continues to provide funding to us, Princeton University, the University of Southern California and the University of Michigan for research activities related to certain aspects of our OLED technologies. Because we have been provided with this funding, the government has rights to these OLED technologies that could restrict our ability to market them to the government for military and other applications, or to third parties for commercial applications. Moreover, if the government determines that we have not taken effective steps to achieve practical application of these OLED technologies in any field of use in a reasonable time, the government could require us to grant licenses to other parties in that field of use.

Any of these occurrences would limit our ability to obtain the full benefits of our OLED technologies.

If we cannot keep our key employees or hire other talented persons as we grow, our business might not succeed.

Our performance is substantially dependent on the continued services of senior management and other key personnel, and on our ability to offer competitive salaries and benefits to our employees. We do not have employment agreements with any of our management or other key personnel. Additionally, competition for highly skilled technical, managerial and other personnel is intense. We might not be able to attract, hire, train, retain and motivate the highly skilled managers and employees we need to be successful. If we fail to attract and retain the necessary technical and managerial personnel, our business will suffer and might fail.

We can issue shares of preferred stock that may adversely affect the rights of shareholders of our common stock.

Our Articles of Incorporation authorize us to issue up to 5,000,000 shares of preferred stock with designations, rights and preferences determined from time-to-time by our Board of Directors. Accordingly, our Board of Directors is empowered, without shareholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights superior to those of shareholders of our common stock. For example, an issuance of shares of preferred stock could:

- adversely affect the voting power of the shareholders of our common stock;
  - make it more difficult for a third party to gain control of us;
  - discourage bids for our common stock at a premium; or
- otherwise adversely affect the market price of our common stock.

As of March 7, 2008, we have issued and outstanding 200,000 shares of Series A Nonconvertible Preferred Stock, all of which are held by an entity controlled by members of the family of Sherwin I. Seligsohn, our Founder and Chairman of the Board of Directors. Our Board of Directors has authorized and issued other shares of preferred stock in the past, none of which are currently outstanding, and may do so again at any time in the future.

If the price of our common stock goes down, we may have to issue more shares than are presently anticipated to be issued under our agreement with PPG Industries.

Under our agreement with PPG Industries, we are required to issue to PPG Industries shares of our common stock as partial payment for services rendered by it, though under limited circumstances we are required to compensate PPG Industries fully in cash in lieu of common stock. The number of shares of common stock that we are required to deliver to PPG Industries is based on a specified formula. Under this formula, the lower the price of our common stock at and around the time of issuance, the greater the number of shares that we are required to issue to PPG Industries. Lower than anticipated market prices for our common stock, and correspondingly greater numbers of shares issuable to PPG Industries, with a resulting increase in the number of shares available for public sale, could cause people to sell our common stock, including in short sales, which could drive down the price of our common stock, thus reducing its value and perhaps hindering our ability to raise additional funds in the future. In addition, such an increase in the number of outstanding shares of our common stock would further dilute existing holders of this stock.

Our executive officers and directors own a large percentage of our common stock and could exert significant influence over matters requiring shareholder approval, including takeover attempts.

Our executive officers and directors, their respective affiliates and the adult children of Sherwin Seligsohn, our Founder and Chairman of the Board of Directors, beneficially own, as of March 7, 2008, approximately 14.5% of the outstanding shares of our common stock. Accordingly, these individuals may, as a practical matter, be able to exert significant influence over matters requiring approval by our shareholders, including the election of directors and the approval of mergers or other business combinations. This concentration also could have the effect of delaying or preventing a change in control of us.

The market price of our common stock might be highly volatile.

The market price of our common stock might be highly volatile, as has been the case with our common stock in the past as well as the securities of many companies, particularly other small and emerging-growth companies. We have included in the section of this report entitled "Market for Registrant's Common Equity, Related Stockholder Matters and

Issuer Purchases of Equity Securities,” a table indicating the high and low closing prices of our common stock as reported on the NASDAQ Global Market for the past two years. Factors such as the following may have a significant impact on the market price of our common stock in the future:

- our expenses and operating results;
- announcements by us or our competitors of technological developments, new product applications or license arrangements; and
  - other factors affecting the flat panel display and solid-state lighting industries in general.



Our operating results may have significant period-to-period fluctuations, which would make it difficult to predict our future performance.

Due to the current stage of commercialization of our OLED technologies and the significant development and manufacturing objectives that we and our licensees must achieve to be successful, our quarterly operating results will be difficult to predict and may vary significantly from quarter to quarter.

We believe that period-to-period comparisons of our operating results are not a reliable indicator of our future performance at this time. Among other factors affecting our period-to-period results, our license and technology development fees often consist of large one-time or annual payments, resulting in significant fluctuations in our revenues. If, in some future period, our operating results or business outlook fall below the expectations of securities analysts or investors, our stock price would be likely to decline and investors in our common stock may not be able to resell their shares at or above their purchase price. Broad market, industry and global economic factors may also materially reduce the market price of our common stock, regardless of our operating performance.

The issuance of additional shares of our common stock could drive down the price of our stock.

The price of our common stock might decrease if:

- other shares of our common stock that are currently subject to restriction on sale become freely salable, whether through an effective registration statement or based on Rule 144 under the Securities Act of 1933, as amended; or
- we issue additional shares of our common stock that might be or become freely salable, including shares that would be issued upon conversion of our preferred stock or the exercise of outstanding warrants and options.

Because we do not intend to pay dividends, shareholders will benefit from an investment in our common stock only if it appreciates in value.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain our future earnings, if any, to finance further research and development and do not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend upon any future appreciation in its value. There is no guarantee that our common stock will appreciate in value or even maintain the price at which shareholders have purchased their shares.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

#### ITEM 2. PROPERTIES

Our corporate offices and research and development laboratories are located at 375 Phillips Boulevard in Ewing, New Jersey. On December 1, 2004, we acquired the building and property at which this facility is located. During 2005, we conducted a two-stage expansion of our laboratory and office space in the building. We currently occupy the entire 40,200 square feet facility. In 2007, we leased a small portion of this office space to Global Photonic Energy Corporation (GPEC); however, that arrangement ended in March 2008.

In 2007, we also leased approximately 850 square feet of office space in Coeur d'Alene, Idaho. However, that lease was assigned to GPEC effective as of January 1, 2008. We have two employees we share with GPEC who work in this office.

ITEM 3. LEGAL PROCEEDINGS

Patent Interference Concerning U.S. Patent No. 6,734,457

In June 2006, Patent Interference No. 105,461 was declared by the United States Patent and Trademark Office (the “USPTO”) between Semiconductor Energy Laboratory Co., Ltd. (“SEL”), and Princeton and USC (the “Universities”). The dispute concerned U.S. Patent No. 6,734,457, which had been issued to SEL. The SEL patent claimed aspects of our phosphorescent OLED technology that we believe were disclosed and claimed in U.S. Application Serial No.10/913,211, which we exclusively license from the Universities. The Universities sought a ruling by the USPTO that they should be granted a patent to the claimed invention and that the SEL patent is invalid because the Universities were first-to-invent and their invention was made prior to that of SEL. Under our agreement with the Universities, we were required to pay all legal costs and fees associated with the interference proceeding.

An oral hearing in the matter was held before the Board of Patent Appeals and Interferences (the “BPAI”) of the USPTO on April 25, 2007. The following day, the BPAI issued a decision in favor of the Universities. The BPAI decision confirmed that the Universities were first-to-invent the subject matter of the interference and that the Universities’ invention is prior art to SEL’s patent. As a result, all claims of the SEL patent were canceled. SEL did not appeal the BPAI decision and the proceeding is effectively terminated.

Notice of Opposition to European Patent No. 0946958

On December 8, 2006, Cambridge Display Technology, Ltd. (“CDT”), which recently was acquired by Sumitomo Chemical Company (“Sumitomo”), filed a Notice of Opposition to European Patent No. 0946958 (the “EP ‘958 patent”). The EP ‘958 patent, which was issued on March 8, 2006, is a European counterpart patent to U.S. patents 5,844,363, 6,602,540, 6,888,306 and 7,247,073. These patents relate to our FOLED technology. They are exclusively licensed to us by Princeton, and under the license agreement we are required to pay all legal costs and fees associated with this proceeding.

The European Patent Office (the “EPO”) set a date of May 12, 2007 for us to file a response to the facts and arguments presented by CDT in its Notice of Opposition. The response was timely filed. The opponents then filed their reply to our response on December 7, 2007. We are still considering whether we will file another response before the oral hearing date is set. At this stage of the proceeding, we cannot make any prediction as to the probable outcome of this opposition. However, based on our analysis of the evidence presented to date, we continue to believe there is a substantial likelihood that the patent being challenged will be declared valid, and that all or a significant portion of its claims will be upheld.

Notices of Opposition to European Patent No. 1449238

On March 8, 2007, Sumation Company Limited (“Sumation”), a joint venture between Sumitomo and CDT, filed a first Notice of Opposition to European Patent No. 1449238 (the “EP ‘238 patent”). The EP ‘238 patent, which was issued on November 2, 2006, is a European counterpart patent, in part, to U.S. patents 6,830,828, 6,902,830, 7,001,536 and 7,291,406, and to pending U.S. patent application 11/879,379, filed on July 16, 2007. These patents and this patent application relate to our PHOLED technology. They are exclusively licensed to us by Princeton, and under the license agreement we are required to pay all legal costs and fees associated with this proceeding.

Two other parties filed additional oppositions to the EP ‘238 patent just prior to the August 2, 2007 expiration date for such filings. On July 24, 2007, Merck Patent GmbH, of Darmstadt, Germany, filed a second Notice of Opposition to the EP ‘238 patent, and on July 27, 2007, BASF Aktiengesellschaft, of Mannheim, Germany, filed a third Notice of Opposition to the EP ‘238 patent. Since there is considerable overlap in the prior art evidence relied upon in each of the filed oppositions, the EPO is handling them as a single opposition.

The EPO set a January 6, 2008 due date for us to file our response to the opposition. We requested a two-month extension to file this response, and we subsequently filed it in a timely manner. We are waiting to see whether the other parties in the opposition file any additional documents, to which we intend to respond. At this time, we cannot make any prediction as to the probable outcome of the opposition. However, based on our analysis of the evidence presented to date, we continue to believe there is a substantial likelihood that the patent being challenged will be declared valid, and that all or a significant portion of its claims will be upheld.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

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## EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth certain information with respect to our executive officers as of March 7, 2008:

Name	Age	Position
Sherwin I. Seligsohn	72	Founder and Chairman of the Board of Directors
Steven V. Abramson	56	President, Chief Executive Officer and Director
Sidney D. Rosenblatt	60	Executive Vice President, Chief Financial Officer, Treasurer, Secretary and Director
Julia J. Brown	46	Vice President and Chief Technical Officer
Janice K. Mahon	50	Vice President of Technology Commercialization and General Manager of Material Supply Business

Our Board of Directors has appointed these executive officers to hold office until their successors are duly appointed.

Sherwin I. Seligsohn is our Founder and has been the Chairman of our Board of Directors since June 1995. He also served as our Chief Executive Officer from June 1995 through December 2007, and as our President from June 1995 through May 1996. Mr. Seligsohn serves as the sole Director, President and Secretary of American Biomimetics Corporation, International Multi-Media Corporation, and Wireless Unified Network Systems Corporation. He is also Chairman of the Board of Directors, President and Chief Executive Officer of Global Photonic Energy Corporation. From June 1990 to October 1991, Mr. Seligsohn was Chairman Emeritus of InterDigital Communications, Inc. (InterDigital), formerly International Mobile Machines Corporation. He founded InterDigital and from August 1972 to June 1990 served as its Chairman of the Board of Directors. Mr. Seligsohn is a member of the Industrial Advisory Board of the Princeton Institute for the Science and Technology of Materials (PRISM) at Princeton University.

Steven V. Abramson is our President and Chief Executive Officer, and has been a member of our Board of Directors since May 1996. Mr. Abramson served as our President and Chief Operating Officer from May 1996 through December 2007. From March 1992 to May 1996, Mr. Abramson was Vice President, General Counsel, Secretary and Treasurer of Roy F. Weston, Inc., a worldwide environmental consulting and engineering firm. From December 1982 to December 1991, Mr. Abramson held various positions at InterDigital, including General Counsel, Executive Vice President and General Manager of the Technology Licensing Division. Mr. Abramson is a member of the Executive Committee of the Board of Governors of the United States Display Consortium.

Sidney D. Rosenblatt has been our Executive Vice President, Chief Financial Officer, Treasurer and Secretary since June 1995, and has been a member of our Board of Directors since May 1996. Mr. Rosenblatt is the owner of and served as the President of S. Zitner Company from August 1990 through December 1998. From May 1982 to August 1990, Mr. Rosenblatt served as the Senior Vice President, Chief Financial Officer and Treasurer of InterDigital.

Julia J. Brown, Ph.D. has been our Vice President and Chief Technical Officer since June 2002. She joined us in June 1998 as our Vice President of Technology Development. From November 1991 to June 1998, Dr. Brown was a Research Department Manager at Hughes Research Laboratories where she directed the pilot line production of high-speed Indium Phosphide-based integrated circuits for insertion into advanced airborne radar and satellite

communication systems. Dr. Brown received an M.S. and Ph.D. in Electrical Engineering/Electrophysics at the University of Southern California under the advisement of Professor Stephen R. Forrest. Dr. Brown has served as an Associate Editor of the Journal of Electronic Materials and as an elected member of the Electron Device Society Technical Board. She co-founded an international engineering mentoring program sponsored by the Institute of Electrical and Electronics Engineers (“IEEE”) and is a Fellow of the IEEE. Dr. Brown has served on numerous technical conference committees and is presently a member of the Society of Information Display.

Janice K. Mahon has been our Vice President of Technology Commercialization since January 1997, and became the General Manager of our Materials Supply Business in January 2007. From 1992 to 1996, Ms. Mahon was Vice President of SAGE Electrochromics, Inc., a thin-film electrochromic technology company, where she oversaw a variety of business development and marketing programs and managed finance and administration activities. From 1984 to 1989, Ms. Mahon was a Vice President and General Manager for Chronar Corporation, a leading developer and manufacturer of amorphous silicon photovoltaic (PV) panels. Prior to that, Ms. Mahon worked as Senior Engineer for the Industrial Chemicals Division of FMC Corporation, where she developed and implemented novel process technologies. Ms. Mahon received her B. S. in Chemical Engineering from Rensselaer Polytechnic Institute in 1979, and an M. B. A. from Harvard University in 1984. Ms. Mahon has been a member of the USDC Technical Council since 1997, and a member of its Governing Board since January 2008.

## PART II

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

## Our Common Stock

Our common stock is quoted on the NASDAQ Global Market under the symbol "PANL." The following table sets forth, for the periods indicated, the high and low closing prices of our common stock as reported on the NASDAQ Global Market.

