

UNIVERSAL DISPLAY CORP \PA\  
Form 10-Q  
November 08, 2011

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2011

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 (I.R.S. Employer Identification No.)  
incorporation or organization)

375 Phillips Boulevard  
Ewing, New Jersey 08618  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (609) 671-0980

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of November 2, 2011, the registrant had outstanding 46,026,058 shares of common stock.

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## PART I – FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS  
(UNAUDITED)

	September 30, 2011	December 31, 2010
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 67,124,442	\$ 20,368,852
Short-term investments	270,829,172	52,794,545
Accounts receivable	11,761,280	7,247,873
Inventory	2,230,620	2,209
Other current assets	1,715,179	1,986,030
<b>Total current assets</b>	<b>353,660,693</b>	<b>82,399,509</b>
<b>PROPERTY AND EQUIPMENT,</b> net of accumulated depreciation of \$18,376,487 and \$17,335,662	10,827,191	9,711,093
<b>ACQUIRED TECHNOLOGY,</b> net of accumulated amortization of \$16,984,912 and \$16,950,718	405,450	—
<b>OTHER ASSETS</b>	312,384	216,529
<b>TOTAL ASSETS</b>	<b>\$ 365,205,718</b>	<b>\$ 92,327,131</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 5,780,710	\$ 2,155,489
Accrued expenses	6,519,459	6,906,289
Deferred revenue	5,911,922	5,323,154
Stock warrant liability	—	10,659,755
Other current liabilities	24,546	—
<b>Total current liabilities</b>	<b>18,236,637</b>	<b>25,044,687</b>
<b>DEFERRED REVENUE</b>	3,281,843	2,775,024
<b>RETIREMENT PLAN BENEFIT LIABILITY</b>	7,773,056	7,077,901
<b>Total liabilities</b>	<b>29,291,536</b>	<b>34,897,612</b>
<b>COMMITMENTS AND CONTINGENCIES (Note 11)</b>		

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, 100,000,000 shares authorized, 46,061,998 and 38,936,571 shares issued and outstanding at September 30, 2011 and December 31, 2010, respectively	460,620	389,366
Additional paid-in capital	560,635,634	280,102,227
Accumulated deficit	(219,604,845)	(217,026,115)
Accumulated other comprehensive loss	(5,579,227 )	(6,037,959 )
Total shareholders' equity	335,914,182	57,429,519
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>\$ 365,205,718</b>	<b>\$ 92,327,131</b>

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

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## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS  
(UNAUDITED)

	Three Months Ended September 30,	
	2011	2010
<b>REVENUE:</b>		
Commercial revenue	\$ 9,881,533	\$ 2,836,587
Developmental revenue	11,895,607	4,219,274
<b>Total revenue</b>	<b>21,777,140</b>	<b>7,055,861</b>
<b>OPERATING EXPENSES:</b>		
Cost of chemicals sold	2,405,493	329,629
Research and development	6,079,433	5,760,105
Selling, general and administrative	4,957,085	3,452,815
Patent costs	1,938,143	1,177,383
Royalty and license expense	461,917	218,474
<b>Total operating expenses</b>	<b>15,842,071</b>	<b>10,938,406</b>
Operating income (loss)	5,935,069	(3,882,545 )
<b>INTEREST INCOME</b>	<b>363,700</b>	<b>64,373</b>
<b>INTEREST EXPENSE</b>	<b>(13,263 )</b>	<b>(5,957 )</b>
<b>GAIN (LOSS) ON STOCK WARRANT LIABILITY</b>	<b>239,562</b>	<b>(3,362,441 )</b>
<b>INCOME (LOSS) BEFORE INCOME TAX EXPENSE</b>	<b>6,525,068</b>	<b>(7,186,570 )</b>
<b>INCOME TAX EXPENSE</b>	<b>(535,642 )</b>	<b>—</b>
<b>NET INCOME (LOSS)</b>	<b>\$ 5,989,426</b>	<b>\$ (7,186,570 )</b>
<b>NET INCOME (LOSS) PER COMMON SHARE:</b>		
BASIC	\$ 0.13	\$ (0.19 )
DILUTED	\$ 0.12	\$ (0.19 )
<b>WEIGHTED AVERAGE SHARES USED IN COMPUTING NET INCOME (LOSS) PER COMMON SHARE:</b>		
BASIC	45,314,893	37,741,107
DILUTED	46,799,557	37,741,107

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

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## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS  
(UNAUDITED)

	Nine Months Ended September 30,	
	2011	2010
<b>REVENUE:</b>		
Commercial revenue	\$ 19,904,312	\$ 6,618,626
Developmental revenue	22,725,783	13,130,714
<b>Total revenue</b>	<b>42,630,095</b>	<b>19,749,340</b>
<b>OPERATING EXPENSES:</b>		
Cost of chemicals sold	2,650,695	646,666
Research and development	18,186,043	16,089,409
Selling, general and administrative	13,324,863	9,719,643
Patent costs	5,466,245	2,802,549
Royalty and license expense	881,956	507,094
<b>Total operating expenses</b>	<b>40,509,802</b>	<b>29,765,361</b>
Operating income (loss)	2,120,293	(10,016,021)
INTEREST INCOME	644,050	201,153
INTEREST EXPENSE	(31,331 )	(18,664 )
LOSS ON STOCK WARRANT LIABILITY	(4,190,283 )	(5,231,626 )
<b>LOSS BEFORE INCOME TAX (EXPENSE) BENEFIT</b>	<b>(1,457,271 )</b>	<b>(15,065,158)</b>
<b>INCOME TAX (EXPENSE) BENEFIT</b>	<b>(1,121,459 )</b>	<b>464,162</b>
<b>NET LOSS</b>	<b>\$ (2,578,730 )</b>	<b>\$ (14,600,996)</b>
<b>BASIC AND DILUTED NET LOSS PER COMMON SHARE</b>	<b>\$ (0.06 )</b>	<b>\$ (0.39 )</b>
<b>WEIGHTED AVERAGE SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS PER COMMON SHARE</b>	<b>43,101,933</b>	<b>37,380,190</b>

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





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## UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS  
(UNAUDITED)

	Nine Months Ended September 30,	
	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (2,578,730 )	\$ (14,600,996)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Amortization of deferred revenue	(2,234,413 )	(3,653,330 )
Depreciation	1,092,305	1,329,279
Amortization of intangibles	34,194	1,234,272
Amortization of premium and discount on investments, net	(483,288 )	(121,891 )
Stock-based employee compensation	3,270,286	1,902,701
Stock-based non-employee compensation	2,899	43,308
Non-cash expense under a materials agreement	9,181	896,184
Stock-based compensation to Board of Directors and Scientific Advisory Board	1,252,275	660,983
Loss on stock warrant liability	4,190,283	5,231,626
Retirement plan benefit expense	1,145,154	684,164
(Increase) decrease in assets:		
Accounts receivable	(4,513,407 )	(1,352,085 )
Inventory	(2,228,411 )	(1,568 )
Other current assets	270,851	(211,372 )
Other assets	(95,855 )	(38,835 )
Increase in liabilities:		
Accounts payable and accrued expenses	5,306,827	2,335,190
Other current liabilities	24,546	-
Deferred revenue	3,330,000	688,623
Net cash provided by (used in) operating activities	7,794,697	(4,973,747 )
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchase of property and equipment	(2,208,403 )	(218,609 )
Purchase of intangibles	(439,644 )	-
Purchase of short-term investments	(290,269,260)	(71,972,672)
Proceeds from sale of short-term investments	72,726,654	56,454,984
Net cash used in investing activities	(220,190,653)	(15,736,297)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		

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Proceeds from the issuance of common stock	249,867,265	191,618
Proceeds from the exercise of common stock options and warrants	13,282,797	7,167,562
Payment of withholding taxes related to stock-based employee compensation	(3,998,516 )	(1,147,522 )
Net cash provided by financing activities	259,151,546	6,211,658
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>46,755,590</b>	<b>(14,498,386)</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD</b>	<b>20,368,852</b>	<b>22,701,126</b>
<b>CASH AND CASH EQUIVALENTS, END OF PERIOD</b>	<b>\$ 67,124,442</b>	<b>\$ 8,202,740</b>
The following non-cash activities occurred:		
Unrealized gain (loss) on available-for-sale securities	\$ 8,733	\$ (8,072 )
Common stock issued to Board of Directors and Scientific Advisory Board that was earned in a previous period	299,943	314,181
Common stock issued to employees that was accrued for in a previous period, net of shares withheld for taxes	1,113,483	929,552
Common stock issued for royalties that was earned in a previous period	—	81,273
Fair value of stock warrant liability reclassified to shareholders' equity upon exercise	14,850,038	—

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

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UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
(UNAUDITED)

1. BACKGROUND

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 proprietary OLED technologies and materials, and to license these technologies and sell these materials to OLED product manufacturers. Through internal research and development efforts and relationships with entities such as Princeton University (Princeton), the University of Southern California (USC), the University of Michigan (Michigan), Motorola Solutions, Inc. (f/k/a Motorola, Inc.) (Motorola) and PPG Industries, Inc. (PPG Industries), the Company has established a significant portfolio of proprietary OLED technologies and materials (Notes 5 and 7).

2. BASIS OF PRESENTATION

Interim Financial Information

In the opinion of management, the accompanying unaudited consolidated financial statements contain all adjustments (consisting of only normal recurring adjustments) necessary to present fairly the Company's financial position as of September 30, 2011 and results of operations for the three and nine months ended September 30, 2011 and 2010, and cash flows for the nine months ended September 30, 2011 and 2010. While management believes that the disclosures presented are adequate to make the information not misleading, these unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements and the notes thereto in the Company's latest year-end financial statements, which are included in the Company's Annual Report on Form 10-K for the year ended December 31, 2010. The results of Company's operations for any interim period are not necessarily indicative of the results of operations for any other interim period or for the full year.

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.

Fair Value of Financial Instruments

The carrying value of cash equivalents, accounts receivable, other current assets and accounts payable approximates fair value in the accompanying financial statements due to the short-term nature of those instruments. See Notes 3 and 4 for a discussion of cash equivalents, short-term investments and stock warrant liability.

Cost of Chemicals Sold

Cost of chemicals sold represents costs associated with the sale of chemicals that have been classified as commercial. Certain reclassifications were made to the statement of operations between cost of chemicals sold and research and development expenses for the three and nine months ended September 30, 2010 to reflect this current presentation.

### Recent Accounting Pronouncements

In September 2009, the Financial Accounting Standards Board (FASB) issued guidance which affects the revenue recognition accounting policies for transactions that involve multiple deliverables. The new guidance requires companies to allocate revenue in arrangements involving multiple deliverables based on the estimated selling price of each deliverable, even though those deliverables are not sold separately either by the company itself or other vendors. This new guidance eliminates the requirement that all undelivered elements have objective and reliable evidence of fair value before a company can recognize the portion of the overall arrangement fee that is attributable to items that already have been delivered. In the absence of vendor-specific objective evidence and third-party evidence for one or more elements in a multiple-element arrangement, companies will estimate the selling prices of those elements. The overall arrangement fee will be allocated to each element whether delivered or undelivered, based on their relative selling prices, regardless of whether those estimated

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selling prices are evidenced by vendor-specific objective evidence, third-party evidence of fair value or are based on the company's judgment. The new guidance was effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. The Company adopted this new guidance on a prospective basis beginning January 1, 2011. The adoption of this new guidance did not have an impact on the Company's results of operations or financial position.

In January 2010, the FASB issued amended standards that require additional fair value disclosures. These amended standards require disclosures about inputs and valuation techniques used to measure fair value as well as disclosures about significant transfers, beginning in the first quarter of 2010. Additionally, these amended standards require presentation of disaggregated activity within the reconciliation for fair value measurements using significant unobservable inputs (Level 3), beginning in the first quarter of 2011. The adoption of the additional disclosure requirements of this new guidance in the first quarter of 2011 did not have an impact on the Company's results of operations, financial position, or disclosures.

