UNIVERSAL DISPLAY CORP \PA\
Form 10-Q
November 07, 2013

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

FORM 10-Q

(Mark One)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2013
OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ____________ to ___________

Commission File Number 1-12031

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

Pennsylvania	23-2372688
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
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 X 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 X No

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 X	Accelerated filer ___
	Smaller reporting company ___

Non-accelerated filer ___ (Do not check if a 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 X

As of November 4, 2013, the registrant had outstanding 46,283,339 shares of common stock.

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UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

(in thousands, except for share and per share data)

	September 30, 2013	December 31, 2012
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$67,085	$85,923
Short-term investments	181,193	158,018
Accounts receivable	17,785	8,657
Inventory	7,852	11,018
Other current assets	6,387	3,929
Total current assets	280,302	267,545
PROPERTY AND EQUIPMENT, net of accumulated depreciation of $22,206 and $20,713	14,698	11,808
ACQUIRED TECHNOLOGY, net of accumulated amortization of $30,091 and $21,868	96,768	104,624
INVESTMENTS	7,971	1,270
OTHER ASSETS	282	277
TOTAL ASSETS	$400,021	$385,524
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$8,042	$7,596
Accrued expenses	9,661	10,394
Deferred revenue	3,684	4,273
Other current liabilities	15	36
Total current liabilities	21,402	22,299
DEFERRED REVENUE	2,591	3,153
RETIREMENT PLAN BENEFIT LIABILITY	10,579	9,837
Total liabilities	34,572	35,289
COMMITMENTS AND CONTINGENCIES (Note 12)		
SHAREHOLDERS' EQUITY:		
Preferred Stock, par value $0.01 per share, 5,000,000 shares authorized, 200,000 shares of Series A Nonconvertible Preferred Stock issued and outstanding (liquidation value of $7.50 per share or $1,500)	2	2
Common Stock, par value $0.01 per share, 100,000,000 shares authorized, 46,670,763 and 46,561,437 shares issued at September 30, 2013 and December 31, 2012, respectively	467	465
Additional paid-in capital	568,896	564,883
Accumulated deficit	(188,045)	(204,211)
Accumulated other comprehensive loss	(5,213)	(5,702)
Treasury stock, at cost (401,501 and 205,902 shares at September 30, 2013 and December 31, 2012, respectively)	(10,658)	(5,202)

Total shareholders' equity	365,449	350,235
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$400,021	$385,524

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

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

(in thousands, except for share and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
REVENUE:				
Material sales	$30,286	$10,984	$70,175	$34,361
Royalty and license fees	1,456	396	23,956	16,253
Technology development and support revenue	1,084	1,124	3,030	4,497
Total revenue	32,826	12,504	97,161	55,111
OPERATING EXPENSES:				
Cost of material sales	9,783	1,094	21,157	3,793
Research and development	7,862	8,177	24,116	22,074
Selling, general and administrative	6,411	5,275	17,918	14,761
Patent costs and amortization of acquired technology	3,899	3,736	13,038	7,859
Royalty and license expense	624	283	2,108	1,319
Total operating expenses	28,579	18,565	78,337	49,806
Operating income (loss)	4,247	(6,061)	18,824	5,305
INTEREST INCOME	206	272	594	986
INTEREST EXPENSE	(13)	(5)	(31)	(43)
INCOME (LOSS) BEFORE INCOME TAXES	4,440	(5,794)	19,387	6,248
INCOME TAX BENEFIT (EXPENSE)	1,102	326	(3,221)	(1,973)
NET INCOME (LOSS)	5,542	(5,468)	16,166	4,275
NET INCOME (LOSS) PER COMMON SHARE:				
BASIC	$0.12	$(0.12)	$0.35	$0.09
DILUTED	$0.12	$(0.12)	$0.35	$0.09
WEIGHTED AVERAGE SHARES USED IN COMPUTING NET INCOME (LOSS) PER COMMON SHARE:				
BASIC	45,912,512	46,006,290	45,865,395	45,916,536
DILUTED	46,594,843	46,006,290	46,547,568	46,912,557

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

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(UNAUDITED)

(in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2013	2012	2013	2012
NET INCOME (LOSS)	$5,542	$(5,468)	$16,166	$4,275
OTHER COMPREHENSIVE (LOSS) INCOME, NET OF TAX:				
Unrealized (loss) gain on available-for-sale securities	(54)	55	(19)	16
Amortization of prior service cost and actuarial loss for retirement plan included in net periodic pension costs	169	148	508	445
TOTAL OTHER COMPREHENSIVE INCOME	115	203	489	461
COMPREHENSIVE INCOME (LOSS)	$5,657	$(5,265)	$16,655	$4,736

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

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(in thousands)