	High Close	Low Close
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2007		
Fourth Quarter	\$ 21.88	\$ 15.67
Third Quarter	18.44	13.80
Second Quarter	17.70	14.59
First Quarter	15.80	12.03
2006		
Fourth Quarter	\$ 15.15	\$ 10.59
Third Quarter	13.66	10.02
Second Quarter	16.08	12.25
First Quarter	15.25	10.94

As of March 7, 2008, there were approximately 17,250 holders of record of our common stock.

We have never declared or paid cash dividends on our common stock. We currently intend to retain any future earnings for the operation and expansion of our business. We do not anticipate declaring or paying cash dividends on our common stock in the foreseeable future. Any future payment of cash dividends on our common stock will be at the discretion of our Board of Directors and will depend upon our results of operations, earnings, capital requirements, contractual restrictions and other factors deemed relevant by our Board of Directors.

## Issuance of Securities to PPG Industries

Under our OLED Materials Supply and Service Agreement, we have the option to issue shares of our common stock to PPG Industries on a periodic basis as payment for up to 50% of the amounts due for certain services performed for us by PPG Industries. During the quarter ended December 31, 2007, we issued an aggregate of 21,552 shares of our common stock to PPG Industries as partial payment for these services. The shares were issued in reliance on the exemption from registration contained in Section 4(2) of the Securities Act of 1933, as amended.

## Issuance of Securities Upon the Exercise of Outstanding Warrants

During the quarter ended December 31, 2007, we issued an aggregate of 262,289 shares of our common stock upon the exercise of outstanding warrants. The warrants had a weighted-average exercise price of \$7.62 per share. The shares were issued in reliance on the exemption from registration contained in Section 4(2) of the Securities Act of 1933, as amended.

## Receipt of Shares Upon the Exercise of Outstanding Stock Options

As illustrated in the following table, on December 14, 2007, certain of our executive officers and a former executive officer tendered payment to us a total of 22,222 shares of our common stock as payment of the exercise price for stock options that had previously been granted to these individuals under our Equity Compensation Plan. These stock options had an exercise price of \$5.25 per share, and an expiration date of December 17, 2007. The shares we received were valued at \$17.72 per share, which was the closing price of our common stock on the NASDAQ Global Market on December 14, 2007. The total value of the shares we received was \$393,774.

The following table provides information relating to the shares we received during the fourth quarter of 2007.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
October 1 – October 31	--	--	--	--
November 1 – November 30	--	--	--	--
December 1 – December 31	22,000	\$17.72	22,000	--
Total	22,000	\$17.72	22,000	--

## Performance Graph

The performance graph below compares the change in the cumulative shareholder return of our common stock from December 31, 2002 to December 31, 2007, with the percentage change in the cumulative total return over the same period on (i) the Russell 2000 Index, and (ii) the Nasdaq Electronics Components Index. This performance graph assumes an initial investment of \$100 on December 31, 2002 in each of our common stock, the Russell 2000 Index and the Nasdaq Electronics Components Index.

	Cumulative Total Return					
	12/02	12/03	12/04	12/05	12/06	12/07
UNIVERSAL DISPLAY CORP.	\$	\$	\$	\$	\$	\$
	100.00	173.89	114.07	133.21	190.24	261.98
RUSSELL 2000	100.00	147.25	174.24	182.18	215.64	212.26
NASDAQ ELECTRONIC COMPONENTS	100.00	196.18	153.08	166.42	155.47	180.19



## ITEM 6. SELECTED FINANCIAL DATA

The following selected condensed consolidated financial data has been derived from, and should be read in conjunction with, our audited Consolidated Financial Statements and the notes thereto, and with "Management's Discussion and Analysis of Financial Condition and Results of Operations," included elsewhere in this report.

	Year Ended December 31,				
	2007	2006	2005	2004	2003
<b>Operating Results:</b>					
Total revenue	\$ 11,305,907	\$ 11,921,292	\$ 10,147,995	\$ 7,006,913	\$ 6,593,193
Research and development expense	20,909,262	19,562,004	18,798,024	16,226,517	17,447,243
General and administrative expense	9,569,381	8,902,462	7,704,931	7,052,047	5,766,761
Interest income	3,599,229	2,168,933	1,419,858	795,620	162,356
Income tax benefit	804,980	544,567	424,207	612,966	—
Net loss	(15,975,841)	(15,186,804)	(15,801,612)	(15,776,574)	(17,353,205)
Net loss attributable to common shareholders	(15,975,841)	(15,186,804)	(15,801,612)	(15,906,198)	(18,387,507)
Net loss per share, basic and diluted	(0.47)	(0.49)	(0.56)	(0.59)	(0.82)
<b>Balance Sheet Data:</b>					
Total assets	\$ 105,000,071	\$ 72,331,536	\$ 73,819,417	\$ 73,892,163	\$ 46,201,646
Current liabilities	12,790,531	14,382,673	11,974,854	7,404,278	4,194,776
Capital lease obligations	—	—	—	—	3,886
Long-term debt	—	—	—	4,200,000	—
Shareholders' equity	89,215,957	54,382,363	57,616,463	59,187,885	38,906,870
<b>Other Financial Data:</b>					
Working capital	\$ 73,979,638	\$ 37,422,740	\$ 38,347,913	\$ 40,630,913	\$ 23,679,705
Capital expenditures	1,225,857	2,349,033	5,656,905	7,418,053	957,328
Weighted average shares used in computing basic	33,759,581	30,855,297	28,462,925	26,791,158	22,428,219

and diluted net  
loss per  
common share

Shares of  
common stock  
outstanding, end  
of period

35,563,201	31,385,408	29,545,471	27,903,385	24,196,765
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Certain prior year amounts have been reclassified to conform to current year presentation.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the section entitled "Selected Financial Data" in this report and our Consolidated Financial Statements and related notes to this report. This discussion and analysis contains forward-looking statements based on our current expectations, assumptions, estimates and projections. These forward-looking statements involve risks and uncertainties. Our actual results could differ materially from those indicated in these forward-looking statements as a result of certain factors, as more fully discussed in Section 1A of this report, entitled "Risk Factors."

### Overview

We are a leader in the research, development and commercialization of organic light emitting diode, or OLED, technologies for use in flat panel display, solid-state lighting and other applications. Since 1994, we have been exclusively engaged, and expect to continue to be exclusively engaged, in funding and performing research and development activities relating to OLED technologies and materials, and in attempting to commercialize these technologies and materials. Our revenues are generated through contract research, sales of development and commercial chemicals, technology development and evaluation agreements and license fees and royalties. In the future, we anticipate that the revenues from licensing our intellectual property will become a more significant part of our revenue stream.

While we have made significant progress over the past few years developing and commercializing our family of OLED technologies (PHOLED, TOLED, FOLED, etc.) and materials, we have incurred significant losses and will likely continue to do so until our OLED technologies and materials become more widely adopted by product manufacturers. We have incurred significant losses since our inception, resulting in an accumulated deficit of \$161,332,467 as of December 31, 2007.

We anticipate fluctuations in our annual and quarterly results of operations due to uncertainty regarding:

- the timing of our receipt of license fees and royalties, as well as fees for future technology development and evaluation;
- the timing and volume of sales of our OLED materials for both commercial usage and evaluation purposes;
- the timing and magnitude of expenditures we may incur in connection with our ongoing research and development activities; and
  - the timing and financial consequences of our formation of new business relationships and alliances.

#### Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect our reported assets and liabilities, revenues and expenses, and other financial information. Actual results may differ significantly from our estimates under other assumptions and conditions.

We believe that our accounting policies related to revenue recognition and deferred license fees, valuation of acquired technology and stock-based compensation, as described below, are our “critical accounting policies” as contemplated by the SEC. These policies, which have been reviewed with our Audit Committee, are discussed in greater detail below.

#### Revenue Recognition and Deferred License Fees

Contract research revenue represents reimbursements by the U.S. government for all or a portion of the research and development expenses we incur related to our government contracts. Revenue is recognized proportionally as research and development expenses are incurred or as defined milestones are achieved. In order to ascertain the revenue associated with these contracts for a period, we estimate the proportion of related research and development expenses incurred and whether defined milestones have been achieved. Different estimates would result in different revenues for the period.

We also receive non-refundable advance license and royalty payments under certain of our development and technology evaluation agreements. These payments are classified as deferred revenue and deferred license fees, which represents the cash received and recorded as a liability until such time revenue can be recognized. Payments that are not creditable to a license are recognized as revenue over the term of the agreement. Payments that are creditable to a license are deferred until a license agreement is executed or negotiations have ceased and there is no appreciable likelihood of executing a license agreement with the other party. Upfront amounts received where a license agreement has not yet been executed are recorded as a current liability in the consolidated balance sheet. If a license agreement is executed, these payments would be recorded as revenues over the expected term of the licensed technology and the associated deferred revenue for the upfront payment would be classified based on the terms of the license; otherwise, they will be recorded as revenues at the time negotiations with the other party show that there is no appreciable likelihood of entering into a license agreement. If we used different estimates for the expected term of this licensed technology, reported revenue during the relevant period would differ. As of December 31, 2007, \$10,344,539 was

recorded as deferred revenue and deferred license fees, of which \$6,666,667 has been received where a license agreement has not yet been executed.

#### Valuation of Acquired Technology

We regularly review our acquired OLED technologies for events or changes in circumstances that might indicate the carrying value of these technologies may not be recoverable. Factors considered important that could cause impairment include, among others, significant changes in our anticipated future use of these technologies and our overall business strategy as it pertains to these technologies, particularly in light of patents owned by others in the same field of use. As of December 31, 2007, we believe that no revision of the remaining useful lives or write-down of our acquired technology was required for 2007, nor was such a revision needed in 2006 or 2005. The net book value of our acquired technology was \$4,624,416 as of December 31, 2007.

## Valuation of Stock-Based Compensation

We account for our stock-based compensation (see Notes 2 and 10 of the Notes to Consolidated Financial Statements) under Statement of Financial Accounting Standards (SFAS) No. 123(R), Share-Based Payment. We recognize in the statement of operations the grant-date fair value of stock options and other equity-based compensation issued to employees. The statement eliminates the intrinsic value-based method prescribed by Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations, that we used prior to 2006. We account for our stock option and warrant grants to non-employees in exchange for goods or services in accordance with SFAS No. 123(R) and Emerging Issues Task Force 96-18 (EITF 96-18). SFAS No. 123(R) and EITF 96-18 require that we record an expense for our option and warrant grants to non-employees based on the fair value of the options and warrants granted.

We use the Black-Scholes option-pricing model to estimate the fair value of options we have granted for purposes of recording charge to the statement of operations required by SFAS No. 123(R). In order to calculate the fair value of the options, assumptions are made for certain components of the model, including risk-free interest rate, volatility, expected dividend yield rate and expected option life. Although we use available resources and information when setting these assumptions, changes to the assumptions could cause significant adjustments to the valuation.

## Results of Operations

### Year Ended December 31, 2007 Compared to Year Ended December 31, 2006

We had a net loss of \$15,975,841 (or \$0.47 per diluted share) for the year ended December 31, 2007, compared to a net loss of \$15,186,804 (or \$0.49 per diluted share) for the year ended December 31, 2006. The increase in net loss was primarily due to:

- a decrease in revenues of \$615,385; and
- an increase in operating expenses of \$1,866,356.

The increase in operating loss was offset to some extent by an increase of \$1,430,296 in interest income. The decrease in net loss per diluted share, despite the increase in total net loss, resulted from an increase in the weighted average number of shares of our common stock outstanding in 2007, as compared to 2006.

Our revenues were \$11,305,907 for the year ended December 31, 2007, compared to \$11,921,292 for the year ended December 31, 2006. The decrease in revenues was mainly due to:

- a decrease in development chemical revenue of \$606,997;
- a decrease in royalty and license revenue of \$1,571,808 and
- a decrease in technology development revenue of \$938,976.

These decreases were offset by the following:

- an increase in contract research revenue of \$778,790; and
- an increase in commercial chemical revenue of \$1,723,606.

We earned \$4,600,693 in contract research revenue from the U.S. Government for 2007, compared to \$3,821,903 for 2006. The increase was mainly attributable to increased work performed under government contracts and the

achievement of milestones as specified within government contracts. We commenced work on 10 new government contracts during 2007 and completed work on eight government programs during the year.

We earned \$1,049,854 from our sales of OLED materials for development purposes in 2007, compared to \$1,656,851 in 2006. The decrease was mainly due to decreased volume of development chemical purchases as a result of an OLED product manufacturer transitioning from exclusively development chemical purchases in 2006 to primarily commercial chemical purchases in 2007. We cannot accurately predict the timing and frequency of development chemical purchases by our customers due to participants in the OLED industry having differing OLED technology development and product launch strategies, which are subject to change and adjustment.

For 2007, our commercial chemical and royalty and license revenues were \$3,599,677 and \$828,371, respectively, compared to \$1,876,071 and \$2,400,179, respectively, in 2006. The increase in commercial chemical revenue was due to increased purchases of our proprietary PHOLED materials for use in commercial OLED products, including by the OLED product manufacturers referred to above. In the fourth quarter of 2006, we began supplying our proprietary PHOLED materials to Samsung SDI for use in a commercial active-matrix OLED display product. This activity continued in 2007, with Samsung SDI being responsible for the vast majority of our commercial chemical sales for the year. As discussed further below, in 2007 we also began recognizing royalty and license revenue from Samsung SDI on account of its sales of commercial OLED products made using our proprietary PHOLED technology and materials.

In 2007, we also began supplying our proprietary PHOLED materials to Chi Mei EL and LG Display, with whom we signed commercial supply agreements during the year. These agreements are similar to the agreement we had entered into with AU Optronics, in that we record both commercial chemical and royalty and license revenues from our sales of materials under the agreements. A small portion of our commercial chemical and royalty and license revenues for 2007 were from sales of our materials to Chi Mei EL and LG Display.

For the first seven months of 2006, we supplied one of our proprietary PHOLED materials to AU Optronics Corporation for use in a commercial active-matrix OLED display product. Under our agreement with AU Optronics, we recognized commercial chemical revenue of \$886,676 and royalty and license revenues of \$1,773,324 on account of our sales of this material to AU Optronics. However, those sales ended when AU Optronics discontinued manufacturing the product for which it ordered our materials in the third quarter of 2006, and we have not sold any commercial chemicals to AU Optronics since that time. Commercial chemical and royalty and license revenues from our material sales to AU Optronics represented a substantial component of our revenues for 2006.

We cannot accurately predict how long our material sales to Samsung SDI or other customers will continue, as they frequently update and alter their product offerings. Continued sales of our PHOLED materials to these customers will depend on several factors, including, pricing, availability, continued technical improvement and competitive product offerings.