In April 2010, the FASB issued guidance allowing the milestone method as an acceptable revenue recognition methodology when an arrangement includes substantive milestones. The guidance provides a definition of a substantive milestone and should be applied regardless of whether the arrangement includes single or multiple deliverables or units of accounting. The scope of this consensus is limited to the transactions involving milestones relating to research and development deliverables. The guidance includes enhanced disclosure requirements about each arrangement, individual milestones and related contingent consideration, information about substantive milestones and factors considered in the determination. The consensus is effective prospectively to milestones achieved in annual reporting periods, and interim periods within those years, beginning after June 15, 2010. The Company adopted this new guidance on a prospective basis beginning January 1, 2011. The adoption of this new guidance did not have an impact on the Company's results of operations or financial position.

In May 2011, the FASB issued amended standards that revised the application of the valuation premise of highest and best use of an asset, the application of premiums and discounts for fair value determination, as well as the required disclosures for transfers between Level 1 and Level 2 fair value measures and the highest and best use of nonfinancial assets. The update provides additional disclosures regarding Level 3 fair value measurements and clarifies certain other existing disclosure requirements. The new guidance is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company is currently evaluating the requirements of this new guidance and has not yet determined the impact on the Company's results of operations or financial position.

In June 2011, the FASB issued amended standards for the reporting of other comprehensive income. The amendments require that all non-owner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In either case, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. Regardless of which option is chosen, the entity is required to present on the face of the financial statements any adjustments for items that are reclassified from other comprehensive income to net income in the statements where the components of net income and the components of other comprehensive income are presented. The new guidance is effective retrospectively for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company does not expect this new guidance to have a material impact on its results of operations or financial position, but it will change the Company's presentation of comprehensive income (loss).

### 3. CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company's remaining marketable securities are classified as available-for-sale. These securities

are carried at fair market value, with unrealized gains and losses reported in shareholders' equity. Gains or losses on securities sold are based on the specific identification method.

Short-term investments at September 30, 2011 consisted of the following:

Investment Classification	Amortized Cost	Unrealized Gains	(Losses)	Aggregate Fair Market Value
September 30, 2011 –				
Certificates of deposit	\$ 5,713,230	\$ 130	\$ (5,130 )	\$ 5,708,230
Corporate bonds	258,859,623	73,289	(44,850 )	258,888,062
U.S. government bonds	6,233,885	846	( 1,851 )	6,232,880
	\$ 270,806,738	\$ 74,265	\$ (51,831 )	\$ 270,829,172

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Short-term investments at December 31, 2010 consisted of the following:

Investment Classification	Amortized Cost	Unrealized Gains	(Losses)	Aggregate Fair Market Value
December 31, 2010 –				
Certificates of deposit	\$ 7,167,818	\$ 62	\$ (7,919 )	\$ 7,159,961
Corporate bonds	30,423,518	19,964	(642 )	30,442,840
U.S. government bonds	15,189,511	3,040	(807 )	15,191,744
	\$ 52,780,847	\$ 23,066	\$ (9,368 )	\$ 52,794,545

All short-term investments held at September 30, 2011 will mature within one year.

#### 4. FAIR VALUE MEASUREMENTS

The following table provides the assets and liabilities carried at fair value measured on a recurring basis as of September 30, 2011:

	Total carrying value as of September 30, 2011	Fair Value Measurements, Using		
		Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cash equivalents	\$ 44,730,776	\$ 44,730,776	\$ —	\$ —
Short-term investments	270,829,172	270,829,172	—	—

The following table provides the assets and liabilities carried at fair value measured on a recurring basis as of December 31, 2010:

	Total carrying value as of December 31, 2010	Fair Value Measurements, Using		
		Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cash equivalents	\$ 8,234,698	\$ 8,234,698	\$ —	\$ —
Short-term investments	52,794,545	52,794,545	—	—
Stock warrant liability	10,659,755	—	—	10,659,755

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on management's own assumptions used to measure assets and liabilities at fair value. A financial asset or liability's classification is determined based on the lowest level input that is significant to the fair value measurement.

The following table is a reconciliation of the changes in fair value of the Company's stock warrant liability for the three months ended September 30, 2011 and 2010 which had been classified in Level 3 in the fair value hierarchy:



	2011	2010
Fair value of stock warrant liability, beginning of period	\$ 4,588,178	\$ 5,589,350
(Gain) loss for period	(239,562 )	3,362,441
Warrants exercised	(4,348,616)	—
Fair value of stock warrant liability, end of period	\$ —	\$ 8,951,791

The following table is a reconciliation of the changes in fair value of the Company's stock warrant liability for the nine months ended September 30, 2011 and 2010 which has been classified in Level 3 in the fair value hierarchy:

	2011	2010
Fair value of stock warrant liability, beginning of period	\$ 10,659,755	\$ 3,720,165
Loss for period	4,190,283	5,231,626
Warrants exercised	(14,850,038)	—
Fair value of stock warrant liability, end of period	\$ —	\$ 8,951,791

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The fair value of the stock warrant liability was determined using the Black-Scholes option pricing model with the following inputs at September 30, 2010:

	2010	
Contractual life (years)	0.9	
Expected volatility	54.6	%
Risk-free interest rate	0.2	%
Annual dividend yield	—	

## 5. RESEARCH AND LICENSE AGREEMENTS WITH PRINCETON, USC AND MICHIGAN

The Company funded OLED technology research at Princeton and, on a subcontractor basis, at USC, for 10 years under a Research Agreement executed with Princeton in August 1997 (the 1997 Research Agreement). The Principal Investigator conducting work under the 1997 Research Agreement transferred to Michigan in January 2006. Following this transfer, the 1997 Research Agreement was allowed to expire on July 31, 2007.

As a result of the transfer, the Company 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 (as amended, the 2006 Research Agreement) was effective as of May 1, 2006, and had an original term of three years. The 2006 Research Agreement superseded the 1997 Research Agreement with respect to all work being performed at USC and Michigan. Payments under the 2006 Research Agreement were made to USC on a quarterly basis as actual expenses were incurred. The Company incurred \$2,155,570 in research and development expense for work performed under the 2006 Research Agreement during the original term, which ended on April 30, 2009.

Effective May 1, 2009, the Company amended the 2006 Research Agreement to extend the term of the agreement for an additional four years. Under the amendment, the Company is obligated to pay USC up to \$7,456,294 for work actually performed during the extended term, which runs through April 30, 2013. From May 1, 2009 through September 30, 2011, the Company incurred \$2,055,916 in research and development expense for work performed under the amended 2006 Research Agreement.

On October 9, 1997, the Company, Princeton and USC entered into an Amended License Agreement (as amended, the 1997 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. 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 royalty expense in connection with this agreement of \$364,108 and \$136,613 for the three months ended September 30, 2011 and 2010, respectively, and \$779,147 and \$318,245 for the nine months ended September 30, 2011 and 2010, 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.

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.

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6. ACQUIRED TECHNOLOGY

In 2000, the Company entered into a license agreement with Motorola whereby Motorola granted the Company perpetual license rights to what are now 74 issued U.S. patents relating to Motorola's OLED technologies, together with foreign counterparts in various countries. These patents will start expiring in the U.S. in 2012.

The Company was required under the license agreement with Motorola to pay Motorola annual royalties on gross revenues received on account of the Company's sales of OLED products or components, or from its OLED technology licensees, whether or not these revenues related specifically to inventions claimed in the patent rights licensed from Motorola.

On March 9, 2011, the Company purchased these patents from Motorola, including all existing and future claims and causes of action for any infringement of the patents, pursuant to a Patent Purchase Agreement. The Patent Purchase Agreement effectively terminated the Company's license agreement with Motorola, including any obligation to make royalty payments to Motorola.

The technology acquired from Motorola had an assigned value of \$439,644, which is being amortized over a period of 7.5 years. The Company accrued royalty expense in connection with the Motorola license agreement of \$79,361 and \$181,349 for the three and nine months ended September 30, 2010, respectively. There was no corresponding royalty expense for the three or nine months ended September 30, 2011.

7. EQUITY AND CASH COMPENSATION UNDER THE PPG INDUSTRIES AGREEMENTS

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

On July 29, 2005, the Company entered into an OLED Materials Supply and Service Agreement with PPG Industries (the OLED Materials Agreement). The OLED Materials Agreement superseded and replaced in their entirety the Development Agreement and Supply Agreement effective as of January 1, 2006, and extended the term of the Company's relationship with PPG Industries through December 31, 2009. The term of the OLED Materials Agreement was subsequently extended through December 31, 2012. Under the OLED Materials Agreement, PPG Industries 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.

On September 22, 2011, the Company entered into an Amended and Restated OLED Materials Supply and Service Agreement with PPG Industries (the New OLED Materials Agreement). The New OLED Materials Agreement replaced the original OLED Materials Agreement with PPG Industries effective as of October 1, 2011. The term of the New OLED Materials Agreement runs through December 31, 2014. The new agreement contains provisions that are substantially similar to those of the original OLED Materials Agreement.

Under the OLED Materials Agreement and New OLED Materials Agreement, the Company compensates PPG Industries on a cost-plus basis for the services provided during each calendar quarter. The Company is required to pay for some of these services in all cash. Up to 50% of the remaining services are payable, at the Company's sole discretion, in cash or shares of the Company's common stock, with the balance payable in all cash. The actual number of shares of common stock issuable to PPG Industries is determined based on the average closing price for the Company's common stock during a specified number of days prior to the end of the relevant calendar quarter. If,

however, this average closing price is less than a specified dollar amount, the Company is required to compensate PPG Industries in all cash.

The Company is also required under the OLED Materials Agreement and New OLED Materials Agreement to reimburse PPG Industries for raw materials used for research and development. The Company records the purchases of these raw materials as a current asset until such materials are used for research and development efforts.

The Company issued 181 and 41,978 shares of the Company's common stock to PPG Industries as consideration for services provided by PPG Industries under the OLED Materials Agreement during the nine months ended September 30, 2011 and 2010, respectively. For these shares, the Company recorded expense of \$9,181 and \$500,757 for the nine months ended September 30, 2011 and 2010, respectively. For the portion of these shares associated with the three months ended September 30, 2011 and 2010, the Company recorded expense of \$0 and \$338,961, respectively.

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The Company recorded expense of \$593,081 and \$775,059 for the three months ended September 30, 2011 and 2010, respectively, and \$2,981,608 and \$1,606,621 for the nine months ended September 30, 2011 and 2010, respectively, in relation to the cash portion of the reimbursement of expenses and work performed by PPG Industries, excluding amounts paid for commercial chemicals.

## 8. SHAREHOLDERS' EQUITY

	Series A Nonconvertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Shares	Amount	Shares	Amount				
BALANCE, JANUARY 1, 2011	200,000	\$2,000	38,936,571	\$389,366	\$280,102,227	\$(217,026,115)	\$(6,037,959)	\$57,429,519
Net loss	—	—	—	—	—	(2,578,730 )	—	(2,578,730 )
Other comprehensive (loss) income:								
Unrealized gain on available-for-sale securities	—	—	—	—	—	—	8,733	8,733
Amortization of prior service cost and actuarial loss for retirement plan	—	—	—	—	—	—	449,999	449,999
Comprehensive loss								(2,119,998 )
Exercise of common stock options and warrants, net of tendered shares	—	—	1,222,192	12,222	28,120,613	—	—	28,132,835
Stock-based employee compensation, net of shares withheld for taxes (A)	—	—	103,124	1,031	1,039,232	—	—	1,040,263
Stock-based non-employee compensation	—	—	72	1	2,898	—	—	2,899
Issuance of common stock to Board of Directors and Scientific Advisory Board (B)	—	—	41,536	415	1,551,803	—	—	1,552,218

Issuance of common stock in connection with materials agreements	—	—	181	2	9,179	—	—	9,181
Issuance of common stock under an Employee Stock Purchase Plan	—	—	8,322	83	238,368	—	—	238,451
Issuance of common stock through a public offering, net of expenses of \$14,871,186 (C)	—	—	5,750,000	57,500	249,571,314	—	—	249,628,814
<b>BALANCE, SEPTEMBER 30, 2011</b>	<b>200,000</b>	<b>\$2,000</b>	<b>46,061,998</b>	<b>\$460,620</b>	<b>\$560,635,634</b>	<b>\$(219,604,845)</b>	<b>\$(5,579,227)</b>	<b>\$335,914,182</b>

(A) Includes \$1,768,493 (50,848 shares) that was accrued for in a previous period and charged to expense when earned, but issued in 2011, less shares withheld for taxes in the amount of \$655,010 (18,792 shares).