	Nine Months Ended September 30, 2013		2012	
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net income	$16,166		$4,275	
Adjustments to reconcile net income to net cash provided by operating activities:				
Amortization of deferred revenue	(3,282	)	(2,685	)
Depreciation	1,493		1,449	
Amortization of intangibles	8,224		2,126	
Amortization of premium and discount on investments, net	(336	)	(612	)
Stock-based employee compensation	4,514		3,111	
Stock-based compensation to Board of Directors and Scientific Advisory Board	597		648	
Retirement plan benefit expense	1,250		1,165	
(Increase) decrease in assets:				
Accounts receivable	(9,128	)	2,856	
Inventory	3,166		(5,608	)
Other current assets	(2,458	)	(2,745	)
Other assets	(5	)	37	
Increase (decrease) in liabilities:				
Accounts payable and accrued expenses	265		1,538	
Other current liabilities	(21	)	(3	)
Deferred revenue	2,131		1,627	
Net cash provided by operating activities	22,576		7,179	
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchase of property and equipment	(4,200	)	(2,278	)
Additions to intangibles	(367	)	(109,102	)
Purchase of investments	(284,581	)	(209,244	)
Proceeds from sale of investments	255,022		278,412	
Net cash used in investing activities	(34,126	)	(42,212	)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Proceeds from the issuance of common stock	268		244	
Repurchase of common stock	(5,456	)	—	
Proceeds from the exercise of common stock options	890		1,323	
Payment of withholding taxes related to stock-based employee compensation	(2,990	)	(4,136	)
Net cash used in financing activities	(7,288	)	(2,569	)
DECREASE IN CASH AND CASH EQUIVALENTS	(18,838	)	(37,602	)
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	85,923		111,795	
CASH AND CASH EQUIVALENTS, END OF PERIOD	$67,085		$74,193	
The following non-cash activities occurred:				
Unrealized loss on available-for-sale securities	$(19	)	$(16	)
Common stock issued to Board of Directors and Scientific Advisory Board that was earned in a previous period	300		328	
	282		252	

Common stock issued to employees that was accrued for in a previous period, net of shares withheld for taxes		
Property and equipment purchases included in accounts payable	184	—

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

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 displays for smartphones, tablets and televisions as well as solid-state lighting applications. The Company's primary business strategy is to develop and license its proprietary OLED technologies to product manufacturers for use in these applications. In support of this objective, the Company also develops new OLED materials and sells those materials to product manufacturers. Through internal research and development efforts and acquisitions from and relationships with entities such as Princeton University (Princeton), the University of Southern California (USC), the University of Michigan (Michigan), FUJIFILM Corporation (Fujifilm), 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 (see Notes 5, 6 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, 2013 and results of operations for the three and nine months ended September 30, 2013 and 2012, and cash flows for the nine months ended September 30, 2013 and 2012. 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, 2012. The results of the 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. The estimates made are principally in the areas of revenue recognition for license agreements, the useful life of acquired technology, the valuation of the Company's convertible promissory note investments, income taxes including realization of deferred tax assets, stock-based compensation and retirement benefit plan liabilities. Actual results could differ from those estimates.

Fair Value of Financial Instruments

The carrying values of accounts receivable and accounts payable approximate 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 and investments.

Revenue Recognition

Material sales relate to the Company’s sale of its OLED materials for incorporation into its customers’ commercial OLED products or for their OLED development and evaluation activities. Material sales are recognized at the time of shipment or at time of delivery, and passage of title, depending upon the contractual agreement between the parties.

The Company has received non-refundable advance license and royalty payments under certain commercial, development and technology evaluation agreements. Certain of the payments under development and technology evaluation agreements are creditable against future amounts payable under commercial license agreements that the parties may subsequently enter into and, as such, are deferred until such commercial license agreements are executed or negotiations have ceased and Company management determines that there is no appreciable likelihood of executing a commercial license agreement with the other party. Revenue would then be recognized over the term of the agreement or the expected useful life of the relevant licensed technology, for perpetual licenses, if there is an effective commercial license agreement or amounts are not creditable against future commercial license fees, or at the time Company management determines that there is no appreciable likelihood of an executable commercial license agreement. Amounts deferred are classified as current and non-current based upon current contractual remaining terms; however, based upon on-going relationships with customers, as well as future agreement extensions, amounts classified as current as of September 30, 2013, may not be recognized as revenue over the next twelve months. As of September 30, 2013, $6.3 million was recorded as deferred revenue, of which $1.5 million is creditable against future commercial license agreements that have not yet been executed or deemed effective. For arrangements with extended payment terms where the fee is not fixed and determinable, the Company recognizes revenue when the payment is due and payable. Royalty revenue is recognized when earned and the amount is fixed and determinable.

Technology development and support revenue is revenue earned from government contracts, development and technology evaluation agreements and commercialization assistance fees, which includes reimbursements by government entities for all or a portion of the research and development costs the Company incurs in relation to its government contracts. Revenues are recognized proportionally as research and development costs are incurred, or as defined milestones are achieved.