Our royalty and license revenue for 2007 decreased substantially from 2006 due in large part to the difference in our business agreements with Samsung SDI and AU Optronics. As previously indicated, under the terms of our agreement with AU Optronics we recognized royalty and license revenue at the time we sold our proprietary PHOLED material to AU Optronics. In contrast, under the terms of our agreement with Samsung SDI, we recognize royalty revenue when Samsung SDI reports to us the sale of commercial OLED products made using our proprietary PHOLED technology and materials. This can occur up to six months or more after the date on which we sell our PHOLED materials to Samsung SDI. For 2007, we recognized \$61,317 in royalty revenue on account of sales of these commercial OLED products reported to us by Samsung SDI for the first three quarters of the year. As Samsung SDI's product sales increase and its production yields improve, we anticipate our royalty revenue to increase as well. There was no corresponding royalty revenue reported to us by Samsung SDI for 2006.

Our royalty and license revenue for 2006 did, however, include license fees received under our patent license agreement with Samsung SDI, as well as license fees received under our cross-license agreement executed with DuPont Displays, Inc. We received upfront payments of license fees in connection with both of these agreements, and in addition we received an upfront payment of royalties under the agreement with Samsung SDI. All of these payments have been classified as deferred. The deferred license fees are being recognized as royalty and license revenue over the life of our agreement with Samsung SDI, and over 10 years for our agreement with DuPont Displays. The deferred royalties are being recognized as royalty and license revenue when sales of commercial OLED products are reported to us by Samsung SDI.

We recognized \$1,227,312 in technology development revenue for 2007, compared to \$2,166,288 in corresponding revenue for 2006. Technology development revenue for 2007 was derived from one technology development contract that we renewed and continued working under for the entire year. For 2006, we derived technology development

revenue from this and three other contracts for technology development and similar services. Although in 2007 we continued working with all of the companies from which we derived technology development revenue for 2006, our business arrangements with these companies have changed as the OLED industry has evolved and our customers have refined their technology development strategies. For example, we received a non-refundable payment for the continuation of one of these technology development agreements in the third quarter of 2006, which payment is creditable against future amounts payable under a commercial license agreement, if one is executed by a specified date. Due to this business arrangement, the payment has been recorded as a deferred license fee rather than technology development revenue. Business changes such as this one make it difficult for us to predict the amount and timing of our recognition of future revenues for technology development and similar services.

We incurred research and development expenses of \$20,909,262 for the year ended December 31, 2007, compared to \$19,562,004 for the year ended December 31, 2006. The increase was mainly due to:

- an increase of \$1,916,862 attributable to higher operating costs associated with our Ewing facility;
- in 2006, we received a refund from Princeton University for unspent research and development funds of \$1,011,358. No such refund was received in 2007
  - an increase of \$724,254 in personnel costs due mainly to increased salaries; and
- an increase of \$242,281 relating to the recognition of expenses for stock issuances to non-employee members of our Scientific Advisory Board, and for the vesting of shares of restricted stock previously issued to these individuals.



The increase was offset to some extent by a decrease of \$1,673,560 in amounts paid to PPG Industries under our OLED Materials Supply and Service Agreement, as we brought a portion of the work previously performed by PPG Industries in-house.

Included within research and development expenses are patent defense costs of \$315,177 and \$507,006 for each of 2007 and 2006, respectively. These costs were associated with the two European patent opposition matters and a patent interference matter with Semiconductor Energy Laboratory (SEL) that was concluded in April 2007, as described in response to Item 3 of this report (Legal Proceedings). We anticipate that our patent defense costs may increase as active matrix OLED products using our PHOLED and other OLED technologies and materials enter the consumer marketplace.

General and administrative expenses were \$9,569,381 for the year ended December 31, 2007, compared to \$8,902,462 for the year ended December 31, 2006. The increase was due mainly to:

- an increase of \$465,243 in personnel costs due to salary increases; and
- an increase of \$153,493 attributable to higher operating costs associated with our Ewing facility.

Royalty and license expenses were \$305,846 for the year ended December 31, 2007, compared to \$687,436 for the year ended December 31, 2006. The decrease was due to a reduction of \$370,998 in royalties owed to Motorola. For 2006, we had a minimum royalty obligation to Motorola of \$500,000. Beginning with 2007, however, we were no longer required to make minimum royalty payments to Motorola.

Interest income increased to \$3,599,229 for the year ended December 31, 2007, compared to \$2,168,933 for the year ended December 31, 2006. The increase was mainly attributable to increased cash to invest due to funds received from a common stock offering that we completed in May 2007, as well as higher rates of return on investments during of 2007.

During 2007, we sold approximately \$7.5 million of our state-related income tax net operating losses (NOLs) and approximately \$263,000 of our research and development tax credits under the New Jersey Technology Tax Certificate Transfer Program. In 2007, we received proceeds of \$804,980 from our sale of these NOLs and research and development tax credits, and we recorded these proceeds as an income tax benefit. During 2006, we sold approximately \$7 million of our state-related income tax NOLs and we received proceeds of \$544,567. We expect to sell a similar quantity of NOLs to New Jersey under the program in 2008.

#### Year Ended December 31, 2006 Compared to Year Ended December 31, 2005

We had a net loss of \$15,186,804 (or \$0.49 per diluted share) for the year ended December 31, 2006, compared to a net loss of \$15,801,612 (or \$0.56 per diluted share) for the year ended December 31, 2005. The decrease in net loss was primarily due to:

- increased revenues of \$1,773,297; and
- an increase of \$2,203,209 in operating expenses.

The decrease in operating loss was offset to some extent by an increase of \$749,075 in interest income.

Our revenues were \$11,921,292 for the year ended December 31, 2006, compared to \$10,147,995 for the year ended December 31, 2005. The increase in revenues was mainly due to:

- an increase in commercial chemical revenue of \$1,844,676;

- an increase in royalty and license revenue of \$2,166,624; and
- an increase in technology development revenue of \$440,909.

The increase was offset by the following:

- a decrease in contract research revenue of \$832,078; and
- a decrease in development chemical revenue of \$1,846,834.

We earned \$3,821,903 in contract research revenue from the U.S. Government for 2006, compared to \$4,653,981 for 2005. The decrease was mainly attributable to the level of work performed under government contracts and the achievement of milestones as specified within government contracts. The number of government contracts we worked under and the level of effort performed under these contracts remained essentially constant from 2005 to 2006.

We earned \$1,656,851 from our sales of OLED materials for development purposes in 2006, compared to \$3,503,685 for corresponding sales in 2005. The decrease was mainly due to a decreased volume of development chemical purchases as a result of an OLED product manufacturer transitioning from exclusively development chemical purchases in 2005 to primarily commercial chemical purchases in 2006. We cannot accurately predict the timing and frequency of development chemical purchases by our customers due to participants in the OLED industry having differing OLED technology development and product launch strategies, which are subject to change and adjustment.

For 2006, our commercial chemical and our royalty and license revenues were \$1,876,071 and \$2,400,179, respectively, compared to \$31,395 and \$233,555, respectively, for the corresponding period in 2005. The increase in commercial chemical revenue was due to purchases of our proprietary PHOLED materials for use in commercial OLED products by two new customers. In the fourth quarter of 2006, we began supplying one of our proprietary PHOLED materials to Samsung SDI for use in a commercial active-matrix OLED display product.

For the first seven months of 2006, we also supplied one of our proprietary PHOLED materials to AU Optronics Corporation for use in a commercial active-matrix OLED display product. Under our agreement with AU Optronics, we recognized commercial chemical and royalty and license revenues of \$2,660,000 on account of our sales of this material to AU Optronics. However, those sales ended when AU Optronics discontinued manufacturing the product for which it ordered our materials in the third quarter of 2006, and we did not sell any commercial chemicals to AU Optronics after that time. Commercial chemical and royalty and license revenues from our material sales to AU Optronics represented a substantial component of our revenues for 2006.

Our royalty and license revenue for 2006 included license fees received under our patent license agreement with Samsung SDI, as well as license fees received under our cross-license agreement executed with DuPont Displays, Inc. We received upfront payments of license fees in connection with both of these agreements, and in addition we received an upfront payment of royalties under the agreement with Samsung SDI. All of these payments have been classified as deferred license fees and deferred revenue. The deferred license fees are being recognized as royalty and license revenue over the term of our agreement with Samsung SDI, and over 10 years for our agreement with DuPont Displays. The deferred royalties are being recognized as royalty and license revenue when sales of commercial OLED products are reported to us by Samsung SDI.

We recognized \$2,166,288 in technology development revenue for 2006, compared to \$1,725,379 in corresponding revenue for 2005. Although the number of technology development contracts that we were working under did not change between 2005 and 2006, technology development revenues increased due mainly to work performed under a contract that commenced in the third quarter of 2005. The amount and timing of our receipt of fees for technology development and similar services is difficult to predict due to participants in the OLED industry having differing technology development strategies.

We incurred research and development expenses of \$19,562,004 for the year ended December 31, 2006, compared to \$18,798,024 for the year ended December 31, 2005. The increase was mainly due to:

- an increase of \$1,661,326 in personnel costs; and
- an increase of \$1,464,059 attributable to higher operating costs associated with the expansion of our Ewing facility.

The increase was offset to some extent by the following:

- a refund from Princeton University for unspent research and development funds of \$1,011,358;
- a decrease of \$528,966 in amounts payable to PPG Industries due to the hiring of certain PPG employees as employees of ours; and
- a decrease of \$563,203 relating to the recognition of expense for stock issuances to non-employee members of our Scientific Advisory Board.

Included within research and development expenses are patent defense costs of \$507,006 and \$97,353 for each of 2006 and 2005, respectively. These costs were associated with the two European patent opposition matters and a patent interference matter with Semiconductor Energy Laboratory (SEL) that was concluded in April 2007, as described in response to Item 3 of this report (Legal Proceedings).

General and administrative expenses were \$8,902,462 for the year ended December 31, 2006, compared to \$7,704,931 for the same period in 2005. The increase was due mainly to:

- an increase of \$559,359 in personnel costs due to salary increases and the recognition of stock-based compensation expenses under SFAS No. 123(R); and
- an increase of \$631,422 attributable to higher operating costs associated with the expansion of our Ewing facility.

Royalty and license expenses were \$687,436 for the year ended December 31, 2006, compared to \$610,098 for the year ended December 31, 2005. The increase was due to \$67,338 in additional royalties due to Princeton University.

Interest income increased to \$2,168,933 for the year ended December 31, 2006, compared to \$1,419,858 for the year ended December 31, 2005. This was the result of higher rates of return on investments during 2006.

During 2006, we sold approximately \$7 million of our state-related income tax net operating losses (NOLs) under the New Jersey Technology Tax Certificate Transfer Program. In 2006, we received proceeds of \$544,567 from the sale of these NOLs and we recorded these proceeds as an income tax benefit. During 2005, we sold approximately \$5 million of our state-related income tax NOLs and received proceeds from these sales of \$424,207.

#### Liquidity and Capital Resources

As of December 31, 2007, we had cash and cash equivalents of \$33,870,696 and short-term investments of \$49,788,961, for a total of \$83,659,657. This compares to cash and cash equivalents of \$31,097,533 and investments in certificates of deposit and other liquid instruments of \$18,000,522, for a total of \$49,098,055, as of December 31, 2006. The increase in cash and investments of \$34,561,602 was primarily due to proceeds received from the common stock offering we completed in May 2007.

Cash used in operating activities was \$11,096,764 for 2007, compared to \$4,703,792 for 2006. The increased use of cash was mainly due to a decrease in non-cash expenses under a development agreement of \$2,041,492, a decrease in our accounts payable and accrued expenses of \$2,061,519, and reduced receipts of deferred license fees and other deferred revenues of \$1,659,842. The decrease in non-cash expenses related mainly to a change in our relationship with PPG Industries. In 2006, we transferred development work, which was previously conducted at PPG, to our own in-house laboratories. We had been paying for that work by issuing shares of our common stock. Once the work was transferred to us, those non-cash expenses were eliminated, and the overall amounts payable to PPG Industries were reduced. The decrease in our accounts payable and accrued expenses related primarily to our agreement with Motorola. At December 31, 2006, we had \$1 million in royalties due to Motorola, based on a minimum royalty obligation under our agreement. This amount was included in accounts payable and accrued expenses for 2006. No such minimum royalty was due at December 31, 2007.

Cash used in investing activities was \$32,670,039 for 2007, compared to \$1,134,692 for the year ended 2006. The increase was mainly due to increased investment purchases using the funds we received from the common stock offering we completed in May 2007.

Cash provided by financing activities was \$46,539,966 for 2007, as compared to \$6,281,768 for 2006. The increase was mainly due to the completion in May 2007 of our public offering of 2,800,000 shares of our common stock at a price of \$14.50 per share. The offering resulted in proceeds to us of \$38,000,023, net of \$2,599,977 in underwriting discounts and commissions and other costs associated with completion of the offering.

Working capital increased to \$73,979,638 as of December 31, 2007, from \$37,422,740 as of December 31, 2006. Again, this increase was mainly due to proceeds from the common stock offering we completed in May 2007.

We anticipate, based on our internal forecasts and assumptions relating to our operations (including, among others, assumptions regarding our working capital requirements, the progress of our research and development efforts, the availability of sources of funding for our research and development work, and the timing and costs associated with the preparation, filing, prosecution, maintenance and defense of our patents and patent applications), that we have sufficient cash, cash equivalents and short-term investments to meet our obligations through at least 2009.

We believe that potential additional financing sources for us include long-term and short-term borrowings, public and private sales of our equity and debt securities and the receipt of cash upon the exercise of warrants and options. It should be noted, however, that additional funding may be required in the future for research, development and commercialization of our OLED technologies and materials, to obtain, maintain and enforce patents respecting these technologies and materials, and for working capital and other purposes, the timing and amount of which are difficult to ascertain. There can be no assurance that additional funds will be available to us when needed, on commercially reasonable terms or at all.

## Contractual Obligations

As of December 31, 2007, we had the following contractual commitments:

Contractual Obligations	Total	Payments due by period			
		Less than 1 year	1-3 years	3-5 years	More than 5 years
Sponsored research obligation	3,923,258	2,942,444	980,814	—	—
Minimum royalty obligation	500,000	100,000	200,000	200,000/year(1)	—
Total (2)	\$ 4,423,258	\$ 3,042,444	\$ 1,180,814	\$ 200,000/year(1)	—

- (1) Under our Amended License Agreement with Princeton University, the University of Southern California and the University of Michigan, we are obligated to pay minimum royalties of \$100,000 per year until such time as the agreement is no longer in effect. The agreement has no scheduled expiration date.
- (2) See Note 12 to the Consolidated Financial Statements for discussion of obligations upon termination of employment of executive officers as a result of a change in control of the Company.