(B) Includes \$299,943 (8,624 shares) that was earned in a previous period and charged to expense when earned, but issued in 2011.

(C) In March 2011, the Company sold 5,750,000 shares of its Common Stock at \$46.00 per share in a registered underwritten public offering. The offering resulted in proceeds to the Company of \$249,628,814, which was net of \$14,871,186 in underwriting discounts and commissions and other costs associated with completion of the offering.

## 9. STOCK-BASED COMPENSATION

The Company recognizes in its results of operations the grant-date fair value of stock options and other equity-based compensation issued to employees and directors. The grant-date fair value of stock options is determined using the Black-Scholes option pricing model. 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 the respective exercise, grant or vesting of share-based awards, as applicable.

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Equity Compensation Plan

In 2003, the Company amended and restated its Stock Option Plan (now called the Equity Compensation Plan). Through September 30, 2011, the Company's shareholders have approved increases in the number of shares reserved for issuance under the Equity Compensation Plan to 8,000,000, and have extended the term of the plan through 2015.

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. Options to purchase shares of the Company's common stock are 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.

During the nine months ended September 30, 2011, the Company did not grant any stock options to employees. The Company did not record any compensation expense for the three months ended September 30, 2011 and 2010, respectively, and the Company recorded compensation expense of \$0 and \$30,497 for the nine months ended September 30, 2011 and 2010, respectively, in relation to the vesting of all previously granted employee stock options.

During the nine months ended September 30, 2010, the Company granted to a non-employee stock options to purchase 10,000 shares of the Company's common stock, which options have since been exercised. These stock options vested immediately and had exercise prices ranging from \$8.56 to \$9.44. The fair value of the options granted was \$38,366, which was charged to research and development expense for the nine months ended September 30, 2010. No such grants were made for the nine months ended September 30, 2011.

During the nine months ended September 30, 2011, the Company granted a total of 92,822 shares of restricted stock awards and restricted stock units to employees. The shares associated with these restricted stock awards and restricted stock units had a fair value of \$3,228,349 on the date of grant, and will vest over one to six years from the date of grant, provided that the grantee is still an employee of the Company on the applicable vesting date.

For the nine months ended September 30, 2011 and 2010, the Company recorded compensation expense related to the vesting of restricted stock awards and restricted stock units previously granted to employees. These expenses were charged to general and administrative expense in amounts of \$752,550 and \$577,609, and to research and development expense in amounts of \$296,309 and \$112,474, for the three months ended September 30, 2011 and 2010, respectively, and to general and administrative expense in amounts of \$2,224,581 and \$1,444,707, and to research and development expense in amounts of \$871,704 and \$344,863, for the nine months ended September 30, 2011 and 2010, respectively.

During the nine months ended September 30, 2011, the Company also granted to employees 2,210 shares of common stock, which shares were issued and fully vested as of the date of grant. For the fair value of fully-vested shares that were issued to employees, the Company recorded charges to research and development expense of \$40,931 and zero for the three months ended September 30, 2011 and 2010, respectively, and \$95,728 and \$21,734 for the nine months ended September 30, 2011 and 2010, respectively.

In connection with all common stock issued to employees for the nine months ended September 30, 2011, 101,057 shares of common stock with a fair value of \$3,998,516 were withheld in satisfaction of tax withholding obligations.

During the nine months ended September 30, 2011, the Company granted 24,000 cash-settled stock appreciation rights (SARs) to certain executive officers. The SARs represent the right to receive, for each SAR, a cash payment equal to the amount, if any, by which the fair market value of a share of the common stock of the Company on the vesting date exceeds the base price of the SAR award. The base price of each SAR award was \$34.78 per share. The



SARs vest on the first anniversary of the date of grant, provided that the grantee is still an employee of the Company on the applicable vesting date. In relation to the vesting of the cash-settled SARs, the Company recorded \$61,374 to general and administrative expense and \$149,052 to research and development expense for the three months ended September 30, 2011, and \$85,770 to general and administrative expense and \$208,300 to research and development expense for the nine months ended September 30, 2011. No such grants were made in 2010.

For the nine months ended September 30, 2011, the Company issued a total 15,000 shares of common stock to members of its Board of Directors as partial compensation for services performed. For the fair value of shares issued to members of its Board of Directors, the Company recorded charges to general and administrative expense of \$197,000 and \$67,631 for the three months ended September 30, 2011 and 2010, respectively, and \$591,000 and \$202,892 for the nine months ended September 30, 2011 and 2010, respectively.

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For the nine months ended September 30, 2011, the Company granted a total of 6,900 shares of restricted stock to certain members of its Scientific Advisory Board. These shares of restricted stock will vest and be issued in equal increments annually over three years from the date of grant, provided that the grantee is still engaged as a consultant of the Company on the applicable vesting date. In relation to the vesting of all restricted stock awards granted to the Scientific Advisory Board, the Company recorded \$337,158 and \$208,687 to research and development expense for the three months ended September 30, 2011 and 2010, respectively, and \$661,275 and \$458,091 to research and development expense for the nine months ended September 30, 2011 and 2010, respectively.

### Employee Stock Purchase Plan

On April 7, 2009, the Board of Directors of the Company adopted an Employee Stock Purchase Plan (ESPP). The ESPP was approved by the Company's shareholders and became effective on June 25, 2009. The Company has reserved 1,000,000 shares of common stock for issuance under the ESPP. Unless sooner terminated by the Board of Directors, the ESPP will expire when all reserved shares have been issued.

Eligible employees may elect to contribute to the ESPP through payroll deductions during consecutive three-month purchase periods, the first of which began on July 1, 2009. Each employee who elects to participate will be deemed to have been granted an option to purchase shares of the Company's common stock on the first day of the purchase period. Unless the employee opts out during the purchase period, the option will automatically be exercised on the last day of the period, which is the purchase date, based on the employee's accumulated contributions to the ESPP. The purchase price will equal 85% of the lesser of the price per share of common stock on the first day of the period or the last day of the period.

Employees may allocate up to 10% of their base compensation to purchase shares of common stock under the ESPP; however, each employee may purchase no more than 12,500 shares on a given purchase date, and no employee may purchase more than \$25,000 of common stock under the ESPP during a given calendar year.

For the nine months ended September 30, 2011, the Company issued 8,322 shares of its common stock under the ESPP, resulting in proceeds of \$238,451. In relation to the ESPP, the Company recorded \$8,457 and \$6,783 to general and administrative expense, and \$21,142 and \$14,132 to research and development expense, for the three months ended September 30, 2011 and 2010, respectively, and \$22,102 and \$20,887 to general and administrative expense, and \$56,172 and \$40,011 to research and development expense, for the nine months ended September 30, 2011 and 2010, respectively. The expense recorded equals the amount of the discount and the value of the look-back feature for the shares that were issued under the ESPP.

### 10. SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN

On March 18, 2010, the Compensation Committee and the Board of Directors of the Company approved and adopted the Universal Display Corporation Supplemental Executive Retirement Plan (the SERP), effective as of April 1, 2010. The purpose of the SERP, which is unfunded, is to provide certain of the Company's executive officers with supplemental pension benefits following a cessation of their employment. As of September 30, 2011, there were six participants in the SERP. The SERP benefit is based on a percentage of the participant's annual base salary and the number of years of service.

The Company records amounts relating to the SERP based on calculations that incorporate various actuarial and other assumptions, including discount rates, rate of compensation increases, retirement dates and life expectancies. The net periodic costs are recognized as employees render the services necessary to earn the SERP benefits.

The components of net periodic pension cost were as follows for the three months ended September 30,

	2011	2010
Service cost	\$ 135,460	\$ 110,613
Interest cost	96,259	85,347
Amortization of prior service cost	146,121	146,122
Amortization of actuarial loss	3,878	-
Total net periodic benefit cost	\$ 381,718	\$ 342,082

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The components of net periodic pension cost were as follows for the nine months ended September 30,

	2011	2010
Service cost	\$ 406,378	\$ 221,226
Interest cost	288,777	170,694
Amortization of prior service cost	438,365	292,244
Amortization of actuarial loss	11,634	-
Total net periodic benefit cost	\$ 1,145,154	\$ 684,164

## 11. COMMITMENTS AND CONTINGENCIES

## Commitments

Under the 2006 Research Agreement with USC, the Company is obligated to make certain payments to USC based on work performed by USC under that agreement, and by Michigan under its subcontractor agreement with USC. See Note 5 for further explanation.

Under the terms of the 1997 Amended License Agreement, the Company is required to make minimum royalty payments to Princeton. See Note 5 for further explanation.

## Opposition to European Patent No. 0946958

On December 8, 2006, Cambridge Display Technology (CDT), which was acquired in 2007 by Sumitomo Chemical Company (Sumitomo), filed a Notice of Opposition to European Patent No. 0946958 (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™ flexible OLED 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.

The European Patent Office (the EPO) conducted an Oral Hearing in this matter on October 6, 2009. No representative from CDT attended the Oral Hearing. At the conclusion of the Oral Hearing, the EPO panel announced its decision to reject the opposition and to maintain the patent as granted. The minutes of the Oral Hearing were dispatched on October 27, 2009, and a written decision was issued on November 26, 2009.

CDT filed an appeal to the EPO panel decision on January 25, 2010. CDT timely filed its grounds for the appeal with the EPO on or about April 1, 2010. The EPO set August 12, 2010 as the due date for filing the Company's reply to this appeal. The Company's reply was timely filed.

At this time, based on its current knowledge, Company management believes that the EPO panel decision will be upheld on appeal. However, Company management cannot make any assurances of this result.

## 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 (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; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011.

These patents and this patent application relate to the Company's UniversalPHOLED phosphorescent OLED 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. The EPO combined all three oppositions into a single opposition proceeding.

The EPO conducted an Oral Hearing in this matter on November 3, 2011. At the conclusion of the Oral Hearing, the EPO panel announced its decision to maintain the patent with claims directed to OLEDs comprising phosphorescent

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organometallic iridium compounds. The Company expects that the official minutes from the Oral Hearing will be published in the near future, and a written decision will follow. The EPO panel decision is open to appeal.

At this time, based on its current knowledge, Company management believes that the EPO panel decision, if appealed, would be upheld on appeal. However, Company management cannot make any assurances of this result.

Invalidation Trial in Japan for Japan Patent No. 3992929

On April 19, 2010, the Company received a copy of a Notice of Invalidation Trial from the Japanese Patent Office (the JPO) for the Company's Japan Patent No. 3992929 (the JP '929 patent), which was issued on August 3, 2007. The request for the Invalidation Trial was filed by Semiconductor Energy Laboratory Co., Ltd. (SEL), of Kanagawa, Japan. The JP '929 patent is a Japanese counterpart patent, in part, to the above-noted EP '238 patent and to the above-noted family of U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011. Under the Company's license agreement with Princeton, the Company is required to pay all legal costs and fees associated with this proceeding.

An Oral Hearing in this matter was held on November 16, 2010. On February 28, 2011, the Company learned that the JPO had issued a decision recognizing the Company's invention and upholding the validity of most of the claims, but finding the broadest claims in the patent invalid. Company management believes that the JPO's decision invalidating these claims was erroneous, and the Company filed an appeal to the Japanese IP High Court.