## Off-Balance Sheet Arrangements

As of December 31, 2007, we had no off-balance sheet arrangements in the nature of guarantee contracts, retained or contingent interests in assets transferred to unconsolidated entities (or similar arrangements serving as credit, liquidity or market risk support to unconsolidated entities for any such assets), or obligations (including contingent obligations) arising out of variable interests in unconsolidated entities providing financing, liquidity, market risk or credit risk support to us, or that engage in leasing, hedging or research and development services with us.

## Recently Issued Accounting Pronouncements

Recently issued accounting pronouncements are addressed in Note 2 in the Notes to Consolidated Financial Statements. We do not expect that the adoption of these recently issued accounting pronouncements will have a material impact on our consolidated financial statements or results of operations.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We do not utilize financial instruments for trading purposes and hold no derivative financial instruments, other financial instruments or derivative commodity instruments that could expose us to significant market risk. As such, a change in interest rates of 1 percentage point would not have a material impact on our operating results and cash flows. Our primary market risk exposure with regard to financial instruments is to changes in interest rates, which would impact interest income earned on investments.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Our Consolidated Financial Statements and the relevant notes to those statements are attached to this report beginning on page F-1.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2007. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures, as of the end of the period covered by this report, are functioning effectively to provide reasonable assurance that the information required to be disclosed by us in reports filed or submitted under the Securities Exchange Act of 1934, as amended, is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding disclosure. However, a controls system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

31

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Management's Report on Internal Control over Financial Reporting and Attestation Report of Public Accounting Firm

The report of management on our internal control over financial reporting and the associated attestation report of our independent registered public accounting firm are set forth in Item 8 of this report.

#### Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2007 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### ITEM OTHER INFORMATION

9B.

None.

### PART III

#### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to this item is set forth in our definitive Proxy Statement for the 2008 Annual Meeting of Shareholders, which is to be filed with the Securities and Exchange Commission no later than April 29, 2008, (our "Proxy Statement"), and which is incorporated herein by reference. Information regarding our executive officers is included at the end of Part I of this report.

#### ITEM 11. EXECUTIVE COMPENSATION

Information with respect to this item is set forth in our Proxy Statement, and is incorporated herein by reference.

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

Information with respect to this item is set forth in our Proxy Statement, and is incorporated herein by reference.

#### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information with respect to this item is set forth in our Proxy Statement, and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information with respect to this item is set forth in our Proxy Statement, and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this report:

(1) Financial Statements:

Management's Report on Internal Control Over Financial Reporting.....	F-2.....
Report of Independent Registered Public Accounting Firm.....	F-3.....
Report of Independent Registered Public Accounting Firm.....	F-4.....
Consolidated Balance Sheets.....	F-5.....
Consolidated Statements of Operations.....	F-6.....
Consolidated Statements of Shareholders' Equity and Comprehensive Loss.....	F-7.....
Consolidated Statements of Cash Flows.....	F-9.....
Notes to Consolidated Financial Statements.....	F-10.....

(2) Financial Statement Schedules:

None.

(3) Exhibits:

The following is a list of the exhibits filed as part of this report. Where so indicated by footnote, exhibits that were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated parenthetically, together with a reference to the filing indicated by footnote.

Exhibit Number	Description
3.1	Amended and Restated Articles of Incorporation of the registrant(1)
3.2	Amendment to Amended and Restated Articles of Incorporation of the registrant(2)
3.3	Bylaws of the registrant(1)
10.1#	Warrant Agreement between the registrant and Steven V. Abramson, dated as of April 2, 1998(3)

- 10.2# Warrant Agreement between the registrant and Sidney D. Rosenblatt, dated as of April 2, 1998(3)
- 10.3# Warrant Agreement between the registrant and Julia J. Brown, dated as of April 18, 2000(4)
- 10.4#Amendment No. 1 to Warrant Agreement between the registrant and Julia J. Brown, dated as of April 18, 2000(1)
- 10.5#Change in Control Agreement between the registrant and Sherwin I. Seligsohn, dated as of April 28, 2003(5)
- 10.6#Change in Control Agreement between the registrant and Steven V. Abramson, dated as of April 28, 2003(5)
- 10.7#Change in Control Agreement between the registrant and Sidney D. Rosenblatt, dated as of April 28, 2003(5)
- 10.8# Change in Control Agreement between the registrant and Julia J. Brown, dated as of April 28, 2003(5)

- 10.9#Non-Competition and Non-Solicitation Agreement between the registrant and Sherwin I. Seligsohn, dated as of February 23, 2007(6)
- 10.10#Non-Competition and Non-Solicitation Agreement between the registrant and Steven V. Abramson, dated as of January 26, 2007(6)
- 10.11#Non-Competition and Non-Solicitation Agreement between the registrant and Sidney D. Rosenblatt, dated as of February 7, 2007(6)
- 10.12#Non-Competition and Non-Solicitation Agreement between the registrant and Julia J. Brown, dated as of February 5, 2007(6)
- 10.13#Executive Performance Compensation Program, dated as of April 20, 2004(3)
- 10.14 Equity Compensation Plan, dated as of June 29, 2006(7)
- 10.151997 Research Agreement between the registrant and The Trustees of Princeton University, dated as of August 1, 1997(8)
- 10.16Amendment #1 to the 1997 Research Agreement between the registrant and the Trustees of Princeton University, dated as of November 14, 2000(9)
- 10.17Amendment #2 to the 1997 Research Agreement between the registrant and the Trustees of Princeton University, dated as of April 11, 2002(9)
- 10.18Sponsored Research Agreement between the registrant and the University of Southern California, dated as of May 1, 2006(10)
- 10.191997 Amended License Agreement among the registrant, The Trustees of Princeton University and the University of Southern California, dated as of October 9, 1997(8)
- 10.20Amendment #1 to the Amended License Agreement among the registrant, the Trustees of Princeton University and the University of Southern California, dated as of August 7, 2003(9)
- 10.21Amendment #2 to the Amended License Agreement among the registrant, the Trustees of Princeton University, the University of Southern California and the Regents of the University of Michigan, dated as of January 1, 2006(10)
- 10.22Termination, Amendment and License Agreement by and among the registrant, PD-LD, Inc., Dr. Vladimir S. Ban, and The Trustees of Princeton University, dated as of July 19, 2000(11)
- 10.23Letter of Clarification of UDC/GPEC Research and License Arrangements between the registrant and Global Photonic Energy Corporation, dated as of June 4, 2004(6)
- 10.24+ License Agreement between the registrant and Motorola, Inc., dated as of September 29, 2000(11)
- 10.25+ OLED Materials Supply and Service Agreement between the registrant and PPG Industries, Inc., dated as of July 29, 2005(12)
- 10.26+ OLED Patent License Agreement between the registrant and Samsung SDI Co., Ltd., dated as of April 19, 2005(13)

- 10.27+ OLED Supplemental License Agreement between the registrant and Samsung SDI Co., Ltd., dated as of April 19, 2005(13)
- 10.28+ Commercial Supply Agreement between the registrant and AU Optronics Corporation, dated as of January 1, 2006(14)
- 10.29+ Settlement and License Agreement between the registrant and Seiko Epson Corporation, dated as of July 31, 2006(15)
- 10.30+ Commercial Supply Agreement between the registrant and Chi Mei EL Corporation, dated as of April 5, 2007(16)
- 10.31+ Commercial Supply Agreement between the registrant and LG.Philips LCD Co., Ltd. (now known as LG Display), dated as of May 23, 2007(16)

21\* Subsidiaries of the registrant

23.1\* Consent of KPMG LLP

31.1\* Certifications of Steven V. Abramson, Chief Executive Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)

31.2\* Certifications of Sidney D. Rosenblatt, Chief Financial Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)

32.1\*\* Certifications of Steven V. Abramson, Chief Executive Officer, as required by Rule 13a-14(b) or Rule 15d-14(b), and by 18 U.S.C. Section 1350. (This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. Further, this exhibit shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.)

32.2\*\* Certifications of Sidney D. Rosenblatt, Chief Financial Officer, as required by Rule 13a-14(b) or Rule 15d-14(b), and by 18 U.S.C. Section 1350. (This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. Further, this exhibit shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.)

Explanation of footnotes to listing of exhibits:

\* Filed herewith.

\*\* Furnished herewith.

# Management contract or compensatory plan or arrangement.

+ Confidential treatment has been accorded to certain portions of this exhibit pursuant to Rule 406 under the Securities Act of 1933, as amended, or Rule 24b-2 under the Securities Exchange Act of 1934, as amended.

(1) Filed as an Exhibit to the Annual Report on Form 10-K for the year ended December 31, 2003, filed with the SEC on March 1, 2004.

(2) Filed as an Exhibit to a Current Report on Form 8-K, filed with the SEC on December 21, 2007.

(3) Filed as an Exhibit to the Annual Report on Form 10-K for the year ended December 31, 2004, filed with the SEC on March 14, 2001.

(4) Filed as an Exhibit to the Annual Report on Form 10-K for the year ended December 31, 2000, filed with the SEC on March 29, 2001.

(5) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended March 31, 2003, filed with the SEC on May 13, 2003.

(6) Filed as an Exhibit to the Annual Report on Form 10-K for the year ended December 31, 2006, filed with the SEC on March 15, 2007.

(7) Filed as an Exhibit to the Definitive Proxy Statement for the 2006 Annual Meeting of Shareholders, filed with the SEC on April 27, 2006.

(8) Filed as an Exhibit to the Annual Report on Form 10K-SB for the year ended December 31, 1997, filed with the SEC on March 31, 1998.

- (9) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended September 30, 2003, filed with the SEC on November 10, 2003.
- (10) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, filed with the SEC on August 9, 2006.
- (11) Filed as an Exhibit to the amended Quarterly Report on Form 10-Q for the quarter ended September 30, 2000, filed with the SEC on November 20, 2001.
- (12) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, filed with the SEC on November 7, 2005.
- (13) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, filed with the SEC on August 9, 2005.
- (14) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended March 31, 2006, filed with the SEC on May 10, 2006.
- (15) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, filed with the SEC on November 6, 2006.
- (16) Filed as an Exhibit to the Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, filed with the SEC on August 9, 2007.

Note: Any of the exhibits listed in the foregoing index not included with this report may be obtained, without charge, by writing to Mr. Sidney D. Rosenblatt, Corporate Secretary, Universal Display Corporation, 375 Phillips Boulevard, Ewing, New Jersey 08618.

- (b) The exhibits required to be filed by us with this report are listed above.
- (c) The consolidated financial statement schedules required to be filed by us with this report are listed above.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized:

UNIVERSAL DISPLAY CORPORATION

By: /s/ Sidney D. Rosenblatt  
 Sidney D. Rosenblatt  
 Executive Vice President, Chief Financial Officer,  
 Treasurer and Secretary

Date: March 13, 2008

Pursuant to the requirements of the Securities Exchange Act of 1934, 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/ Sherwin I. Seligsohn Sherwin I. Seligsohn	Founder and Chairman of the Board of Directors	March 13, 2008
/s/ Steven V. Abramson Steven V. Abramson	President, Chief Executive Officer and Director	March 13, 2008
/s/ Sidney D. Rosenblatt Sidney D. Rosenblatt	Executive Vice President, Chief Financial Officer, Treasurer, Secretary and Director	March 13, 2008
/s/ Leonard Becker Leonard Becker	Director	March 13, 2008
/s/ Elizabeth H. Gemmill Elizabeth H. Gemmill	Director	March 13, 2008
/s/ C. Keith Hartley C. Keith Hartley	Director	March 13, 2008
/s/ Lawrence Lacerte Lawrence Lacerte	Director	March 13, 2008





UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARY

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Financial Statements:	
Management's Report on Internal Control Over Financial Reporting	F-2
Report of Independent Registered Public Accounting Firm	F-3
Report of Independent Registered Public Accounting Firm	F-4
Consolidated Balance Sheets	F-5
Consolidated Statements of Operations	F-6
Consolidated Statements of Shareholders' Equity and Comprehensive Loss	F-7
Consolidated Statements of Cash Flows	F-9
Notes to Consolidated Financial Statements	F-10

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## MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our system of internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Management performed an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2007 based upon criteria in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, management determined that the Company's internal control over financial reporting was effective as of December 31, 2007, based on the criteria in Internal Control-Integrated Framework issued by COSO.

The effectiveness of our internal control over financial reporting as of December 31, 2007, has been attested to by KPMG LLP, an independent registered public accounting firm, as stated in its report which appears on the following page.

Steven V. Abramson  
President and Chief Executive Officer

Sidney D. Rosenblatt  
Executive Vice President and Chief  
Financial Officer

Dated: March 11, 2008

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders  
Universal Display Corporation:

We have audited Universal Display Corporation's internal control over financial reporting as of December 31, 2007, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Universal Display Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Universal Display Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Universal Display Corporation as of December 31, 2007 and 2006, and the related consolidated statements of operations, shareholders' equity and comprehensive loss and cash flows for each of the years in the three-year period ended December 31, 2007, and our report dated March 13, 2008 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Philadelphia, Pennsylvania  
March 13, 2008

F-3

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders  
Universal Display Corporation:

We have audited the accompanying consolidated balance sheets of Universal Display Corporation and subsidiary (the Company) as of December 31, 2007 and 2006, and the related consolidated statements of operations, shareholders' equity and comprehensive loss and cash flows for each of the years in the three-year period ended December 31, 2007. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Universal Display Corporation and subsidiary as of December 31, 2007 and 2006, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2007, in conformity with U.S. generally accepted accounting principles.