Both parties are in the process of filing appeal briefs in this matter with the Japanese IP High Court. A technical explanation hearing has been tentatively scheduled for February 1, 2012. At the hearing, both parties will be required to file technical materials supporting their respective positions.

At this time, based on its current knowledge, Company management believes that the JPO decision invalidating certain claims in the Company's JP '929 patent should be overturned on appeal as to all or a significant portion of the claims. However, Company management cannot make any assurances of this result.

Opposition to European Patent No. 1394870

On about April 20, 2010, five European companies filed Notices of Opposition to European Patent No. 1394870 (the EP '870 patent). The EP '870 patent, which was issued on July 22, 2009, is a European counterpart patent, in part, to U.S. patents 6,303,238; 6,579,632; 6,872,477; 7,279,235; 7,279,237; 7,488,542; 7,563,519; and 7,901,795; and to pending U.S. patent application 13/035051, filed on February 25, 2011. These patents and this patent application relate to the Company's UniversalPHOLED phosphorescent OLED 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. The five companies are Merck Patent GmbH; BASF Schweiz AG of Basel, Switzerland; Osram GmbH of Munich, Germany; Siemens Aktiengesellschaft of Munich, Germany; and Koninklijke Philips Electronics N.V., of Eindhoven, The Netherlands.

The EPO combined the oppositions into a single opposition proceeding. The matter has been briefed and the Company is waiting for the EPO to provide notice of the date of the Oral Hearing. The Company is also waiting to see whether any of the other parties in the opposition file additional documents, to which the Company might respond.

At this time, based on its current knowledge, Company management believes 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. However, Company management cannot make any assurances of this result.

Invalidation Trials in Japan for Japan Patent Nos. 4357781 and 4358168

On May 24, 2010, the Company received copies of two additional Notices of Invalidation Trials against Japan Patent Nos. 4357781 (the JP '781 patent) and 4358168 (the JP '168 patent), which were both issued on August 14, 2009. The requests for these two additional Invalidation Trials were also filed by SEL. The JP '781 and '168 patents are also Japanese counterpart patents, in part, to the above-noted family of U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011. Under the Company's license agreement with Princeton, the Company is also required to pay all legal costs and fees associated with these two proceedings.

An Oral Hearing in this matter was held on February 1, 2011. On March 31, 2011, the Company learned that the JPO had issued decisions finding all claims in the JP '781 and JP '168 patents invalid. Company management believes that the JPO's

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decisions invalidating these claims were erroneous, and the Company filed appeals for both cases to the Japanese IP High Court.

Both parties are in the process of filing appeal briefs in this matter with the Japanese IP High Court. The Japanese IP High Court has scheduled a first hearing for this matter on November 22, 2011.

At this time, based on its current knowledge, Company management believes that the JPO decisions invalidating all the claims in the Company's JP '781 and JP '168 patents should be overturned on appeal as to all or a significant portion of the claims. However, Company management cannot make any assurances of this result.

Interference No. 105,771 involving Claims 48-52 of US Patent No. 6,902,830

Patent Interference No. 105,771 was declared by the United States Patent and Trademark Office (the USPTO) on November 17, 2010 between The University of Southern California and The Trustees of Princeton University (the Universities), Junior Party, and Fujifilm Holding Corporation (Fuji), Senior Party. The dispute is between the Universities' U.S. Patent No 6,902,830 (the '830 patent), claims 48-52, and Fuji's Patent Application No. 11/802,492, claims 1-5 (the Fuji application). The '830 patent relates to the Company's UniversalPHOLED phosphorescent OLED technology. It is 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.

The USPTO declares an interference when two or more parties claim the same patentable invention. The objective of an interference is to contest which party, if any, has both a right to participate in the proceeding and a right to the claimed invention and, if more than one party does, then to contest which party has the earliest priority date for the claimed invention.

Subsequent to the filing of motions and responsive motions in this matter, the interference was concluded by the Company's purchase of the Fuji application. As a result of this purchase, the Fuji application was assigned to the Company effective September 13, 2011. The Company then requested that adverse judgment be entered against the Fuji application, which was entered by the USPTO on October 4, 2011. Thus, the Company's claims 48-52 of the '830 patent, and the '830 patent as a whole, remain intact as granted.

Invalidation Trial in Korea for Patent No. KR-0998059

On March 10, 2011, the Company received informal notice from its Korean patent counsel of a Request for an Invalidation Trial from the Korean Intellectual Property Office (KIPO) for the Company's Korean Patent No. 10-0998059 (the KR '059 patent), which was issued on November 26, 2010. The Request was filed by a certain individual petitioner, but the Company still does not know which company, if any, was ultimately responsible for filing this Request. The KR '059 patent is a Korean counterpart patent to the OVJP, Organic Vapor Jet Printing, family of U.S. patents originating from US 7,431,968.

On April 21, 2011, the Company's Korean patent counsel received a copy of the Appeal Brief for the Request from KIPO. The Company filed a response to the Request on June 20, 2011. The petitioner filed a rebuttal brief on August 8, 2011, and the Company filed a response to the rebuttal brief on October 12, 2011.

At this time, based on its current knowledge, Company management believes 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. However, Company management cannot make any assurances of this result.

Invalidation Trials in Korea for Patent Nos. KR-558632 and KR-963857



On May 11 and May 31, 2011, respectively, the Company learned that further Requests for Invalidation Trials were filed in Korea, on May 3 and May 26, 2011, respectively, for the Company's Korean Patent Nos. KR-558632 (the KR '632 patent), which issued on March 2, 2006, and KR-963857 (the KR '857 patent), which issued on June 8, 2010. The Requests were filed by Duk San Hi-metal, Ltd. (Duk San) of Korea. The KR '632 and KR '857 patents are both Korean counterpart patents, in part, to U.S. patents 6,303,238; 6,579,632; 6,872,477; 7,279,235; 7,279,237; 7,488,542 and 7,563,519; and to pending U.S. patent application 12/489,045, filed on June 22, 2009; to the EP '870 patent, which is subject to one of the above-noted European Oppositions; and to the JP '024 patent, which is subject to the below-noted Japanese Invalidation Trial. These patents and the pending U.S. patent application relate to the Company's UniversalPHOLED phosphorescent OLED 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.

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The Company timely filed its formal responses to the Requests by the due dates of August 27, 2011 and September 8, 2011, respectively.

At this time, based on its current knowledge, Company management believes there is a substantial likelihood that the patents being challenged will be declared valid, and that all or a significant portion of their claims will be upheld. However, Company management cannot make any assurances of this result.

Invalidation Trials in Korea for Patent Nos. KR-744199 and KR-913568

On May 10 and May 31, 2011, respectively, the Company learned that further Requests for Invalidation Trials were filed in Korea, on May 3 and May 26, 2011, respectively, for the Company's Korean Patent Nos. KR-744199 (the KR '199 patent), which issued on July 24, 2007, and KR-913568 (the KR '568 patent), which issued on August 17, 2009. The Requests were also filed by Duk San. The KR '199 and KR '568 patents are both Korean counterpart patents, in part, to U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011; to the EP '238 patent, which is subject to one of the above-noted European Oppositions; and to the JP '929 patent, which is subject to one of the above-noted Japanese Invalidation Trials. These patents and this patent application relate to the Company's UniversalPHOLED phosphorescent OLED 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.

The Company timely filed its formal responses to the Requests by the due dates of September 1, 2011 and August 23, 2011, respectively.

At this time, based on its current knowledge, Company management believes there is a substantial likelihood that the patents being challenged will be declared valid, and that all or a significant portion of their claims will be upheld. However, Company management cannot make any assurances of this result.

Invalidation Trial in Japan for Japan Patent No. 4511024

On June 16, 2011, the Company learned that a further Request for an Invalidation Trial was filed in Japan for the Company's Japanese Patent No. JP-4511024 (the JP '024 patent), which issued on May 14, 2010. The Request was filed by SEL, the same opponent as in the above-noted Japanese Invalidation Trial for the JP '929 patent. The JP '024 patent is a counterpart patent, in part, to U.S. patents 6,303,238; 6,579,632; 6,872,477; 7,279,235; 7,279,237; 7,488,542; 7,563,519; and 7,901,795; and to pending U.S. patent application 13/035051, filed on February 25, 2011; to the EP '870 patent, which is subject to one of the above-noted European Oppositions; and to the KR '632 and KR '857 patents, which are subject to one of the above noted Korean Invalidation Trials. These patents and the pending U.S. patent application relate to the Company's UniversalPHOLED phosphorescent OLED 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.

The Company timely filed a Written Reply to the Request for Invalidation Trial by the due date of November 2, 2011.

At this time, based on its current knowledge, Company management believes 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. However, Company management cannot make any assurances of this result.

Opposition to European Patent No. 1252803

On July 12 and 13, 2011, Oppositions were filed to the Company's European Patent No. 1252803 (the EP '803 patent). These Oppositions were filed by Sumitomo, Merck Patent GmbH and BASF SE, of Ludwigshaven, Germany. The EP

'803 patent, which was issued on October 13, 2010, is a European counterpart patent, in part, to U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011. These patents and this patent application relate to the Company's UniversalPHOLED phosphorescent OLED 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.

The EPO combined the oppositions into a single opposition proceeding and set December 18, 2011 as the due date for the Company to file its response, subject to extension.

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At this time, based on its current knowledge, Company management believes 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. However, Company management cannot make any assurances of this result.

## Invalidation Trials in Korea for Patent Nos. KR-840,637 and KR-937,470

On August 8, 2011, the Company received information indicating that further Requests for Invalidation Trials were filed against the Company's Korean Patent Nos. KR-840,637 (the KR '637 patent) and KR-937,470 (the KR '470 patent), which issued on June 17, 2008 and January 11, 2010, respectively. The Requests were also filed by Duk San. The KR '637 and KR '470 patents are both Korean counterpart patents, in part, to U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011; to the EP '803 patent, which is subject to one of the above-noted European Oppositions; and to the JP '781 and JP '168 patents, which are subject to the above-noted Japanese Invalidation Trials. These patents and this patent application relate to the Company's UniversalPHOLED phosphorescent OLED 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.

Formal, substantially non-substantive responses were originally due in Korea on September 7 and 8, 2011, respectively, but these due dates have now been extended until December 7 and 8, 2011, respectively.

At this time, based on its current knowledge, Company management believes there is a substantial likelihood that the patents being challenged will be declared valid, and that all or a significant portion of their claims will be upheld. However, Company management cannot make any assurances of this result.

## 12. CONCENTRATION OF RISK

Contract research revenue, which is included in developmental revenue in the accompanying statement of operations, of \$1,300,658 and \$1,288,745 for the three months ended September 30, 2011 and 2010, respectively, and \$4,591,702 and \$3,662,284 for the nine months ended September 30, 2011 and 2010, respectively, has been derived from contracts with United States government agencies. Revenues derived from contracts with government agencies represented 6% and 18% of consolidated revenue for the three months ended September 30, 2011 and 2010, respectively, and 11% and 19% of consolidated revenue for the nine months ended September 30, 2011 and 2010, respectively.

Revenues for the nine months ended September 30, 2011 and 2010, and accounts receivable as of September 30, 2011 from our largest non-government customers, were as follows:

Customer	% of Total Revenue			Accounts Receivable September 30, 2011
	2011	2010		
A	43 %	31 %	%	\$ 4,341,679
B	12 %	20 %	%	1,771,700
C	24 %	3 %	%	2,786,808

Revenues for the three months ended September 30, 2011 and 2010, from the same non-government customers, were as follows:

Customer	% of Total Revenue	
	2011	2010

A	41	%	40	%
B	9	%	20	%
C	36	%	3	%

The Company's relationships with customers B and C are under agreements that are presently scheduled to expire in less than twelve months.