As discussed in Notes 2 and 10 to the consolidated financial statements, effective January 1, 2006, the Company adopted the fair value method of accounting for stock-based compensation as required by Statement of Financial Accounting Standards No. 123(R), Share-Based Payment.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Universal Display Corporation's internal control over financial reporting as of December 31, 2007, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 13, 2008 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Philadelphia, Pennsylvania  
March 13, 2008

## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARY

## CONSOLIDATED BALANCE SHEETS

December 31,

2007

2006

## ASSETS

## CURRENT ASSETS:

Cash and cash equivalents	\$	33,870,696	\$	31,097,533
Short-term investments		49,788,961		17,957,752
Accounts receivable		2,395,416		2,113,263
Inventory		41,165		30,598
Other current assets		673,931		606,267

Total current assets		86,770,169		51,805,413
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PROPERTY AND EQUIPMENT, net		13,525,714		14,074,093
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ACQUIRED TECHNOLOGY, net		4,624,416		6,319,488
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INVESTMENTS		—		42,770
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OTHER ASSETS		79,772		89,772
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	\$	105,000,071	\$	72,331,536
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## LIABILITIES AND SHAREHOLDERS' EQUITY

## CURRENT LIABILITIES:

Accounts payable	\$	861,428	\$	1,808,869
Accrued expenses		4,578,147		5,245,536
Deferred license fees		7,178,268		7,178,268
Deferred revenue		172,688		150,000

Total current liabilities		12,790,531		14,382,673
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DEFERRED LICENSE FEES		2,454,900		2,966,500
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DEFERRED REVENUE		538,683		600,000
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Total liabilities		15,784,114		17,949,173
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COMMITMENTS AND  
CONTINGENCIES (Note 12)

## SHAREHOLDERS' EQUITY:

Preferred Stock, par value \$0.01 per share, 5,000,000 shares authorized, 200,000 shares of Series A

Nonconvertible Preferred Stock issued and outstanding (liquidation value of \$7.50 per share or \$1,500,000)		2,000		2,000
--	--	-------	--	-------

Common Stock, par value \$0.01 per share, 50,000,000 shares authorized,		355,632		313,854
---	--	---------	--	---------

35,563,201 and 31,385,408 shares issued  
and outstanding at December 31, 2007  
and 2006, respectively

Additional paid-in-capital	250,240,994	199,505,981
Unrealized loss on available for sale securities	(50,202)	(82,846)
Accumulated deficit	(161,332,467)	(145,356,626)
Total shareholders' equity	89,215,957	54,382,363
	\$ 105,000,071	\$ 72,331,536

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



UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARY  
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2007	2006	2005
<b>REVENUE:</b>			
Contract research revenue	\$ 4,600,693	\$ 3,821,903	\$ 4,653,981
Development chemical revenue	1,049,854	1,656,851	3,503,685
Commercial chemical revenue	3,599,677	1,876,071	31,395
Royalty and license revenue	828,371	2,400,179	233,555
Technology development revenue	1,227,312	2,166,288	1,725,379
<b>Total revenue</b>	<b>11,305,907</b>	<b>11,921,292</b>	<b>10,147,995</b>
<b>OPERATING EXPENSES:</b>			
Cost of chemicals sold	893,276	659,507	495,147
Research and development	20,909,262	19,562,004	18,798,024
General and administrative	9,569,381	8,902,462	7,704,931
Royalty and license expense	305,846	687,436	610,098
<b>Total operating expenses</b>	<b>31,677,765</b>	<b>29,811,409</b>	<b>27,608,200</b>
Operating loss	(20,371,858)	(17,890,117)	(17,460,205)
<b>INTEREST INCOME</b>	<b>3,599,229</b>	<b>2,168,933</b>	<b>1,419,858</b>
<b>INTEREST EXPENSE</b>	<b>(8,192)</b>	<b>(10,187)</b>	<b>(185,472)</b>
<b>LOSS BEFORE INCOME TAX BENEFIT</b>	<b>(16,780,821)</b>	<b>(15,731,371)</b>	<b>(16,225,819)</b>
<b>INCOME TAX BENEFIT</b>	<b>804,980</b>	<b>544,567</b>	<b>424,207</b>
<b>NET LOSS</b>	<b>(15,975,841)</b>	<b>(15,186,804)</b>	<b>(15,801,612)</b>
<b>BASIC AND DILUTED NET LOSS PER COMMON SHARE</b>	<b>\$ (0.47)</b>	<b>\$ (0.49)</b>	<b>\$ (0.56)</b>
<b>WEIGHTED AVERAGE SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS PER COMMON SHARE</b>	<b>33,759,581</b>	<b>30,855,297</b>	<b>28,462,925</b>

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

F-6

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## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARY

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE LOSS

	Series A		Common Stock		Additional Paid-in Capital
	Nonconvertible Preferred Stock Shares	Amount	Shares	Amount	
BALANCE, DECEMBER 31, 2004	200,000	\$ 2,000	27,903,385	\$ 279,034	\$ 173,372,344
Exercise of common stock options and warrants	—	—	1,029,710	10,297	8,413,361
Stock-based employee compensation	—	—	88,270	883	725,532
Stock-based non-employee compensation	—	—	—	—	(4,225)
Issuance of common stock to Board of Directors and Scientific Advisory Board	—	—	48,000	480	725,524
Issuance of common stock, options and warrants in connection with the development agreements	—	—	476,106	4,761	4,376,871
Amortization of deferred compensation	—	—	—	—	—
Unrealized loss on available-for-sale securities	—	—	—	—	—
Net loss	—	—	—	—	—
Comprehensive loss	—	—	—	—	—
BALANCE, DECEMBER 31, 2005	200,000	2,000	29,545,471	295,455	187,609,407
Exercise of common stock options and warrants	—	—	1,432,655	14,326	6,267,442
Stock-based employee compensation	—	—	123,922	1,239	1,720,481
Stock-based non-employee compensation	—	—	—	—	105,011
Issuance of common stock to Board of Directors and Scientific Advisory Board	—	—	73,766	738	837,062
Issuance of common stock, options and warrants in connection with the development agreements	—	—	209,594	2,096	2,966,578
	—	—	—	—	—

Unrealized gain on available-for-sale securities					
Net loss	—	—	—	—	—
Comprehensive loss	—	—	—	—	—
BALANCE, DECEMBER 31, 2006	200,000	2,000	31,385,408	313,854	199,505,981
Issuance of common stock through a public offering, net of expenses of \$2,599,977	—	—	2,800,000	28,000	37,972,023
Exercise of common stock options and warrants	—	—	1,169,648	11,696	8,528,247
Stock-based employee compensation	—	—	70,238	703	2,049,554
Stock-based non-employee compensation	—	—	—	—	23,336
Issuance of common stock to Board of Directors and Scientific Advisory Board	—	—	37,796	378	714,364
Issuance of common stock and options in connection with the development and license agreements	—	—	100,111	1,001	1,447,489
Unrealized gain on available-for-sale securities	—	—	—	—	—
Net loss	—	—	—	—	—
Comprehensive loss	—	—	—	—	—
BALANCE, DECEMBER 31, 2007	200,000	\$ 2,000	35,563,201	\$ 355,632	\$ 250,240,994

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

(Continued)

## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY AND  
COMPREHENSIVE LOSS — (Continued)

	Deferred Compensation	Unrealized Loss on Available -for- Sale Securities	Accumulated Deficit	Total Equity
BALANCE, DECEMBER 31, 2004	\$ (17,446 )	\$ (79,837)	\$ (114,368,210)	\$ 59,187,885
Exercise of common stock options and warrants	—	—	—	8,423,658
Stock-based employee compensation	—	—	—	726,415
Stock-based non-employee compensation	—	—	—	(4,225)
Issuance of common stock to Board of Directors and Scientific Advisory Board	—	—	—	726,004
Issuance of common stock, options and warrants in connection with the development agreements	—	—	—	4,381,632
Amortization of deferred compensation	17,446	—	—	17,446
Unrealized loss on available-for-sale securities	—	(40,740)	—	(40,740)
Net loss	—	—	(15,801,612)	(15,801,612)
Comprehensive loss	—	—	—	(15,842,352)
BALANCE, DECEMBER 31, 2005	—	(120,577)	(130,169,822)	57,616,463
Exercise of common stock options and warrants	—	—	—	6,281,768
Stock-based employee compensation	—	—	—	1,721,720
Stock-based non-employee compensation	—	—	—	105,011
Issuance of common stock to Board of Directors and Scientific Advisory Board	—	—	—	837,800
Issuance of common stock, options and warrants in connection with the development agreements	—	—	—	2,968,674

Unrealized gain on available-for-sale securities	—	37,731	—	37,731
Net loss	—	—	(15,186,804)	(15,186,804)
Comprehensive loss	—	—	—	(15,149,073)
BALANCE, DECEMBER 31, 2006	—	(82,846)	(145,356,626)	54,382,363
Issuance of common stock through a public offering, net of expenses of \$2,599,977	—	—	—	38,000,023
Exercise of common stock options and warrants	—	—	—	8,539,943
Stock-based employee compensation	—	—	—	2,050,257
Stock-based non-employee compensation	—	—	—	23,336
Issuance of common stock to Board of Directors and Scientific Advisory Board	—	—	—	714,742
Issuance of common stock and options in connection with the development and license agreements	—	—	—	1,448,490
Unrealized gain on available-for-sale securities	—	32,644	—	32,644
Net loss	—	—	(15,975,841)	(15,975,841)
Comprehensive loss	—	—	—	(15,943,197)
BALANCE, DECEMBER 31, 2007	\$ —	\$ (50,202)	\$ (161,332,467)	\$ 89,215,957

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

## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARY

## CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2007	2006	2005
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net loss	\$ (15,975,841)	\$ (15,186,804)	\$ (15,801,612)
Non-cash charges to statement of operations:			
Depreciation	1,774,236	1,828,551	1,654,826
Amortization of intangibles	1,695,072	1,695,072	1,695,072
Amortization of premium and discount on investments	(311,613)	(158,182)	(112,747)
Stock-based employee compensation	2,733,909	2,442,149	1,373,196
Stock-based non-employee compensation	23,336	105,011	(4,225)
Non-cash expense under a Development Agreement	926,582	2,968,074	3,908,666
Stock-based compensation to Board of Directors and Scientific Advisory Board	754,711	509,600	1,314,202
(Increase) decrease in assets:			
Accounts receivable	(282,153)	(169,164)	644,180
Inventory	(10,567)	5,833	(16,490)
Other current assets	(67,664)	(108,521)	(259,819)
Other assets	10,000	10,000	5,586
Increase (decrease) in liabilities:			
Accounts payable and accrued expenses	(1,816,543)	244,976	1,252,285
Deferred license fees	(511,600)	3,188,401	2,089,700
Deferred revenue	(38,629)	(2,078,788)	1,912,121
Net cash used in operating activities	(11,096,764)	(4,703,792)	(345,059)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Purchases of property and equipment	(1,225,857)	(2,349,033)	(5,656,905)
Purchases of investments	(61,336,182)	(24,374,659)	(22,791,027)
Proceeds from sale of investments	29,892,000	25,589,000	32,393,001
Net cash (used in) provided by investing activities	(32,670,039)	(1,134,692)	3,945,069
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
	38,000,023	—	—

Net proceeds from issuance of common stock			
Repayment of loan	—	—	(4,500,000)
Restricted cash	—	—	4,200,000
Proceeds from the exercise of common stock options and warrants	8,539,943	6,281,768	8,423,658
Net cash provided by financing activities	46,539,966	6,281,768	8,123,658
INCREASE IN CASH AND CASH EQUIVALENTS	2,773,163	443,284	11,723,668
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	31,097,533	30,654,249	18,930,581
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 33,870,696	\$ 31,097,533	\$ 30,654,249
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Cash paid for interest	\$ —	\$ —	\$ 181,686

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



## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARY

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 1. BUSINESS:

Universal Display Corporation (the “Company”) is engaged in the research, development and commercialization of organic light emitting diode (“OLED”) technologies and materials for use in flat panel display, solid-state lighting and other product applications. The Company’s primary business strategy is to develop and license its proprietary OLED technologies to product manufacturers for use in these applications. In support of this objective, the Company also develops new OLED materials and sells those materials to product manufacturers. Through internal research and development efforts and relationships with entities such as Princeton University, the University of Southern California (“USC”), the University of Michigan, Motorola, Inc. and PPG Industries, Inc., the Company has established a significant portfolio of proprietary OLED technologies and materials (Notes 3, 5 and 7).

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

## Principles of Consolidation

The consolidated financial statements include the accounts of Universal Display Corporation and its wholly owned subsidiary, UDC, Inc. All intercompany transactions and accounts have been eliminated.

In January 2008, the Company also formed a second wholly-owned subsidiary, Universal Display Corporation Hong Kong, Ltd.

## Management’s 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 disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

## Cash, Cash Equivalents, Short-Term Investments and Long-Term Investments

The Company considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents. The Company classifies its existing marketable securities as available-for-sale. These securities are carried at fair market value, with unrealized gains and losses reported in the consolidated statement of shareholders’ equity and comprehensive loss. Gains or losses on securities sold are based on the specific identification method.

Investments at December 31, 2007 and 2006 consist of the following:

Investment Classification	Cost	Gains	(Losses)	Market Value Aggregate Fair
December 31, 2007-				
Corporate bonds	\$ 25,486,974	\$ —	\$ (22,154)	\$ 25,464,820
	14,073,000	—	(29,108)	14,043,892

Certificates of deposit				
US Government bonds	9,779,189	1,351	(291)	9,780,249
Municipal bonds	500,000	—	—	500,000

	\$ 49,839,163	\$ 1,351	\$ (51,553)	\$ 49,788,961
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December 31, 2006-				
Certificates of deposit				
	\$ 11,243,000	\$ —	\$ (79,070)	\$ 11,163,930
US Government bonds	6,840,368	668	(4,444)	6,836,592
	\$ 18,083,368	\$ 668	\$ (83,514)	\$ 18,000,522

#### Fair Value of Financial Instruments

Cash and cash equivalents, accounts receivable, other current assets, and accounts payable are reflected in the accompanying financial statements at fair value due to the short-term nature of those instruments. Short-term and long-term investments are recorded at fair market value.

#### Property and Equipment

Property and equipment are stated at cost and depreciated generally on a straight-line basis over the estimated useful life of 30 years for building, 15 years for building improvements, and three to seven years for office and lab equipment and furniture and fixtures. Repair and maintenance costs are charged to expense as incurred. Additions and betterments are capitalized.

#### Inventory

Inventory consists of chemicals held at the Company's Ewing, New Jersey facility and is valued at the lower of cost or market, with cost determined using the specific identification method.

#### Acquired Technology

Acquired technology consists of license rights and know-how obtained from PD-LD, Inc. and Motorola, Inc. (Note 5). Acquired technology is amortized on a straight-line basis over its estimated useful life of 10 years.

#### Impairment of Long-Lived Assets

Company management continually evaluates whether events or changes in circumstances might indicate that the remaining estimated useful life of long-lived assets may warrant revision, or that the remaining balance may not be recoverable. When factors indicate that long-lived assets should be evaluated for possible impairment, the Company uses an estimate of the related undiscounted cash flows in measuring whether the long-lived asset should be written down to fair value. Measurement of the amount of impairment would be based on generally accepted valuation methodologies, as deemed appropriate. As of December 31, 2007, Company management believed that no revision to the remaining useful lives or write-down of the Company's long-lived assets was required. No such revisions were required in 2006 or 2005.

#### Net Loss Per Common Share

Basic net loss per common share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding for the period. Diluted net loss per common share reflects the potential dilution from the exercise or conversion of securities into common stock. For the years ended December 31, 2007, 2006 and 2005, the effects of the combined outstanding stock options and warrants of 5,172,041, 6,812,601 and 8,395,297, respectively, were excluded from the calculation of diluted EPS as the impact would have been anti-dilutive.

#### Revenue Recognition and Deferred License Fees

Contract research revenue represents reimbursements by government entities for all or a portion of the research and development costs the Company incurs in relation to its government contracts. Revenues are recognized proportionally as research and development costs are incurred, or as defined milestones are achieved.

Development chemical revenue represents revenues from sales of OLED materials to product manufacturers for evaluation and development purposes. Revenue is recognized at the time of shipment and passage of title. The

customer does not have the right to return the materials.

Commercial chemical revenue represents revenues from sales of OLED materials to manufacturers for the production of commercial products. This revenue is recognized at the time of shipment, or at time of delivery and passage of title, depending upon the contractual agreement between the parties.

The Company has received non-refundable advance license and royalty payments under certain development and technology evaluation agreements. Certain of these payments are creditable against future amounts payable under commercial license agreements that the parties may subsequently enter into and, as such, are deferred until such license agreements are executed or negotiations have ceased and Company management determines that there is no appreciable likelihood of executing a license agreement with the other party. Revenue would then be recorded over the expected life of the relevant licensed technology, if there is an effective license agreement, or at the time Company management determines that there is no appreciable likelihood of an executable license agreement. Advanced payments received under technology development and evaluation agreements that are not creditable against license fees are deferred and recognized as technology development revenue over the term of the agreement.

F-11

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## Research and Development

Expenditures for research and development are charged to operations as incurred. Research and development expenses consist of the following:

	Year Ended December 31,		
	2007	2006	2005
Development and operations in the Company's facility	\$ 13,169,527	\$ 11,891,852	\$ 8,967,285
Patent application and prosecution expenses	1,932,161	1,799,819	2,158,598
Patent maintenance and defense expenses	616,592	611,512	171,135
Costs incurred to Princeton University and USC under the 2006 and 1997 Research Agreements (Note 3), net of refunded amounts from Princeton University	812,221	(551,220)	598,796
PPG Development and License Agreement (Note 7)	2,181,408	3,854,969	4,383,935
Amortization of intangibles	1,695,072	1,695,072	1,695,072
Scientific Advisory Board compensation	502,281	260,000	823,203
	\$ 20,909,262	\$ 19,562,004	\$ 18,798,024

## Patent Costs

Costs associated with patent applications, patent prosecution, patent defense and the maintenance of patents are charged to expense as incurred. Costs to successfully defend a challenge to a patent are capitalized to the extent of an evident increase in the value of the patent. Legal costs which relate to an unsuccessful outcome are charged to expense.

## Statement of Cash Flow Information

The following non-cash activities occurred:

	Year Ended December 31,		
	2007	2006	2005
Unrealized gain (loss) on available-for-sale securities	\$ 32,644	\$ 37,731	\$ (40,740)
	521,908	22,515	495,481

Common stock issued in connection with Development and License Agreements that were earned in a previous period

Common stock issued to Board of Directors and Scientific Advisory Board that were earned in a previous period	260,000	588,200	390,720
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Common stock issued to employees that were earned in a previous period	944,115	838,854	726,414
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#### Income Taxes

Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities. Deferred tax assets or liabilities at the end of each period are determined using the tax rate expected to be in effect when taxes are actually paid or recovered. The Company accounts for the sale of its net state operating losses on a cash basis; therefore, it does not record an income tax benefit until the cash is received. The Company adopted Financial Accounting Standards Board (“FASB”) Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an Interpretation of FASB Statement No. 109 (“FIN 48”) effective January 1, 2007, and pursuant to its provisions classifies interest and penalties, if any, as a component of tax expense.

## Share-Based Payment Awards

Statement of Financial Accounting Standards (“SFAS”) No. 123(R), Share-Based Payment, addresses all forms of share-based payment awards including shares issued under employee stock purchase plans, stock options, restricted stock and stock appreciation rights. It requires companies to recognize in the statement of operations the grant-date fair value of stock options and other equity-based compensation issued to employees and directors. The statement eliminates the intrinsic value-based method prescribed by Accounting Principles Board (“APB”) Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations, that the Company used prior to 2006.

Effective January 1, 2006, the Company adopted SFAS No. 123(R) using the modified prospective method (Note 10). Under this method, share-based compensation recognized in 2007 and 2006 included: (1) compensation expense for all share-based payments granted prior to, but not yet vested as of, January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of SFAS 123, and (2) compensation expense for all share-based payments granted, modified or settled subsequent to January 1, 2006, based on the grant date fair value.

The grant-date fair value of stock options are determined using the Black-Scholes valuation model, which is the same model the Company used previously for valuing stock options for footnote disclosure purposes. The fair value of share-based awards is recognized as compensation expense on a straight-line basis over the requisite service period, net of estimated forfeitures. The Company relies primarily upon historical experience to estimate expected forfeitures and recognizes compensation expense on a straight-line basis from the date of the grant. The Company issues new shares upon exercise or vesting of share-based awards.

Prior to the adoption of SFAS No. 123(R), the Company used the intrinsic value method of accounting for stock-based employee compensation in accordance with APB Opinion No. 25. Under the intrinsic value method, no compensation expense was recognized for the Company’s stock options as the exercise price was equal to the market price of the common stock on the date of grant. The following table illustrates the effect on net loss and net loss per share if the Company had applied SFAS No. 123 for the year ended December 31, 2005:

	Year Ended December 31, 2005
Net loss, as reported	\$ (15,801,612)
Add stock-based employee compensation expense included in reported net loss	1,851,296
Deduct total stock-based employee compensation expense determined under fair-value-based method for all awards	(8,459,041)
Pro forma net loss	\$ (22,409,357)
Basic and diluted net loss per share:	
As reported	\$ (0.56)
Pro forma	\$ (0.79)

## Recent Accounting Pronouncements

In June 2006, the Financial Accounting Standards Board (“FASB”) issued FASB Interpretation No. 48, “Accounting for Uncertainty in Income Taxes, an Interpretation of FASB Statement No. 109 (“FIN 48”). FIN 48 clarifies the accounting for uncertainty in income taxes by prescribing a minimum recognition threshold for a tax position taken, or

expected to be taken, in a tax return that is required to be met before being recognized in the financial statements. FIN 48 also provides guidance on recognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 was adopted by the Company in 2007 and did not have an impact on its consolidated results of operations and financial position.

In June 2006, the FASB ratified the Emerging Issues Task Force (“EITF”) Issue 06-3, How Taxes Collected from Customers and Remitted to Government Authorities Should Be Presented in the Income Statement (That Is, Gross Versus Net Presentation). This standard allows companies to present in their statements of operations any taxes assessed by a governmental authority that are directly imposed on revenue-producing transactions between a seller and a customer, such as sales, use, value-added and some excise taxes, on either a gross (included in revenue and costs) or a net (excluded from revenue) basis. The Company presents these transactions on a gross basis. The Company adopted EITF 06-3 in 2007 and it did not have an impact on its consolidated results of operations and financial position.

In September 2006, the FASB issued Statement of Financial Accounting Standards (“SFAS”) No. 157, Fair Value Measurements (“SFAS 157”). SFAS 157 clarifies the definition of fair value, establishes a framework for measuring fair value and expands disclosures on fair value measurement. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and will be applied on a prospective basis. Company management does not expect the adoption of SFAS 157 to have a material impact on its consolidated financial position, results of operations and cash flows.



In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities (“SFAS 159”). SFAS 159 permits entities to measure many financial instruments and certain other items at fair value at specified election dates. Under SFAS 159, any unrealized holding gains and losses on items for which the fair value option has been elected are reported in earnings at each subsequent reporting date. If elected, the fair value option (1) may be applied instrument by instrument, with a few exceptions, such as investments otherwise accounted for by the equity method; (2) is irrevocable (unless a new election date occurs); and (3) is applied only to entire instruments and not to portions of instruments. SFAS 159 is effective as of an entity’s first fiscal year that begins after November 15, 2007 (non-financial instruments deferred under SFAS 159 to fiscal years beginning after November 15, 2008), provided the entity also elects to apply the provisions of SFAS 157. Company management is currently evaluating the potential impact of SFAS 159 on its consolidated results of operations and financial position.

In June 2007, the FASB issued EITF Issue 07-3, Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities, which applies to companies involved in research and development activities that make non-refundable down payments for goods that will be used or for services that will be performed on future research and development. EITF Issue 07-3 requires that nonrefundable advance payments for future research and development activities be deferred and recognized as an expense as goods are delivered or the related services are performed. EITF Issue 07-3 is effective for financial statements issued for fiscal years beginning after December 15, 2007, and interim periods within those fiscal years. Company management does not expect the adoption of EITF Issue 07-3 to have an impact on its consolidated results of operations and financial position.

#### Adjustment to Prior Year Consolidated Financials Statements

Certain prior year amounts have been adjusted to conform to the current year presentation. The adjustment results in an increase in reported cost of chemicals sold and a reduction in research and development expenses by \$302,940 and \$385,366 for the years ended December 31, 2006 and 2005, respectively.

### 3. RESEARCH AND LICENSE AGREEMENTS WITH PRINCETON UNIVERSITY, UNIVERSITY OF SOUTHERN CALIFORNIA AND THE UNIVERSITY OF MICHIGAN:

The Company has funded OLED technology research at Princeton University (“Princeton”) and, on a subcontractor basis, at the University of Southern California (“USC”), under a Research Agreement executed with Princeton in August 1997 (as amended, the “1997 Research Agreement”). In April 2002, the 1997 Research Agreement was amended to provide for, among other things, an additional five-year term, which expired July 31, 2007. Payments to Princeton under this agreement were charged to research and development expenses as they became due. The Company paid \$3,571,226 to Princeton under the 1997 Research Agreement. Although the payments were charged to expense when they became due, the actual work performed by Princeton and USC did not always equate to the fixed amounts actually paid for each period. In the third quarter of 2006, Princeton refunded \$1,011,358 to the Company for cumulative amounts overpaid under the 1997 Research Agreement. The Company recorded the refund as an offset to research and development expenses.

On October 9, 1997, the Company, Princeton and USC entered into an Amended License Agreement under which Princeton and USC granted the Company worldwide, exclusive license rights, with rights to sublicense, to make, have made, use, lease and/or sell products and to practice processes based on patent applications and issued patents arising out of work performed by Princeton and USC under the 1997 Research Agreement (as amended, the “1997 Amended License Agreement”). Under this agreement, the Company is required to pay Princeton royalties for licensed products sold by the Company or its sublicensees. For licensed products sold by the Company, the Company is required to pay Princeton 3% of the net sales price of these products. For licensed products sold by the Company’s sublicensees, the Company is required to pay Princeton 3% of the revenues received by the Company from these sublicensees. These royalty rates are subject to renegotiation for products not reasonably conceivable as arising out of the 1997 Research Agreement if Princeton reasonably determines that the royalty rates payable with respect to these products are not fair

and competitive. The Company is obligated under the 1997 Amended License Agreement to pay to Princeton minimum annual royalties. The minimum royalty payment is \$100,000 per year. The Company accrued \$163,007, \$177,436 and \$110,098 of royalty expense in connection with the agreement for the year ended December 31, 2007, 2006 and 2005, respectively.

The Company also is required under the 1997 Amended License Agreement to use commercially reasonable efforts to bring the licensed OLED technology to market. However, this requirement is deemed satisfied if the Company invests a minimum of \$800,000 per year in research, development, commercialization or patenting efforts respecting the patent rights licensed to the Company.

F-14

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In January 2006, the Principal Investigator conducting research at Princeton under the 1997 Research Agreement transferred to the University of Michigan (“Michigan”). As a result of this transfer, the Company has entered into a new Sponsored Research Agreement with USC to sponsor OLED technology research at USC and, on a subcontractor basis, Michigan. This new Research Agreement (the “2006 Research Agreement”) was effective as of May 1, 2006, and has a term of three years. The 2006 Research Agreement supersedes the 1997 Research Agreement with respect to all work being performed at USC and Michigan. Under the 2006 Research Agreement, the Company is obligated to pay USC up to \$4,936,296 for work actually performed during the period from May 1, 2006 through April 30, 2009. Amounts paid to Princeton under the 1997 Research Agreement offset any amounts the Company was obligated to pay USC under the 2006 Research Agreement. Payments under the 2006 Research Agreement are made to USC on a quarterly basis as actual expenses are incurred. For the period from May 1, 2006 through the period ended December 31, 2007, the Company had incurred \$1,013,038 in research and development expense under the 2006 Research Agreement.

In connection with entering into the 2006 Research Agreement, the Company amended the 1997 Amended License Agreement to include Michigan as a party to that agreement effective as of January 1, 2006. Under this amendment, Princeton, USC and Michigan have granted the Company a worldwide exclusive license, with rights to sublicense, to make, have made, use, lease and/or sell products and to practice processes based on patent applications and issued patents arising out of work performed under the 2006 Research Agreement. The financial terms of the 1997 Amended License Agreement were not impacted by this amendment.

#### 4. PROPERTY AND EQUIPMENT:

Property and equipment consist of the following:

	December 31,	
	2007	2006
Land	\$ 820,000	\$ 820,000
Building and improvements	11,126,189	11,087,331
Office and lab equipment	11,502,305	11,286,548
Furniture and fixtures	285,573	285,573
Construction-in-progress	1,784,344	827,123
	25,518,411	24,306,575
Less: Accumulated depreciation	(11,992,697)	(10,232,482)
Property and equipment, net	\$ 13,525,714	\$ 14,074,093

Construction-in-progress consists of costs incurred for the acquisition of laboratory equipment for the Company’s facility. Upon commencement of operation of the lab equipment, the cost associated with such assets will be depreciated over their estimated useful lives.

Depreciation expense was \$1,774,236, \$1,828,551 and \$1,654,826 for the years ended December 31, 2007, 2006 and 2005, respectively.

#### 5. ACQUIRED TECHNOLOGY:

Acquired technology consists of acquired license rights for patents and know-how obtained from PD-LD, Inc. and Motorola, Inc. These intangible assets consist of the following:

	December 31,	
	2007	2006
PD-LD, Inc.	\$ 1,481,250	\$ 1,481,250
Motorola, Inc.	15,469,468	15,469,468
	16,950,718	16,950,718
Less: Accumulated amortization	(12,326,302)	(10,631,230)
Acquired technology, net	\$ 4,624,416	\$ 6,319,488

F-15

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On July 19, 2000, the Company, PD-LD, Inc. (“PD-LD”), its president Dr. Vladimir Ban and the Trustees of Princeton entered into a Termination, Amendment and License Agreement whereby the Company acquired all PD-LD’s rights to certain issued and pending OLED technology patents in exchange for 50,000 shares of the Company’s common stock. Pursuant to this transaction, these patents were included in the patent rights exclusively licensed to the Company under the 1997 Amended License Agreement. The acquisition of these patents had a fair value of \$1,481,250.