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Revenues from outside of North America represented 93% and 81% of the consolidated revenue for the three months ended September 30, 2011 and 2010, respectively. Revenues by geographic area are as follows:

Country	2011	2010
United States	\$ 1,424,608	\$ 1,366,246
South Korea	11,225,215	4,440,324
Japan	9,032,499	754,540
Taiwan	67,600	466,027
Other	27,218	28,724
All foreign locations	20,352,532	5,689,615
Total revenue	\$ 21,777,140	\$ 7,055,861

Revenues from outside of North America represented 89% and 80% of the consolidated revenue for the nine months ended September 30, 2011 and 2010, respectively. Revenues by geographic area are as follows:

Country	2011	2010
United States	\$ 4,871,667	\$ 3,936,434
South Korea	24,300,274	10,462,769
Japan	12,743,123	4,263,877
Taiwan	605,310	1,040,124
Other	109,721	46,136
All foreign locations	37,758,428	15,812,906
Total revenue	\$ 42,630,095	\$ 19,749,340

The Company attributes revenue to different geographic areas on the basis of the location of the customer.

Long-lived tangible assets at international locations are not significant for each of the periods presented.

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

### 13. INCOME TAXES

The Company filed for and was granted a five-year exemption from withholding tax on royalty payments received from Samsung Mobile Display Co., Ltd. (Samsung SMD) under its patent license agreement as part of a tax incentive program in Korea. The exemption was granted in May 2005 and remained in effect until May 2010. Since then, Samsung SMD has been required to withhold tax upon payment of royalties to the Company. In 2011 and 2010, the withholding tax rate for royalty payments made by Samsung SMD was 16.5%. For the three and nine months ended September 30, 2011, foreign income taxes of \$535,642 and \$1,121,459, respectively, were withheld in connection with royalty payments. No such taxes were withheld during the nine months ended September 30, 2010.

During the nine months ended September 30, 2010, the Company sold approximately \$3.8 million of its state-related income tax net operating losses and \$194,088 of its research and development tax credits under the New Jersey Technology Tax Certificate Transfer Program. The Company received proceeds of \$464,162 from these sales and recorded these proceeds as an income tax benefit. No corresponding sales of state-related income tax net operating losses or research and development tax credits occurred during the nine months ended September 30, 2011.

14. NET INCOME (LOSS) PER COMMON SHARE

Basic net income (loss) per common share is computed by dividing the net income (loss) by the weighted-average number of shares of common stock outstanding for the period. Diluted net income (loss) per common share reflects the potential dilution from the exercise or conversion of securities into common stock, the effect of unvested restricted stock awards and restricted stock units, and the impact of shares to be issued under the ESPP.

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The following table is a reconciliation of net income (loss) and the shares used in calculating basic and diluted net income (loss) per common share for the three months ended September 30, 2011 and 2010:

	2011	2010
<b>Numerator:</b>		
Net income (loss) – Basic	\$ 5,989,426	\$ (7,186,570 )
Effect of warrants	(239,562 )	—
Net income(loss) – Diluted	\$ 5,749,864	\$ (7,186,570 )
<b>Denominator:</b>		
Weighted average common shares outstanding – Basic	45,314,893	37,741,107
<b>Effect of dilutive shares:</b>		
Common stock equivalents arising from stock options, warrants and ESPP	1,059,293	—
Restricted stock awards and units	425,371	—
<b>Weighted average common shares outstanding – Diluted</b>	<b>46,799,557</b>	<b>37,741,107</b>
<b>Net income (loss) per common share:</b>		
Basic	\$ 0.13	\$ (0.19 )
Diluted	\$ 0.12	\$ (0.19 )

For the three months ended September 30, 2010, the effects of the exercise of the combined outstanding stock options and warrants and unvested restricted stock awards and restricted stock units of 3,777,027, and the impact of shares to be issued under the ESPP, which was minor, were excluded from the calculation of diluted EPS as the impact would have been antidilutive.

The following table is a reconciliation of net loss and the shares used in calculating basic and diluted net loss per common share for the nine months ended September 30, 2011 and 2010:

	2011	2010
<b>Numerator:</b>		
Net loss	\$ (2,578,730 )	\$ (14,600,996)
<b>Denominator:</b>		
Weighted average common shares outstanding – Basic	43,101,933	37,380,190
Effect of dilutive shares	—	—
<b>Weighted average common shares outstanding – Diluted</b>	<b>43,101,933</b>	<b>37,380,190</b>
<b>Net loss per share:</b>		
Basic and diluted	\$ (0.06 )	\$ (0.39 )

For the nine months ended September 30, 2011 and 2010, the effects of the exercise of the combined outstanding stock options and warrants and unvested restricted stock awards and restricted stock units of 1,769,470 and 3,777,027, respectively, and the impact of shares to be issued under the ESPP, which was minor, were excluded from the calculation of diluted EPS as the impact would have been antidilutive.

ITEM 2.



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 consolidated financial statements and related notes above.

CAUTIONARY STATEMENT  
CONCERNING FORWARD-LOOKING STATEMENTS

This discussion and analysis contains some "forward-looking statements." Forward-looking statements concern our possible or assumed future results of operations, including descriptions of our business strategies and customer relationships. These statements often include words such as "believe," "expect," "anticipate," "intend," "plan," "estimate," "will," "may" or similar 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 in these circumstances.

As you read and consider this discussion and analysis, 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

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future performance or results. They depend on many factors that are discussed further in the section entitled (Risk Factors) in our Annual Report on Form 10-K for the year ended December 31, 2010, as supplemented by any disclosures in Item 1A of Part II of our Quarterly Report for the quarter ended March 31, 2011, and by any disclosures in Item 1A of Part II below. 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 in the 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.

### 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 and solid-state lighting 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 commercializing 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. Over time, we anticipate that revenues from licensing our intellectual property and selling our proprietary materials will become the dominant elements of our revenue stream.

We have made significant progress over the past few years developing and commercializing our PHOLED™ and other OLED technologies and materials. Nevertheless, we have incurred significant losses since our inception, resulting in an accumulated deficit of \$219,604,845 as of September 30, 2011.

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

- the timing of our receipt of license fees and royalties, as well as fees for future technology development and evaluation activities;
- 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.

### RESULTS OF OPERATIONS

Three Months Ended September 30, 2011 Compared to Three Months Ended September 30, 2010

We had operating income of \$5,935,069 for the three months ended September 30, 2011, compared to an operating loss of \$3,882,545 for the three months ended September 30, 2010. The change to an operating profit from an operating loss was due to the following:

- an increase in revenue of \$14,721,279; offset by

·an increase in operating expenses of \$4,903,665.

We had net income of \$5,989,426 (or \$0.13 per basic share and \$0.12 per diluted share) for the three months ended September 30, 2011, compared to a net loss of \$7,186,570 (or \$0.19 per basic and diluted share) for the three months ended September 30, 2010.

The change to net income from a net loss was due mainly to the increase in operating income of \$9,817,614, as well as a gain on stock warrant liability of \$239,562 for the three months ended September 30, 2011, compared to a loss on stock warrant liability of \$3,362,441 for the same period in 2010.

Our revenues were \$21,777,140 for the three months ended September 30, 2011, compared to \$7,055,861 for the three months ended September 30, 2010.

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Commercial revenue increased to \$9,881,533 for the three months ended September 30, 2011, compared to \$2,836,587 for the three months ended September 30, 2010. Commercial revenue relates to the incorporation of our OLED technologies and materials into our customers' commercial products, and includes commercial chemical revenue, royalty and license revenues, and commercialization assistance revenue. The increase in commercial revenue was primarily due to the following:

- an increase of \$3,464,613 in commercial chemical revenue, of which \$2,870,748 represents an increase in sales of our host materials, as discussed in further detail below; and
- an increase of \$3,560,628 in royalty and license revenue, which mainly represents license fees received under our license agreement with Samsung Mobile Display Co., Ltd. (Samsung SMD) executed in August 2011.

On April 19, 2005, we entered into an OLED Patent License Agreement and an OLED Supplemental License Agreement with Samsung SDI Co., Ltd. (Samsung SDI). Under the license agreement, we granted Samsung SDI Co. license rights under various patents that we owned or controlled for Samsung SDI to make and sell specified OLED display products. In consideration of this license grant, Samsung SDI Co. agreed to pay us up front license fees and running royalties on its sales of these display products. The 2005 agreements had terms that ran through June 30, 2010.

Effective as of September 5, 2008, the 2005 agreements were assigned by Samsung SDI to Samsung SMD, a subsidiary of Samsung SDI, in connection with Samsung SDI's transfer of all its OLED assets and liabilities to Samsung SMD. In July 2010, we entered into an amendment extending the terms of the 2005 agreements for three months. We subsequently entered into further amendments extending the terms of the 2005 agreements for additional three-month periods through September 30, 2011.

On August 22, 2011, we entered into a new OLED Patent License Agreement and a new Supplemental OLED Material Purchase Agreement with Samsung SMD. These agreements replaced the 2005 agreements in their entirety, effectively terminating the 2005 agreements. The 2011 agreements have terms that run through December 31, 2017.

Under the 2011 license agreement, we granted Samsung SMD license rights under various patents that we owned or controlled for Samsung SMD to manufacture and sell specified OLED display products. In consideration of the license grant, Samsung SMD agreed to pay us a fixed license fee, payable in installments over the agreement term. These installments increase on an annual basis over the term of the license agreement. The installment amounts were determined through negotiation based on a number of factors, including, without limitation, estimates of Samsung SMD's OLED business growth as a percentage of published OLED market forecasts, the use of red and green phosphorescent materials in Samsung SMD's OLED display products, and appropriate royalty rates relating to Samsung SMD's practice under the licensed patents. For the three months and nine months ended September 30, 2011, we received and recognized as revenue \$3,246,315 in license fees from Samsung SMD under the 2011 license agreement.

Pursuant to the 2011 supplemental agreement, Samsung SMD agreed to purchase from us a minimum dollar amount of phosphorescent materials for use in the manufacture of licensed products. This minimum purchase commitment is subject to us being able to supply Samsung SMD with sufficient material to meet its requirements over the agreement term. The minimum purchase amounts increase on an annual basis over the term of the supplemental agreement. The minimum purchase amounts were determined through negotiation based on a number of factors, including, without limitation, estimates of Samsung SMD's OLED business growth as a percentage of published OLED market forecasts and Samsung SMD's projected minimum usage of red and green phosphorescent emitter materials over the term of the agreement.

Commercial chemical revenue for the three months ended September 30, 2011 included revenue received from sales of both phosphorescent emitter and host materials. Host material sales were approximately 31% of our total commercial chemical revenue for this period, compared to no commercial chemical revenue from host material sales for the corresponding period in 2010. We believe that host material sales can enhance our phosphorescent emitter material sales business. However, the host material business is more competitive than the phosphorescent emitter material sales business, and our long-term prospects for host material sales are uncertain.

We cannot accurately predict how long our phosphorescent emitter material sales or host material sales to particular customers will continue, as our customers frequently update and alter their product offerings in response to market demands. Continued sales of our OLED materials to these customers will depend on several factors, including pricing, availability, continued technical improvement and competitive product offerings.

Developmental revenue increased to \$11,895,607 for the three months ended September 30, 2011, compared to \$4,219,274 for the three months ended September 30, 2010. Developmental revenue relates to OLED technology and material development and evaluation activities for which we are paid, and includes contract research revenue, development chemical

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revenue and technology development revenue. The increase in developmental revenue was due primarily to an increase of \$7,512,138 in development chemical revenue, of which \$4,275,236 represents an increase in sales of our host materials, mainly due to increased purchases of development chemicals by customers that are preparing for commercial production.

Cost of chemicals sold increased to \$2,405,493 for the three months ended September 30, 2011, compared to \$329,629 for the three months ended September 30, 2010. Cost of chemicals sold includes the cost of producing materials that have been classified as commercial and shipping costs for such materials, but excludes the cost of producing certain commercial materials which costs have already been included in research and development expense. Cost of chemicals sold does not include costs associated with producing materials that have not yet been classified as commercial, which costs are included in research and development expenses. Depending on the timing and stage of materials being classified as commercial, we expect the cost of chemicals for these materials to fluctuate from quarter to quarter. As a result of these timing issues, and due to increased sales of commercial chemicals, cost of chemicals sold increased for the three months ended September 30, 2011 compared to the same period in 2010. During the quarter, costs associated with \$4,146,800 of development chemical sales related to materials classified as commercial were included in cost of sales.

We incurred research and development expenses of \$6,079,433 for the three months ended September 30, 2011, compared to \$5,760,105 for the three months ended September 30, 2010. Although total expenses remained relatively consistent over the corresponding periods, the following significant changes occurred:

- employee costs increased by \$599,918, due mainly to new employees, increased salaries and stock compensation for certain executive officers;
- development costs with PPG Industries decreased by \$520,939; and
- amortization costs decreased by \$372,082, due to certain acquired technology being fully amortized as of December 31, 2010.

Selling, general and administrative expenses were \$4,957,085 for the three months ended September 30, 2011, compared to \$3,452,815 for the three months ended September 30, 2010. The overall increase in these costs was driven in part by increased commercial activities and non-cash expenses related to stock compensation and in part by costs incurred to establish new subsidiaries in Hong Kong, Korea and Japan. Specifically, we incurred increased costs in the following areas:

- increased employee costs of \$324,496, due mainly to increased salaries and stock compensation for certain executive officers;
- increased general legal fees of \$305,629, due in large part to expanded licensing negotiations;
- increased international consulting fees of \$267,008 related to increased revenues; and
- costs of \$138,813 resulting from the incorporation and commencement of operations for certain of our foreign subsidiaries.

Patent costs increased to \$1,938,143 for the three months ended September 30, 2011, compared to \$1,177,383 for the three months ended September 30, 2010. The increase was mainly due to increased costs associated with our defense of certain ongoing and new patent challenges to our issued patents, as well as the timing of prosecution and maintenance costs associated with a number of patents and patent applications.

Interest income increased to \$363,700 for the three months ended September 30, 2011, compared to \$64,373 for the three months ended September 30, 2010. The increase was mainly attributable to interest earned on higher average cash and investment balances as a result of proceeds received from the completion of our public offering in March 2011.

In August 2011, all remaining outstanding stock warrants to purchase shares of our common stock were exercised, and we received \$2,948,463 in proceeds for issuing 214,746 common shares based on the exercise of these warrants. The warrants, which contained a “down-round” provision, were previously recorded as a liability. The change in fair value of the warrants during the period prior to the exercise date resulted in a \$239,562 non-cash gain on our statement of operations for the three months ended September 30, 2011, compared to a \$3,362,441 non-cash loss for the three months ended September 30, 2010.

For the three months ended September 30, 2011, we incurred an income tax expense of \$535,642. No corresponding expense was incurred for the three months ended September 30, 2010. We filed for and were granted a five-year exemption from withholding tax on royalties and license fees received from Samsung SMD under our 2005 license agreement as part of a tax

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incentive program in Korea. The exemption was granted in May 2005 and remained in effect until May 2010. Since then, Samsung SMD has been required to withhold tax upon payment of royalties to us. This is also the case under the 2011 license agreement that we entered into with Samsung SMD in August 2011.

In 2011 and 2010, the withholding tax rate for royalties and license fees paid by Samsung SMD was 16.5%. For the three months ended September 30, 2011, foreign income taxes of \$535,642 were withheld in connection with these payments. We anticipate the amount of withholding taxes to increase as license fees received from Samsung SMD increase in the future.

Nine Months Ended September 30, 2011 Compared to Nine Months Ended September 30, 2010

We had operating income of \$2,120,293 for the nine months ended September 30, 2011, compared to an operating loss of \$10,016,021 for the nine months ended September 30, 2010. The change from an operating loss to an operating profit was due to the following:

- an increase in revenue of \$22,880,755; offset by
- an increase in operating expenses of \$10,744,441.

We had a net loss of \$2,578,730 (or \$0.06 per basic and diluted share) for the nine months ended September 30, 2011, compared to a net loss of \$14,600,996 (or \$0.39 per basic and diluted share) for the nine months ended September 30, 2010. The decrease in net loss was mainly due to the following:

- the increase in operating income of \$12,136,314;
- a decrease in loss on stock warrant liability of \$1,041,343;
- an increase in interest income of \$442,897; offset primarily by
- an increase in income tax expense of \$1,585,621.

Our revenues were \$42,630,095 for the nine months ended September 30, 2011, compared to \$19,749,340 for the nine months ended September 30, 2010.

Commercial revenue increased to \$19,904,312 for the nine months ended September 30, 2011, compared to \$6,618,626 for the nine months ended September 30, 2010. Commercial revenue relates to the incorporation of our OLED technologies and materials into our customers' commercial products, and includes commercial chemical revenue, royalty and license revenues, and commercialization assistance revenue. The increase in commercial revenue was primarily due to the following:

- an increase of \$6,161,658 in commercial chemical revenue, of which \$2,870,748 represents an increase in sales of our host materials, and discussed in further detail below; and
- an increase of \$7,064,914 in royalty and license revenue, which in substantial part represents royalty and license fee payments received under our patent license agreements with Samsung SMD, including our new agreement executed in August 2011, as discussed earlier.

Commercial chemical revenue for the nine months ended September 30, 2011 included revenue received from sales of both phosphorescent emitter and host materials. Host material sales were approximately 41% of our total commercial



chemical revenue for this period, compared to no commercial chemical revenue from host material sales for the corresponding period in 2010. We believe that host material sales can enhance our phosphorescent emitter material sales business. However, the host material business is more competitive than the phosphorescent emitter material sales business, and our long-term prospects for host material sales are uncertain.

We cannot accurately predict how long our phosphorescent emitter material sales or host material sales to particular customers will continue, as our customers frequently update and alter their product offerings in response to market demands. Continued sales of our OLED materials to these customers will depend on several factors, including pricing, availability, continued technical improvement and competitive product offerings.

Developmental revenue increased to \$22,725,783 for the nine months ended September 30, 2011, compared to \$13,130,714 for the nine months ended September 30, 2010. Developmental revenue relates to OLED technology and material

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development and evaluation activities for which we are paid, and includes contract research revenue, development chemical revenue and technology development revenue. The increase in developmental revenue was due to:

- an increase of \$10,539,025 in development chemical revenue, of which \$5,693,331 represents an increase in sales of our host materials, mainly due to increased purchases of development chemicals by customers that are preparing for commercial production; and
- an increase in contract revenue of \$929,417; offset in part by
- a decrease of \$1,873,374 in technology development revenue, due to the recognition as revenue during the nine months ended September 30, 2010 of non-refundable payments totaling \$2,100,000 that were received from a customer through the fourth quarter of 2006.

The \$2,100,000 received from a customer referenced above was for technical assistance previously provided under an agreement to conduct OLED development, evaluation and sampling activities. These payments were made between the years 2001 and 2006, and the agreement itself expired at the end of 2006. We had previously classified these payments as deferred revenue because they were creditable against the license fee under a commercial license agreement in the event we entered into one with the customer. In May 2010, based on information received from the customer regarding its future OLED plans, we determined that the likelihood of us entering into a commercial license agreement was remote. As a result of this determination, we recorded the \$2,100,000 payment as technology development revenue in the second quarter of 2010. No similar revenue was recognized during the nine months ended September 30, 2011.

Cost of chemicals sold increased to \$2,650,695 for the nine months ended September 30, 2011, compared to \$646,666 for the nine months ended September 30, 2010. Cost of chemicals sold includes the cost of producing materials that have been classified as commercial and shipping costs for such materials, but excludes the cost of producing certain commercial materials which costs have already been included in research and development expense. Cost of chemicals sold does not include costs associated with producing materials that have not yet been classified as commercial, which costs are included in research and development expenses. Depending on the timing and stage of materials being classified as commercial, we expect the costs of chemicals for these materials to fluctuate from quarter to quarter. As a result of these timing issues, and due to increased sales of commercial chemicals, cost of chemicals sold increased for the nine months ended September 30, 2011 compared to the same period in 2010. During the period, costs associated with \$9,138,435 of development chemical sales related to materials classified as commercial were included in cost of sales.

We incurred research and development expenses of \$18,186,043 for the nine months ended September 30, 2011, compared to \$16,089,409 for the nine months ended September 30, 2010. The increase was mainly due to:

- increased employee costs of \$1,476,281, due primarily to new employees, increased salaries, costs associated with retirement benefits and stock compensation for certain executive officers;
- increased costs of \$790,477, due to overall expanded research and development efforts to support the growth of our business;
- costs of \$492,399 resulting from commencement of research and development activities at certain of our foreign subsidiaries;

- increased costs of \$487,984 incurred under our agreement with PPG Industries; offset in part by
- decreased amortization costs of \$1,200,078 due to part of our acquired technology being fully amortized as of December 31, 2010.

Selling, general and administrative expenses were \$13,324,863 for the nine months ended September 30, 2011, compared to \$9,719,643 for the nine months ended September 30, 2010. The overall increase in these costs was driven in part by increased commercial activities and non-cash expenses related to stock compensation, and in part by costs incurred to establish new subsidiaries in Hong Kong, Korea and Japan. Specifically, we incurred increased costs in the following areas:

- increased employee costs of \$1,320,785, due primarily to increased salaries, costs associated with retirement benefits and stock compensation for certain executive officers;

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- costs of \$400,648 resulting from the incorporation and commencement of operations of certain of our foreign subsidiaries;
- increased costs of \$388,108 related to stock compensation for members of our Board of Directors;
- increased general legal fees of \$351,405, due in large part to expanded licensing negotiations; and
- increased international consulting fees related to increased revenues of \$322,318.

Patent costs increased to \$5,466,245 for the nine months ended September 30, 2011, compared to \$2,802,549 for the nine months ended September 30, 2010. The increase was mainly due to increased costs associated with our defense of certain ongoing and new patent challenges to our issued patents, as well as the timing of prosecution and maintenance costs associated with a number of patents and patent applications.

Interest income increased to \$644,050 for the nine months ended September 30, 2011, compared to \$201,153 for the nine months ended September 30, 2010. The increase was mainly attributable to interest earned on higher average cash and investment balances as a result of proceeds received from the completion of our public offering in March 2011.

In 2011, all remaining outstanding stock warrants to purchase shares of our common stock were exercised, and we received \$7,397,710 in proceeds for issuing 586,972 common shares based on the exercise of these warrants. The warrants, which contained a “down-round” provision, were previously recorded as a liability. The change in fair value of these warrants during the period prior to the exercise date resulted in a \$4,190,283 non-cash loss on our statement of operations for the nine months ended September 30, 2011, compared to a \$5,231,626 non-cash loss for the nine months ended September 30, 2010.

For the nine months ended September 30, 2011, we incurred an income tax expense of \$1,121,459, compared to an income tax benefit of \$464,162 for the nine months ended September 30, 2010. We had previously filed for and were granted a five-year exemption from withholding tax on royalties and license fees received from Samsung SMD under our 2005 license agreement as part of a tax incentive program in Korea. The exemption was granted in May 2005 and remained in effect until May 2010. Since then, Samsung SMD has been required to withhold tax upon payment of royalties to us. This is also the case under the 2011 license agreement that we entered into with Samsung SMD in August 2011.

In 2011 and 2010, the withholding tax rate for royalties and license fees paid by Samsung SMD was 16.5%. For the nine months ended September 30, 2011, foreign income taxes of \$1,121,459 were withheld in connection with these payments. We anticipate the amount of withholding taxes to increase as associated payments received from Samsung SMD increase in the future.

During the nine months ended September 30, 2010, we sold approximately \$3.8 million of our state-related income tax net operating losses (NOLs) and \$194,088 of our research and development tax credits under the New Jersey Technology Tax Certificate Transfer Program. We received proceeds of \$464,162 from our sale of these NOLs and research and development tax credits, and we recorded these proceeds as an income tax benefit. No corresponding sales have occurred during the nine months ended September 30, 2011.