On September 29, 2000, the Company entered into a License Agreement with Motorola, Inc. (“Motorola”). Pursuant to this agreement, the Company licensed from Motorola what are now 74 issued U.S. patents and corresponding foreign patents relating to OLED technologies. These patents expire between 2012 and 2018. The Company has the sole right to sublicense these patents to OLED product manufacturers. As consideration for this license, the Company issued to Motorola 200,000 shares of the Company’s common stock (valued at \$4,412,500), 300,000 shares of the Company’s Series B Convertible Preferred Stock (valued at \$6,618,750) and a warrant to purchase 150,000 shares of the Company’s common stock at \$21.60 per share. The 300,000 shares of the Series B Convertible Preferred Stock issued were converted into shares of the Company’s common stock on September 29, 2004. The warrant was recorded at a fair market value of \$2,206,234 based on the Black-Scholes option-pricing model, and was recorded as a component of the cost of the acquired technology. The warrant expired on September 29, 2007, without having been exercised.

The Company also issued a warrant to an unaffiliated third party to acquire 150,000 shares of the Company’s common stock as a finder’s fee in connection with the Motorola transaction. The original exercise price of this warrant was \$21.60 per share and the exercise period was seven years. This warrant was accounted for at its fair value based on the Black-Scholes option pricing model and \$2,206,234 was recorded as a component of the cost of the acquired technology. Based on anti-dilution adjustments, the number of warrant shares was adjusted to 191,028 shares, and the exercise price was adjusted to \$16.96 per share. The warrant was exercised on a cashless basis on August 13, 2007.

The Company used the following assumptions in the Black-Scholes option pricing model for the 300,000 warrants issued in connection with this transaction: (1) 6.3% risk-free interest rate, (2) term of 7 years, (3) 60% volatility and (4) zero expected dividend yield.

In total, the Company recorded an intangible asset of \$15,469,468 for the technology acquired from Motorola. This includes \$25,750 of direct cash transaction costs. Amortization expense was \$1,695,072 for each of the years ended December 31, 2007, 2006 and 2005. For each of the two succeeding years, amortization expense will be \$1,695,072 and for the third succeeding year it will be \$1,234,272.

The Company is required under the License Agreement to pay Motorola royalties on gross revenues earned by the Company from its sales of OLED products or components, or from its OLED technology licensees, whether or not these revenues relate specifically to inventions claimed in the patent rights licensed from Motorola (Note 12). Moreover, the Company was required to pay Motorola minimum royalties of \$250,000 for the two-year period ended on December 31, 2002, \$500,000 for the two-year period ended on December 31, 2004, and \$1,000,000 for the two-year period ended on December 31, 2006. All royalty payments were made, at the Company’s discretion, in 50% cash and 50% in shares of the Company’s common stock. The number of shares of common stock used to pay the stock portion of the royalty was equal to 50% of the royalty due divided by the average daily closing price per share of the Company’s common stock over the 10 trading days ending two business days prior to the date the common stock is issued.

For the two-year period ended on December 31, 2006, the Company issued to Motorola 37,075 shares of the Company’s common stock, valued at \$499,993, and paid Motorola \$500,007 in cash to satisfy the minimum royalty obligation of \$1,000,000. The Company is no longer subject to a minimum royalty obligation under this agreement and for the year ended December 31, 2007, the Company recorded royalty expense of \$132,839.

6. ACCRUED EXPENSES:

Accrued expenses consist of the following:

	December 31,	
	2007	2006
Compensation	\$ 3,087,650	\$ 2,876,897
Minimum royalties	295,846	1,177,436
Consulting	299,969	260,000
Professional fees	432,719	324,288
Subcontracts	90,113	153,104
Research and development agreements	308,497	200,658
Other	63,353	253,153
	\$ 4,578,147	\$ 5,245,536

F-16

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7. EQUITY AND CASH COMPENSATION UNDER THE PPG AGREEMENTS:

On October 1, 2000, the Company entered into a five-year Development and License Agreement (“Development Agreement”) and a seven-year Supply Agreement (“Supply Agreement”) with PPG Industries, Inc. (“PPG”). Under the Development Agreement, a team of PPG scientists and engineers assisted the Company in developing its proprietary OLED materials and supplied the Company with these materials for evaluation purposes. Under the Supply Agreement, PPG supplied the Company with its proprietary OLED materials that were intended for resale to customers for commercial purposes.

For the period from inception of the Development Agreement through December 2004, the Company issued shares of its common stock and warrants to acquire its common stock to PPG on an annual basis in consideration of the services provided under the agreement. The consideration to PPG for these services was determined by reference to an agreed-upon annual budget and was subject to adjustment based on costs actually incurred for work performed during the budget period. The specific number of shares of common stock and warrants issued to PPG was determined based on the average closing price of the Company’s common stock during a specified period prior to the start of the budget period. In January 2003, the Company and PPG amended the Development Agreement, providing for additional consideration to PPG for additional services to be provided under that agreement, which services were paid for in cash. All materials provided by PPG under the Supply Agreement were also paid for in cash.

In December 2004 and again in March 2005, the Company and PPG amended both the Development Agreement and the Supply Agreement to alter the charges and method of payment for services and materials provided by PPG under both agreements during 2005. Under the amended Development Agreement, the Company compensated PPG on a cost-plus basis for the services provided during each calendar quarter. The Company was required to pay for some of these services in cash and for other of the services in common stock. Payment for up to 50% of the remaining services was able to be paid, at the Company’s sole discretion, in cash or shares of common stock, with the balance payable in all cash. The actual number of shares of common stock issuable to PPG was determined based on the average closing price for the Company’s common stock during a specified period prior to the end of that quarter. If, however, this average closing price was less than \$6.00, the Company was required to compensate PPG in all cash. The Company recorded these expenses to research and development as they were incurred.

Under the amended Supply Agreement, the Company also compensated PPG on a cost-plus basis for services and materials provided during each calendar quarter of 2005. The Company was required to pay for all materials and for some of these services in cash. Payment for up to 50% of the remaining services was able to be paid, at the Company’s sole discretion, in cash or shares of common stock, with the balance payable in all cash. Again, the specific number of shares of common stock issuable to PPG was determined based on the average closing price for the Company’s common stock during a specified period prior to the end of the quarter. If, however, this average closing price was less than \$6.00, the Company was required to compensate PPG in cash.

On July 29, 2005, the Company entered into an OLED Materials Supply and Service Agreement with PPG. This Agreement superseded and replaced in their entirety the amended Development and Supply Agreements effective as of January 1, 2006, and extended the term of the Company’s existing relationship with PPG through December 31, 2008. Under the new agreement, PPG has continued to assist the Company in developing its proprietary OLED materials and supplying the Company with those materials for evaluation purposes and for resale to its customers. The financial terms of the new agreement are substantially similar to those of the amended Development and Supply Agreements, and include a requirement that the Company pay PPG in a combination of cash and the Company’s common stock. On January 4, 2008, the term of the OLED Materials Supply and Service Agreement was extended for an additional three years, through December 31, 2011.

On April 19, 2006, the Company issued 1,957 shares of common stock to PPG based on a final accounting for actual costs incurred by PPG under the Development Agreement for the year ended December 31, 2005. Accordingly, the Company accrued \$22,515 of additional research and development expense as of December 31, 2005, based on the fair value of these additional shares as of the end of 2005.

In 2007, 2006 and 2005, the Company issued to PPG 58,930, 210,639 and 413,314 shares of the Company's common stock, respectively, as consideration for services provided by PPG under the applicable agreement(s). For these shares, the Company recorded charges of \$926,582, \$2,619,439 and \$3,610,229 to research and development expense for 2007, 2006 and 2005, respectively. The charges were determined based on the fair value of the Company's common stock as of the end of each period. The Company also recorded \$936,322, \$886,895 and \$475,269 to research and development expense for the cash portion of the work performed by PPG during 2007, 2006 and 2005, respectively.

Also, in accordance with the agreements with PPG, the Company is required to reimburse PPG for its raw materials and conversion costs for all development chemicals produced on behalf of the Company. The Company recorded \$318,504, \$0 and \$0 in research and development expenses related to these costs during 2007, 2006 and 2005, respectively. The remainder of these costs is included in cost of chemicals sold.

F-17

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For work performed through the end of 2006, the Company was required under its agreements with PPG to grant options to purchase shares of the Company's common stock to PPG employees performing certain development services for the Company, in a manner consistent with that for issuing options to its own employees. Subject to certain contingencies, these options were to vest one year following the date of grant and were to remain exercisable for up to 90 days after the individual PPG employee ceased performing development services for the Company. However, in connection with the conclusion of the development program on December 31, 2006, the exercise periods for these options were extended. In the case of certain PPG employees who were hired by the Company as full-time employees in April 2006, the exercise period was extended to run for so long as they remain employees of the Company, plus an additional period of up to one year thereafter, just as other Company employees are treated under the Company's Equity Compensation Plan. For those PPG employees not hired by the Company, the exercise period was extended for three years through December 31, 2009.

On December 30, 2005 and January 18, 2005, the Company granted to PPG employees performing development services under the Development Agreement options to purchase 31,500 and 30,500 shares, respectively, of the Company's common stock at exercise prices of \$10.51 and \$8.14, respectively. As a result of the Company hiring certain of the PPG employees in April 2006, the Company accelerated the vesting of 18,500 of the options granted on December 30, 2005. Accordingly, the Company recorded \$225,882 in research and development costs related to these options in the third quarter of 2006. The Company also recorded \$100,838 in research and development costs for the remaining 13,000 options during 2006. During 2005, the Company recorded \$275,922, in research and development costs related to these options granted.

The Company determined the fair value of the options earned during 2006 and 2005 using the Black-Scholes option-pricing model with the following assumptions: (1) risk free interest rate of 4.4 and 3.7%, respectively, (2) no expected dividend yield, (3) contractual life of 3.25 and 10 years, respectively and (4) expected volatility of 51% and 80%, respectively.

In lieu of stock options, and consistent with awards made to the Company's own employees, shares of stock were granted to certain PPG employees performing development services on the Company's behalf during 2006. On January 9, 2007, the Company issued 1,500 shares of its common stock as a bonus to these PPG research and development team members for the year ended December 31, 2006. Accordingly, the Company accrued \$21,915 as of December 31, 2006 in research and development costs relating to the issuance. The Company has no obligation to issue options or shares of stock to any PPG employees in 2007 or thereafter.

#### 8. SERIES A NONCONVERTIBLE PREFERRED STOCK:

In 1995, the Company issued 200,000 shares of Series A Nonconvertible Preferred Stock ("Series A") to American Biomimetics Corporation ("ABC") pursuant to a certain Technology Transfer Agreement between the Company and ABC. The Series A shares have a liquidation value of \$7.50 per share. Series A shareholders, as a single class, have the right to elect two members of the Company's Board of Directors. This right has never been exercised. Holders of the Series A shares are entitled to one vote per share on matters which shareholders are generally entitled to vote. The Series A shareholders are not entitled to any dividends. The Series A shares were valued at \$1.75 per share, which was based upon an independent appraisal.

#### 9. SHAREHOLDERS' EQUITY:

Effective as of each of March 31, 2007, June 30, 2007, September 30, 2007 and December 31, 2007, the Company issued 5,000 shares of fully vested common stock to members of its Board of Directors as partial payment for services performed for the three-month periods ended on such dates. The fair value of the shares issued was \$252,430, which was recorded as a compensation charge in general and administrative expense for the year ended December 31, 2007.

There are outstanding warrants to purchase 1,945,941 shares of the Company's common stock as of December 31, 2007. These warrants are exercisable at a weighted average price of \$14.03 and expire in 2008 through 2012.

In May 2007, the Company sold 2,800,000 shares of common stock through a public offering at \$14.50 per share. The offering resulted in net proceeds to the Company of \$38,000,023, net of \$2,599,977 in associated costs.

On January 9, 2008 and 2007, the Company issued a total of 75,403 and 84,138 shares of fully vested common stock to employees and members of the Scientific Advisory Board for services performed in 2007 and 2006, respectively. The fair value of the shares issued of \$1,627,767 and \$1,559,283 for employees and \$299,969 and \$260,000 for members of the Scientific Advisory Board was accrued at December 31, 2007 and 2006, respectively. The stock awards were recorded as a compensation charge in general and administrative expense of \$1,143,792 and \$1,135,933, respectively, and research and development expense of \$783,944 and \$683,350 in 2007 and 2006, respectively. In 2007, the Company issued 500 shares to an employee and the \$8,750 fair value was charged to research and development expense.

F-18

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## 10. STOCK-BASED COMPENSATION:

## Equity Compensation Plan

In 1995, the Board of Directors of the Company adopted a Stock Option Plan (the “1995 Plan”), under which options to purchase a maximum of 500,000 shares of the Company’s common stock were authorized to be granted at prices not less than the fair market value of the common stock on the date of the grant, as determined by the Compensation Committee of the Board of Directors. Through December 31, 2007, the Company’s shareholders have approved increases in the number of shares reserved for issuance under the 1995 Plan to 7,000,000, and have extended the term of the 1995 Plan through 2015. The 1995 Plan was also amended and restated in 2003, and is now called the Equity Compensation Plan. The Equity Compensation Plan provides for the granting of incentive and nonqualified stock options, shares of common stock, stock appreciation rights and performance units to employees, directors and consultants of the Company. Stock options are exercisable over periods determined by the Compensation Committee, but for no longer than 10 years from the grant date. At December 31, 2007, there are 1,472,295 shares that remain available to be granted under the Equity Compensation Plan.

The following table summarizes the stock option activity during the year ended December 31, 2007 for all grants under the Equity Compensation Plan:

	Options	Weighted Average Exercise Price
Outstanding at January 1, 2007	3,743,592	\$ 9.51
Granted	11,750	16.32
Exercised	(506,742)	7.79
Forfeited	(20,000)	13.85
Cancelled	(2,500)	24.38
Outstanding at December 31, 2007	3,226,100	9.77
Vested and expected to vest	3,219,587	9.76
Exercisable at December 31, 2007	3,174,100	9.72

The weighted average grant date fair value of options granted in 2007, 2006, and 2005 was \$8.65, \$10.66 and \$7.21, respectively. The fair value of the options granted was estimated using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model considers assumptions related to volatility, risk-free interest rate and dividend yield. Expected volatility was based on the Company’s historical daily stock price volatility. The risk-free rate was based on the average U.S. Treasury security yields in the quarter of the grant. The dividend yield was based on historical information. The expected life was determined from historical information and management’s estimate. The following table provides the assumptions used in determining the fair value of the stock options for the years ended December 31, 2007, 2006, and 2005 respectively:

	2007	2006	2005
Dividend yield rate	0%	0%	0%
Expected volatility			

	48.1 -	73.4 -	80.0 -
	52.5%	79.9%	86.3%
Risk-free interest rates	3.8 -	4.6 -	3.8 -
	4.8%	5.0%	4.5%
Expected life	5 years	7 Years	7 Years

F-19

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The following table summarizes the status of unvested options at December 31, 2007 and the changes during the year ended December 31, 2007:

	Options	Weighted Average Grant Date Fair Value
Unvested options at January 1, 2007	135,000	\$ 9.73
Granted	11,750	8.65
Vested	(74,750)	9.16
Forfeited	(20,000)	7.70
Unvested options at December 31, 2007	52,000	\$ 9.82

A summary of options outstanding and exercisable by price range at December 31, 2007, is as follows:

Exercise Price	Outstanding				Exercisable			
	Number of Options Outstanding at December 31, 2007	Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price	Aggregate Intrinsic Value (A)	Number of Options Outstanding at December 31, 2007	Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price	Aggregate Intrinsic Value (A)
\$ 3.75 - 5.45	704,249	3.01	\$ 4.75	\$ 11,208,406	704,249	3.01	\$ 4.75	\$ 11,208,406
5.46 - 8.14	460,115	6.40	7.99	5,834,543	460,115	6.40	7.99	5,834,543
8.15 - 12.04	1,397,528	5.17	9.71	15,319,201	1,377,528	5.14	9.71	15,099,721
12.05 - 17.64	548,208	6.12	15.38	2,900,144	516,208	6.01	15.41	2,713,534
17.65 - 24.38	116,000	2.32	21.47	137,160	116,000	2.32	21.47	137,160
3.75 - 24.38	3,226,100	4.93	\$ 9.77	\$ 35,399,454	3,174,100	4.89	\$ 9.72	\$ 34,993,364

(A) The difference between the stock option's exercise price and the closing price of the common stock at December 31, 2007.