Liquidity and Capital Resources

As of September 30, 2011, we had cash and cash equivalents of \$67,124,442 and short-term investments of \$270,829,172, for a total of \$337,953,614. This compares to cash and cash equivalents of \$20,368,852 and short-term investments of \$52,794,545, for a total of \$73,163,397, as of December 31, 2010. The increase in cash and cash equivalents and short-term investments of \$264,790,217 was primarily due to the completion in March 2011 of our public offering of 5,750,000 shares of our common stock at a price of \$46.00 per share. The offering resulted in net proceeds to us of \$249,628,814.

Cash provided from operating activities was \$7,794,694 for the nine months ended September 30, 2011, compared to cash used of \$4,973,747 for the same period in 2010. The increase in cash provided by operating activities was primarily due to the following:

- a decrease in net loss of \$12,093,843, which amount excludes the impact of non-cash items;
- the impact of the timing of payment of accounts payable and accrued expenses of \$2,971,637; and
- an increase of \$2,641,377 in deferred revenue and licensing fees received; offset partially by

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·the impact of the timing of receipt of accounts receivable of \$3,161,322; and

·the impact of the timing of inventory purchases of \$2,226,843.

Cash used in investing activities was \$220,190,650 for the nine months ended September 30, 2011, compared to \$15,736,297 for the same period in 2010. The increase in cash used in investing activities was mainly due to increased purchases of short-term investments as a result of the completion of our public offering described below.

Cash provided by financing activities was \$259,151,546 for the nine months ended September 30, 2011, compared to \$6,211,658 for the same period in 2010. The increase in cash provided by financing activities was due primarily to the completion of our March 2011 public offering. The offering resulted in proceeds to us of \$249,628,814, which was net of \$14,871,186 in underwriting discounts and commissions and other costs associated with completion of the offering. In addition, for the nine months ended September 30, 2010, we received proceeds of \$13,282,797 from the exercise of options and warrants to purchase shares of our common stock, compared to proceeds of \$7,167,562 from the exercise of options and warrants to purchase shares of our common stock for the same period in 2010.

Working capital was \$335,424,056 as of September 30, 2011, compared to \$57,354,822, which included a stock warrant liability of \$10,659,755, as of December 31, 2010. The stock warrants associated with this liability were all exercised by August 2011, resulting in no cash outlay by us. Working capital, excluding the stock warrant liability, was \$335,424,056 as of September 30, 2011 and \$68,014,577 at December 31, 2010. Again, the increase in working capital was primarily due to proceeds from the common stock offering we completed in March 2011.

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, defense and enforcement of our patents and patent applications), that we have sufficient cash, cash equivalents and short-term investments to meet our obligations for at least the next 12 months.

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 outstanding stock 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, particularly in the current economic environment.

Critical Accounting Policies

Revenue Recognition and Deferred Revenue

We receive non-refundable cash payments under certain development and technology evaluation agreements with our customers. These payments are generally recognized as revenue over the term of the agreement. On occasion, however, these payments are creditable against license fees and/or royalties payable by the customer if a license agreement is subsequently executed with the customer. These payments are classified as deferred revenues, and are recorded as liabilities in the consolidated balance sheet until such time as revenue can be recognized. Revenue is deferred until a license agreement is executed or negotiations have ceased and there is no appreciable likelihood of executing a license agreement with the customer. If a license agreement is executed, these payments are recorded as revenue over the estimated useful life of the licensed technology and the revenue is classified based on the terms of the license. Otherwise, these payments are recorded as revenue at the time negotiations with the customer show that

there is no appreciable likelihood of executing a license agreement. If we used different estimates for the useful life of the licensed technology, reported revenue during the relevant period would differ. As of September 30, 2011, \$9,193,765 was recorded as deferred revenue, of which \$3,366,667 may be recognized under license agreements that have not yet been executed or deemed effective. For the three and nine months ended September 30, 2010, \$0 and \$2,100,000, respectively, of revenue was recognized relating to cash payments received that were creditable against license fees and/or royalties for which we determined there was no appreciable likelihood of executing a license agreement with the customer. For the three and nine months ended September 30, 2011, no such revenue was recognized.

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

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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.

### Valuation of Stock-Based Compensation

We recognize in the statement of operations the grant-date fair value of equity-based compensation issued to employees and directors (see Note 9 of the Notes to Consolidated Financial Statements). We also record an expense for equity-based compensation grants to non-employees, in exchange for goods or services, based on the fair value, which is remeasured over the vesting period of such awards.

We use the Black-Scholes option-pricing model to estimate the fair value of options and warrants we have granted for purposes of recording charges to the statement of operations. In order to calculate the fair value of the options and warrants, assumptions are made for certain components of the model, including expected volatility, expected dividend yield rate and expected option life. Expected volatilities utilized in the model are based mainly on the historical volatility of our stock price over a period commensurate with the expected life of the share option. The risk-free interest rate is derived from the U.S. Treasury yield curve in effect at the time of grant. In the case of stock options granted to employees, we estimate the expected term of options granted based on our historical experience with our employees' exercise of stock options. In the case of stock options granted to non-employees, the contractual life is used. Although we use our best estimates when setting these assumptions, changes to the assumptions could cause significant adjustments to the valuation of future grants or the remeasurement of non-employee awards.

### Accounting for Warrants

On January 1, 2009, we adopted certain revised provisions of Accounting Standards Codification (ASC) 815, Derivatives and Hedging. These provisions apply to freestanding financial instruments or embedded features that have the characteristics of a derivative and to freestanding financial instruments that are potentially settled in an entity's own common stock. As a result, certain of our warrants were considered to be derivatives since they contained "down-round" provisions and needed to be remeasured at fair value at the end of each period as they were recorded as liabilities. At September 30, 2011, there was no liability relating to such warrants, as a result of all the warrants having been exercised by such date.

The fair value of the stock warrant liability when the warrants were outstanding was determined by the Black-Scholes option pricing model using assumptions for certain components of the model, including expected volatility and expected annual dividend yield. Expected volatilities utilized in the model were based mainly on the historical volatility of our stock price over a period commensurate with the remaining contractual life of the warrant. The risk-free interest rate was derived from the U.S. Treasury yield curve. The expected term of the warrants was based on the remaining contractual life. Although we used our best estimates when setting these assumptions, changes in assumptions could have caused significant adjustments to our valuation of the stock warrant liability. The change in fair value of the stock warrant liability when the warrants were outstanding was recorded as a gain or loss on the statement of operations.

### Retirement Plan

We have recorded a significant retirement plan benefit liability that is developed from actuarial valuations. The determination of our retirement plan benefit liability requires key assumptions regarding discount rates, as well as rates of compensation increases, retirement dates and life expectancies used to determine the present value of future benefit payments. We determine these assumptions in consultation with, and after input from, our actuaries and considering our experience and expectations for the future. Actual results for a given period will often differ from



assumed amounts because of economic and other factors.

The discount rate reflects the estimated rate at which the benefit liabilities could be settled at the end of the year. The discount rate is determined by selecting a single rate that produces a result equivalent to discounting expected benefit payments from the plan using the Citigroup Above-Median Pension Discount Curve (Curve). Based upon this analysis using the Curve, we used a discount rate to measure our retirement plan benefit liability of 5.44% at September 30, 2011. A change of 25 basis points in the discount rate would increase or decrease the expense on an annual basis by approximately \$21,000.

#### Contractual Obligations

Refer to our Annual Report on Form 10-K for the year ended December 31, 2010 for a discussion of our contractual obligations.

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Off-Balance Sheet Arrangements

Refer to our Annual Report on Form 10-K for the year ended December 31, 2010 for a discussion of off-balance sheet arrangements. As of September 30, 2011, we had no off-balance sheet arrangements.

ITEM 3. 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 other than our short-term investments disclosed in Note 4 to the consolidated financial statements included herein. We invest in investment grade financial instruments to reduce our exposure. 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 4. 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 September 30, 2011. 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 effective 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.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the three months ended September 30, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Opposition to European Patent No. 0946958

On December 8, 2006, Cambridge Display Technology (CDT), which was acquired in 2007 by Sumitomo Chemical Company (Sumitomo), filed a Notice of Opposition to European Patent No. 0946958 (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™ flexible OLED 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) conducted an Oral Hearing in this matter on October 6, 2009. No representative from CDT attended the Oral Hearing. At the conclusion of the Oral Hearing, the EPO panel announced

its decision to reject the opposition and to maintain the patent as granted. The minutes of the Oral Hearing were dispatched on October 27, 2009, and a written decision was issued on November 26, 2009.

CDT filed an appeal to the EPO panel decision on January 25, 2010. CDT timely filed its grounds for the appeal with the EPO on or about April 1, 2010. The EPO set August 12, 2010 as the due date for filing our reply to this appeal. Our reply was timely filed.

At this time, based on our current knowledge, we believe that the EPO panel decision will be upheld on appeal. However, we cannot make any assurances of this result.

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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 (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; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011. These patents and this patent application relate to our UniversalPHOLED phosphorescent OLED 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. The EPO combined all three oppositions into a single opposition proceeding.

The EPO conducted an Oral Hearing in this matter on November 3, 2011. At the conclusion of the Oral Hearing, the EPO panel announced its decision to maintain the patent with claims directed to OLEDs comprising phosphorescent organometallic iridium compounds. We expect that the official minutes from the Oral Hearing will be published in the near future, and a written decision will follow. The EPO panel decision is open to appeal.

At this time, based on our current knowledge, we believe that the EPO panel decision, if appealed, would be upheld on appeal. However, we cannot make any assurances of this result.

Invalidation Trial in Japan for Japan Patent No. 3992929

On April 19, 2010, we received a copy of a Notice of Invalidation Trial from the Japanese Patent Office (the JPO) for our Japan Patent No. 3992929 (the JP '929 patent), which was issued on August 3, 2007. The request for the Invalidation Trial was filed by Semiconductor Energy Laboratory Co., Ltd. (SEL), of Kanagawa, Japan. The JP '929 patent is a Japanese counterpart patent, in part, to the above-noted EP '238 patent and to the above-noted family of U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011. Under our license agreement with Princeton, we are required to pay all legal costs and fees associated with this proceeding.

An Oral Hearing in this matter was held on November 16, 2010. On February 28, 2011, we learned that the JPO had issued a decision recognizing our invention and upholding the validity of most of the claims, but finding the broadest claims in the patent invalid. We believe that the JPO's decision invalidating these claims was erroneous, and we filed an appeal to the Japanese IP High Court.

Both parties are in the process of filing appeal briefs in this matter with the Japanese IP High Court. A technical explanation hearing has been tentatively scheduled for February 1, 2012. At the hearing, both parties will be required to file technical materials supporting their respective positions.

At this time, based on our current knowledge, we believe that the JPO decision invalidating certain claims in our JP '929 patent should be overturned on appeal as to all or a significant portion of the claims. However, we cannot make any assurances of this result.

Opposition to European Patent No. 1394870

On about April 20, 2010, five European companies filed Notices of Opposition to European Patent No. 1394870 (the EP '870 patent). The EP '870 patent, which was issued on July 22, 2009, is a European counterpart patent, in part, to

U.S. patents 6,303,238; 6,579,632; 6,872,477; 7,279,235; 7,279,237; 7,488,542; 7,563,519; and 7,901,795; and to pending U.S. patent application 13/035051, filed on February 25, 2011. These patents and this patent application relate to our UniversalPHOLED phosphorescent OLED 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 five companies are Merck Patent GmbH; BASF Schweiz AG of Basel, Switzerland; Osram GmbH of Munich, Germany; Siemens Aktiengesellschaft of Munich, Germany; and Koninklijke Philips Electronics N.V., of Eindhoven, The Netherlands.