The total intrinsic value of stock awards exercised during the years ended December 31, 2007 and 2006 was \$4,607,227 and \$2,403,556, respectively. At December 31, 2007, there was \$447,944 of total unrecognized compensation cost from stock-based compensation arrangements granted under the Equity Compensation Plan, which is related to non-vested options. The compensation expense is expected to be recognized over a weighted-average period of approximately 1.76 years.

The Company has issued restricted stock to employees and members of the Scientific Advisory Board with vesting terms of three years. The fair value is equal to the market price of the Company's common stock on the date of grant. Expense for restricted stock is amortized ratably over the vesting period for the awards issued to employees and using a graded vesting method for the awards issued to the Scientific Advisory Board. The following table summarizes the restricted stock activity:

	Number of Shares	Weighted- Average Grant-Date Fair Value
Unvested, January 1, 2007	15,000	12.48
Granted	116,394	14.59
Vested	(5,000)	12.48
Cancelled	(2,368)	13.68
Unvested, December 31, 2007	124,026	\$ 14.44

For the year ended December 31, 2007 and 2006, the Company recorded as compensation charges related to all restricted stock awards a general and administrative expense of \$323,377 and \$7,090 and a research and development expense of \$387,986 and \$25,224, respectively.

In addition, on January 9, 2008, the Company granted a total of 87,643 shares of restricted common stock to employees and members of the Scientific Advisory Board for services to be rendered. The restricted stock had a fair value of \$1,607,373 on the date of grant and vest over three years from the date of grant.

## 11. RESEARCH CONTRACTS:

Contract research revenue consists of the following:

	2007	December 31, 2006	2005
U.S. Army	\$ 2,150,274	\$ 1,796,338	\$ 897,887
Army Research Laboratory (ARL)	457,264	239,357	865,445
Department of Energy (DoE)	1,993,155	1,786,208	2,409,442
Air Force Research Laboratory (AFRL)	—	—	481,207
	\$ 4,600,693	\$ 3,821,903	\$ 4,653,981

## 12. COMMITMENTS AND CONTINGENCIES:

## Lease Commitments

Through December 31, 2007, the Company had an operating lease arrangement for 850 square feet of office space in Coeur d'Alene, Idaho. Total rent expense was \$3,300, \$10,275 and \$78,411 for the years ended December 31, 2007, 2006 and 2005, respectively. The lease was assigned to third party effective as of January 1, 2008.

## Other Commitments

Under the terms of the 1997 Amended License Agreement with Princeton (Note 3), the Company is required to pay Princeton minimum royalty payments of \$100,000 per year. To the extent that the royalties otherwise payable to Princeton under this agreement are not sufficient to meet the minimums for the relevant calendar year, the Company is required to pay Princeton the difference between the royalties paid and the minimum royalty.

The Company has agreements with four executive officers which provide for certain cash and other benefits upon termination of employment of the officer in connection with a change in control of the Company. The executive is entitled to a lump-sum cash payment equal to two times the sum of the average annual base salary and bonus of the officer and immediate vesting of all stock options and other equity awards that may be outstanding at the date of the change in control, among other items.

## Patent Interference Concerning U.S. Patent No. 6,734,457

In June 2006, Patent Interference No. 105,461 was declared by the United States Patent and Trademark Office (the "USPTO") between Semiconductor Energy Laboratory Co., Ltd. ("SEL"), and Princeton and USC (the "Universities"). The dispute concerned U.S. Patent No. 6,734,457, which had been issued to SEL. The SEL patent claimed aspects of the Company's phosphorescent OLED technology that Company management believes were disclosed and claimed in U.S. Application Serial No.10/913,211, which the Company exclusively licenses from the Universities. The Universities sought a ruling by the USPTO that they should be granted a patent to the claimed invention and that the SEL patent is invalid because the Universities were first-to-invent and their invention was made prior to that of SEL. Under the Company's agreement with the Universities, it was required to pay all legal costs and fees associated with the interference proceeding.

An oral hearing in the matter was held before the Board of Patent Appeals and Interferences (the “BPAI”) of the USPTO on April 25, 2007. The following day, the BPAI issued a decision in favor of the Universities. The BPAI decision confirmed that the Universities were first-to-invent the subject matter of the interference and that the Universities’ invention is prior art to SEL’s patent. As a result, all claims of the SEL patent were canceled. SEL did not appeal the BPAI decision and the proceeding is effectively terminated.

Notice of Opposition to European Patent No. 0946958

On December 8, 2006, Cambridge Display Technology, Ltd. (“CDT”), which recently was acquired by Sumitomo Chemical Company (“Sumitomo”), filed a Notice of Opposition to European Patent No. 0946958 (the “EP ‘958 patent”). The EP ‘958 patent, which was issued on March 8, 2006, is a European counterpart patent to U.S. patents 5,844,363, 6,602,540, 6,888,306 and 7,247,073. These patents relate to the Company’s FOLED technology. They are exclusively licensed to the Company by Princeton, and under the license agreement the Company is required to pay all legal costs and fees associated with this proceeding.

F-21

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The European Patent Office (the “EPO”) set a date of May 12, 2007 for the Company to file a response to the facts and arguments presented by CDT in its Notice of Opposition. The response was timely filed. The opponents then filed their reply to the Company’s response on December 7, 2007. The Company is still considering whether to file another response before the oral hearing date is set. At this stage of the proceeding, Company management cannot make any prediction as to the probable outcome of this opposition. However, based on an analysis of the evidence presented to date, Company management continues to believe there is a substantial likelihood that the patent being challenged will be declared valid, and that all or a significant portion of its claims will be upheld.

Notices of Opposition to European Patent No. 1449238

On March 8, 2007, Sumation Company Limited (“Sumation”), a joint venture between Sumitomo and CDT, filed a first Notice of Opposition to European Patent No. 1449238 (the “EP ‘238 patent”). The EP ‘238 patent, which was issued on November 2, 2006, is a European counterpart patent, in part, to U.S. patents 6,830,828, 6,902,830, 7,001,536 and 7,291,406, and to pending U.S. patent application 11/879,379, filed on July 16, 2007. These patents and this patent application relate to the Company’s PHOLED technology. They are exclusively licensed to the Company by Princeton, and under the license agreement the Company is required to pay all legal costs and fees associated with this proceeding.

Two other parties filed additional oppositions to the EP ‘238 patent just prior to the August 2, 2007 expiration date for such filings. On July 24, 2007, Merck Patent GmbH, of Darmstadt, Germany, filed a second Notice of Opposition to the EP ‘238 patent, and on July 27, 2007, BASF Aktiengesellschaft, of Mannheim, Germany, filed a third Notice of Opposition to the EP ‘238 patent. Since there is considerable overlap in the prior art evidence relied upon in each of the filed oppositions, the EPO is handling them as a single opposition.

The EPO set a January 6, 2008 due date for the Company to file its response to the opposition. The Company requested a two-month extension to file this response, and the Company subsequently filed the response in a timely manner. The Company is waiting to see whether the other parties in the opposition file any additional documents, to which the Company intends to respond. At this time, Company management cannot make any prediction as to the probable outcome of the opposition. However, based on an analysis of the evidence presented to date, Company management continues to believe there is a substantial likelihood that the patent being challenged will be declared valid, and that all or a significant portion of its claims will be upheld.

13. CONCENTRATION OF RISK

Two non-government customers accounted for approximately 46%, 38% and 24% of consolidated revenue for the years ended December 31, 2007, 2006 and 2005, respectively. Accounts receivable from these customers were \$692,576 at December 31, 2007.

Revenues from outside of North America represented 57%, 65% and 54% of the consolidated revenue for the years ended December 31, 2007, 2006 and 2005, respectively.

All chemical materials were purchased from one supplier. See Note 7.

14. INCOME TAXES:

The components of income taxes are as follows:

	2007	December 31, 2006	2005
Current	\$ (804,980)	\$ (544,567)	\$ (424,207)

Deferred	(6,907,000)	(8,092,992)	(6,601,124)
	(7,711,980)	(8,637,559)	(7,025,331)
Increase in valuation allowance	6,907,000	8,092,992	6,601,124
	\$ (804,980)	\$ (544,567)	\$ (424,207)

The difference between the Company's federal statutory income tax rate and its effective income tax rate is due to state income tax benefits, non-deductible expenses, general business credits and the increase in the valuation allowance.

F-22

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As of December 31, 2007, the Company had tax loss and credit carry forwards. The Company's net operating loss carry forwards differ from the accumulated deficit principally due to the timing of the recognition of certain expenses. A portion of the Company's net operating loss carry forwards relate to tax deductions from stock-based compensation that would be accounted for as an increase to additional-paid-in-capital for financial reporting purposes to the extent such future deductions could be utilized by the Company. In accordance with the Tax Reform Act of 1986, utilization of the Company's net operating loss and general business credit carry forwards could be subject to limitations because of certain ownership changes. The following table summarizes Company tax loss and tax credit carry forwards at December 31, 2007:

	Related Tax Deduction	Deferred Tax Asset	Expiration Date
<b>Loss carry forwards:</b>			
Federal net operating loss	\$ 120,738,000	\$ 41,051,000	2011 to 2027
State net operating loss	87,924,000	5,219,000	2010 to 2027
<b>Total loss carry forwards</b>	<b>\$ 208,662,000</b>	<b>\$ 46,270,000</b>	
<b>Tax credit carry forwards:</b>			
Research tax credit	n/a	3,259,000	2018 to 2027
State tax credits	n/a	1,004,000	2014 to 2022
<b>Total credit carry forwards</b>	<b>n/a</b>	<b>\$ 4,263,000</b>	

Significant components of the Company's deferred tax assets are as follows:

	December 31,	
	2007	2006
<b>Gross deferred tax assets:</b>		
Net operating loss carry forwards	\$ 46,270,000	\$ 36,459,000
Capitalized start-up costs	1,961,000	3,923,000
Capitalized technology license	3,318,000	3,092,000
Stock options and warrants	589,000	2,603,000
Accruals and reserves	332,000	286,000
Deferred revenue	4,132,000	4,351,000
Other	466,000	430,000
Tax credit carry forward	4,263,000	3,280,000
	61,331,000	54,424,000
Valuation allowance	(61,331,000)	(54,424,000)
<b>Net deferred tax asset</b>	<b>\$ —</b>	<b>\$ —</b>

During the years ended December 31, 2007, 2006 and 2005, the Company sold approximately \$7.5 million, \$7 million and \$5 million, respectively, of its net state operating losses and \$263,000, \$0 and \$0 of its research and development tax credits under the New Jersey Technology Tax Certificate Transfer Program, and received net proceeds of \$804,980, \$544,567 and \$424,207, respectively, during these years. The Company recorded the proceeds as an income tax benefit.

A valuation allowance was established for all of the deferred tax assets because the Company has incurred substantial operating losses since inception and expects to incur additional losses in 2008. At this time, Company management has concluded that these deferred tax assets will not be realized.

The Company adopted FIN 48 effective January 1, 2007. No transition adjustment was recorded as a result of the adoption of FIN 48 and the Company does not have any liability recorded for uncertain tax positions as of December 31, 2007. Company management does not anticipate any material change in the Company's FIN 48 position in the next twelve months. The Company's federal income tax returns for 2004 through 2007 are open tax years and are subject to examination by the Internal Revenue Service. State tax jurisdictions (Pennsylvania, New Jersey, Idaho and California) that remain open to examination range from 2002 to 2007.

F-23

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## 15. DEFINED CONTRIBUTION PLAN:

The Company maintains the Universal Display Corporation 401(k) Plan (the "Plan") in accordance with the provisions of Section 401(k) of the Internal Revenue Code (the "Code"). The Plan covers substantially all full-time employees of the Company. Participants may contribute up to 15% of their total compensation to the Plan, not to exceed the limit as defined in the Code, with the Company matching 50% of the participant's contribution, limited to 6% of the participant's total compensation. For the years ended December 31, 2007, 2006 and 2005, the Company contributed \$195,697, \$164,050 and \$149,630 to the Plan, respectively.

## 16. QUARTERLY SUPPLEMENTAL FINANCIAL DATA (UNAUDITED):

The following tables present certain unaudited consolidated quarterly financial information for each of the eight quarters in the two-year period ended December 31, 2007. In the opinion of Company management, this quarterly information has been prepared on the same basis as the consolidated financial statements and includes all adjustments (consisting of only normal recurring adjustments) necessary to present fairly the information for the periods presented. The results of operations for any quarter are not necessarily indicative of the results for the full year or for any future period.

Year ended December 31, 2007:

	March 31	June 30	Three Months Ended		Total
			September 30	December 31	
Revenue	\$ 3,014,630	\$ 2,315,170	\$ 3,077,281	\$ 2,898,826	\$ 11,305,907
Net loss	(4,583,801)	(5,175,371)	(2,960,565)	(3,256,104)	(15,975,841)
Basic and diluted loss per share	(0.15)	(0.16)	(0.08)	(0.08)	(0.47)

Year ended December 31, 2006:

	March 31	June 30	Three Months Ended		Total
			September 30	December 31	
Revenue	\$ 3,271,406	\$ 3,009,316	\$ 3,096,288	\$ 2,544,282	\$ 11,921,292
Net loss	(3,522,040)	(4,312,651)	(2,943,287)	(4,408,826)	(15,186,804)
Basic and diluted loss per share	(0.12)	(0.14)	(0.09)	(0.14)	(0.49)