The EPO combined the oppositions into a single opposition proceeding. The matter has been briefed and we are waiting for the EPO to provide notice of the date of the Oral Hearing. We are also waiting to see whether any of the other parties in the opposition file additional documents, to which we might respond.

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At this time, based on our current knowledge, we 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. However, we cannot make any assurances of this result.

Invalidation Trials in Japan for Japan Patent Nos. 4357781 and 4358168

On May 24, 2010, we received copies of two additional Notices of Invalidation Trials against Japan Patent Nos. 4357781 (the JP '781 patent) and 4358168 (the JP '168 patent), which were both issued on August 14, 2009. The requests for these two additional Invalidation Trials were also filed by SEL. The JP '781 and '168 patents are also Japanese counterpart patents, in part, to the above-noted family of U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011. Under our license agreement with Princeton, we are also required to pay all legal costs and fees associated with these two proceedings.

An Oral Hearing in this matter was held on February 1, 2011. On March 31, 2011, we learned that the JPO had issued decisions finding all claims in the JP '781 and JP '168 patents invalid. We believe that the JPO's decisions invalidating these claims were erroneous, and we filed appeals for both cases to the Japanese IP High Court.

Both parties are in the process of filing appeal briefs in this matter with the Japanese IP High Court. The Japanese IP High Court has scheduled a first hearing for this matter on November 22, 2011.

At this time, based on our current knowledge, we believe that the JPO decisions invalidating all the claims in our JP '781 and JP '168 patents should be overturned on appeal as to all or a significant portion of the claims. However, we cannot make any assurances of this result.

Interference No. 105,771 involving Claims 48-52 of US Patent No. 6,902,830

Patent Interference No. 105,771 was declared by the United States Patent and Trademark Office (the USPTO) on November 17, 2010 between The University of Southern California and The Trustees of Princeton University (the Universities), Junior Party, and Fujifilm Holding Corporation (Fuji), Senior Party. The dispute is between the Universities' U.S. Patent No 6,902,830 (the '830 patent), claims 48-52, and Fuji's Patent Application No. 11/802,492, claims 1-5 (the Fuji application). The '830 patent relates to our UniversalPHOLED phosphorescent OLED technology. It is 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 USPTO declares an interference when two or more parties claim the same patentable invention. The objective of an interference is to contest which party, if any, has both a right to participate in the proceeding and a right to the claimed invention and, if more than one party does, then to contest which party has the earliest priority date for the claimed invention.

Subsequent to the filing of motions and responsive motions in this matter, the interference was concluded by our purchase of the Fuji application. As a result of this purchase, the Fuji application was assigned to us effective September 13, 2011. We then requested that adverse judgment be entered against the Fuji application, which was entered by the USPTO on October 4, 2011. Thus, our claims 48-52 of the '830 patent, and the '830 patent as a whole, remain intact as granted.

Invalidation Trial in Korea for Patent No. KR-0998059

On March 10, 2011, we received informal notice from our Korean patent counsel of a Request for an Invalidation Trial from the Korean Intellectual Property Office (KIPO) for our Korean Patent No. 10-0998059 (the KR '059 patent),

which was issued on November 26, 2010. The Request was filed by a certain individual petitioner, but we still do not know which company, if any, was ultimately responsible for filing this Request. The KR '059 patent is a Korean counterpart patent to the OVJP, Organic Vapor Jet Printing, family of U.S. patents originating from US 7,431,968.

On April 21, 2011, our Korean patent counsel received a copy of the Appeal Brief for the Request from KIPO. We filed a response to the Request on June 20, 2011. The petitioner filed a rebuttal brief on August 8, 2011, and we filed a response to the rebuttal brief on October 12, 2011.

At this time, based on our current knowledge, we 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. However, we cannot make any assurances of this result.

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Invalidation Trials in Korea for Patent Nos. KR-558632 and KR-963857

On May 11 and May 31, 2011, respectively, we learned that further Requests for Invalidation Trials were filed in Korea, on May 3 and May 26, 2011, respectively, for our Korean Patent Nos. KR-558632 (the KR '632 patent), which issued on March 2, 2006, and KR-963857 (the KR '857 patent), which issued on June 8, 2010. The Requests were filed by Duk San Hi-metal, Ltd. (Duk San) of Korea. The KR '632 and KR '857 patents are both Korean counterpart patents, in part, to U.S. patents 6,303,238; 6,579,632; 6,872,477; 7,279,235; 7,279,237; 7,488,542 and 7,563,519; and to pending U.S. patent application 12/489,045, filed on June 22, 2009; to the EP '870 patent, which is subject to one of the above-noted European Oppositions; and to the JP '024 patent, which is subject to the below-noted Japanese Invalidation Trial. These patents and the pending U.S. patent application relate to our UniversalPHOLED phosphorescent OLED 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.

We timely filed our formal responses to the Requests by the due dates of August 27, 2011 and September 8, 2011, respectively.

At this time, based on our current knowledge, we believe there is a substantial likelihood that the patents being challenged will be declared valid, and that all or a significant portion of their claims will be upheld. However, we cannot make any assurances of this result.

Invalidation Trials in Korea for Patent Nos. KR-744199 and KR-913568

On May 10 and May 31, 2011, respectively, we learned that further Requests for Invalidation Trials were filed in Korea, on May 3 and May 26, 2011, respectively, for our Korean Patent Nos. KR-744199 (the KR '199 patent), which issued on July 24, 2007, and KR-913568 (the KR '568 patent), which issued on August 17, 2009. The Requests were also filed by Duk San. The KR '199 and KR '568 patents are both Korean counterpart patents, in part, to U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011; to the EP '238 patent, which is subject to one of the above-noted European Oppositions; and to the JP '929 patent, which is subject to one of the above-noted Japanese Invalidation Trials. These patents and this patent application relate to our UniversalPHOLED phosphorescent OLED 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.

We timely filed our formal responses to the Requests by the due dates of September 1, 2011 and August 23, 2011, respectively.

At this time, based on our current knowledge, we believe there is a substantial likelihood that the patents being challenged will be declared valid, and that all or a significant portion of their claims will be upheld. However, we cannot make any assurances of this result.

Invalidation Trial in Japan for Japan Patent No. 4511024

On June 16, 2011, we learned that a further Request for an Invalidation Trial was filed in Japan for our Japanese Patent No. JP-4511024 (the JP '024 patent), which issued on May 14, 2010. The Request was filed by SEL, the same opponent as in the above-noted Japanese Invalidation Trial for the JP '929 patent. The JP '024 patent is a counterpart patent, in part, to U.S. patents 6,303,238; 6,579,632; 6,872,477; 7,279,235; 7,279,237; 7,488,542; 7,563,519; and 7,901,795; and to pending U.S. patent application 13/035051, filed on February 25, 2011; to the EP '870 patent, which is subject to one of the above-noted European Oppositions; and to the KR '632 and KR '857 patents, which are subject to one of the above noted Korean Invalidation Trials. These patents and the pending U.S. patent application relate to our UniversalPHOLED phosphorescent OLED 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.

We timely filed a Written Reply to the Request for Invalidation Trial by the due date of November 2, 2011.

At this time, based on our current knowledge, we 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. However, we cannot make any assurances of this result.

#### Opposition to European Patent No. 1252803

On July 12 and 13, 2011, Oppositions were filed to our European Patent No. 1252803 (the EP '803 patent). These Oppositions were filed by Sumitomo, Merck Patent GmbH and BASF SE, of Ludwigshaven, Germany. The EP '803 patent,

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which was issued on October 13, 2010, is a European counterpart patent, in part, to U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011. These patents and this patent application relate to our UniversalPHOLED phosphorescent OLED 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 EPO combined the oppositions into a single opposition proceeding and set December 18, 2011 as the due date for us to file our response, subject to extension.

At this time, based on our current knowledge, we 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. However, we cannot make any assurances of this result.

### Invalidation Trials in Korea for Patent Nos. KR-840,637 and KR-937,470

On August 8, 2011, we received information indicating that further Requests for Invalidation Trials were filed against our Korean Patent Nos. KR-840,637 (the KR '637 patent) and KR-937,470 (the KR '470 patent), which issued on June 17, 2008 and January 11, 2010, respectively. The Requests were also filed by Duk San. The KR '637 and KR '470 patents are both Korean counterpart patents, in part, to U.S. patents 6,830,828; 6,902,830; 7,001,536; 7,291,406; 7,537,844; and 7,883,787; and to pending U.S. patent application 13/009001, filed on January 19, 2011; to the EP '803 patent, which is subject to one of the above-noted European Oppositions; and to the JP '781 and JP '168 patents, which are subject to the above-noted Japanese Invalidation Trials. These patents and this patent application relate to our UniversalPHOLED phosphorescent OLED 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.

Formal, substantially non-substantive responses were originally due in Korea on September 7 and 8, 2011, respectively, but these due dates have now been extended until December 7 and 8, 2011, respectively.

At this time, based on our current knowledge, we believe there is a substantial likelihood that the patents being challenged will be declared valid, and that all or a significant portion of their claims will be upheld. However, we cannot make any assurances of this result.

### ITEM 1A. RISK FACTORS

There have been no material changes to the risk factors previously discussed in Part I, Item 1A "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2010, as supplemented by our Quarterly Report on Form 10-Q for the quarter ended March 31, 2011.

### ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

#### Issuance of Unregistered Shares Upon the Exercise of Outstanding Warrants

During the quarter ended September 30, 2011, we issued an aggregate of 214,746 unregistered shares of our common stock upon the exercise of outstanding warrants. The warrants had a weighted average exercise price of \$13.73 per share. All of the shares were issued in reliance on the exemption from registration contained in Section 4(2) of the Securities Act of 1933, as amended.

#### Withholding of Shares to Satisfy Tax Liabilities

During the quarter ended September 30, 2011, we acquired 187 shares of common stock through transactions related to the vesting of restricted share awards previously granted to certain employees. Upon vesting, the employees turned in shares of common stock in amounts sufficient to pay their minimum statutory tax withholding at rates required by the relevant tax authorities.

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The following table provides information relating to the shares we received during the quarter ended September 30, 2011.

ISSUER PURCHASES OF EQUITY SECURITIES				
Period	Total Number of Shares Purchased	Weighted 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
July 1 – July 31	187	\$ 29.80	n/a	--
August 1 – August 31	—	—	n/a	--
September 1 – September 30	—	—	n/a	--
Total	187	\$ 29.80	n/a	--

## ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

## ITEM 4. REMOVED AND RESERVED

## ITEM 5. OTHER INFORMATION

None.

## ITEM 6. EXHIBITS

The following is a list of the exhibits included as part of this report. Where so indicated by footnote, exhibits that were previously included 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
10.1+#	OLED Patent License Agreement between the registrant and Samsung Mobile Display Co., Ltd., dated as of August 22, 2011
10.2+#	Supplemental OLED Material Purchase Agreement between the registrant and Samsung Mobile Display Co., Ltd., dated as of August 22, 2011
10.3*#	Limited-Term OLED Technology License Agreement between the registrant and Panasonic Idemitsu OLED Lighting Co., Ltd., dated as of August 23, 2011
10.4*#	Amended and Restated OLED Materials Supply and Service Agreement between the registrant and PPG Industries, Inc., dated as of September 22, 2011
10.5*#	OLED Technology License Agreement between the registrant and Pioneer Corporation, dated as of September 27, 2011

- 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.)

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Exhibit

Number Description

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.)

\* Filed herewith.

\*\* Furnished herewith.

+ Filed as an exhibit to the registrant’s Current Report on Form 8-K, filed with the SEC on August 26, 2011.

# Confidential treatment has been requested as to certain portions of this exhibit pursuant to Rule 24b-2 under the Securities Exchange Act of 1934, as amended.

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.

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SIGNATURES

Pursuant to the requirements 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

Date: November 8, 2011      By: /s/ Sidney D. Rosenblatt  
Sidney D. Rosenblatt  
Executive Vice President and  
Chief Financial Officer

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