Currently, the Company's most significant commercial license agreement, which runs through the end of 2017, is with Samsung Display Co., Ltd. (SDC) and covers the manufacture and sale of specified OLED display products. Under this agreement, the Company is being paid a license fee, payable in semi-annual installments over the agreement term of 6.4 years. The installments, which are due in the second and fourth quarter of each year, increase on an annual basis over the term of the agreement. The agreement conveys to SDC the non-exclusive right to use certain of the Company's intellectual property assets for a limited period of time that is less than the estimated life of the assets. Ratable recognition of revenue is impacted by the agreement's extended increasing payment terms in light of the Company's limited history with similar agreements. As a result revenue is recognized at the lesser of the proportional performance approach (ratable) and the amount of due and payable fees from SDC. Given the increasing contractual payment schedule, license fees under the agreement are recognized as revenue when they become due and payable, which is currently scheduled to be in the second and fourth quarter of each year.

Cost of Material Sales

Cost of material sales represents costs associated with the sale of materials that have been classified as commercial including shipping costs. Commercial materials are materials that have been validated by the Company for use in commercial OLED products. Prior to their designation as commercial materials, costs incurred related to the materials are included in research and development costs.

Recent Accounting Pronouncements

In February 2013, the Financial Accounting Standards Board (FASB) issued amended standards that revised the reporting of reclassifications out of accumulated other comprehensive income and addressed certain matters from standards for reporting of other comprehensive income that were deferred pending additional consideration. The amendment requires an entity to provide information about the amounts reclassified out of accumulated other comprehensive income by component. In addition, entities are required to present, either on the face of the statement where net income (loss) is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income (loss) by the respective line items of net income (loss) but only if the amount reclassified is required under U.S. GAAP to be reclassified to net income (loss) in its entirety in the same reporting period. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income (loss), entities are required to cross-reference to other disclosures required under U.S. GAAP that provide additional detail on these amounts. This guidance is effective prospectively for reporting periods beginning after December 15, 2012. The Company adopted this guidance in the first quarter of 2013, and such adoption did not have an impact on the Company’s results of operations or financial position, but did change the Company’s disclosures related to accumulated other comprehensive income (loss). In addition, consistent with its annual financial statements, the Company has elected to present separate statements of operations and comprehensive income (loss) versus one continuous statement.

3. CASH, CASH EQUIVALENTS AND INVESTMENTS

The Company considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents. The Company classifies its remaining investments 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.

Investments at September 30, 2013 consisted of the following (in thousands):

Investment Classification	Amortized Cost	Unrealized Gains	(Losses)	Aggregate Fair Market Value
September 30, 2013 –				
Certificates of deposit	$11,103	$2	$(20)	$11,085
Corporate bonds	170,724	15	(34)	170,705
U.S. government bonds	3,074	—	—	3,074
Convertible notes	4,300	—	—	4,300
	$189,201	$17	$(54)	$189,164

Investments at December 31, 2012 consisted of the following (in thousands):

Investment Classification	Amortized Cost	Unrealized Gains	(Losses)	Aggregate Fair Market Value
December 31, 2012 –				
Certificates of deposit	$7,562	$3	$(5)	$7,560
Commercial paper	2,997	—	—	2,997
Corporate bonds	141,349	9	(25)	141,333
U.S. government bonds	3,098	—	—	3,098
Convertible notes	4,300	—	—	4,300
	$159,306	$12	$(30)	$159,288

On July 13, 2012, the Company entered into a three-year joint development agreement with Plextronics, Inc. (Plextronics), a private company engaged in printed solar, lighting and other electronics-related research and development. Under the joint development agreement, the Company is committed to pay $1.0 million per year to Plextronics for three years. In addition, the Company invested $4.0 million in Plextronics through the purchase of a convertible promissory note. The Company also received warrants to purchase shares of preferred stock in connection with the purchase of the convertible note. The note accrues interest at the rate of 3% per year. The Company modified the note extending its due date beyond the original due date of June 30, 2013. Depending on certain conditions, the note may either convert automatically, or if other certain conditions are met, the Company has the option to convert the note into shares of Plextronics' preferred stock at a specified conversion price. The note was classified as a long-term investment at September 30, 2013, and was classified as a short-term investment at December 31, 2012.

On July 17, 2012, the Company invested $300,000 in a private company engaged in plasma processing equipment research and development (the Borrower) through the purchase of a convertible promissory note. The note accrues interest at the rate of 5% per year and is due and payable by August 1, 2015. The note is included in long-term investments on the consolidated balance sheet. The Company has the option to convert the note into shares of the Borrower's preferred stock at a specified conversion price.

All short-term investments held at September 30, 2013 will mature within one year.

4. FAIR VALUE MEASUREMENTS

The following table provides the assets carried at fair value measured on a recurring basis as of September 30, 2013 (in thousands):

		Fair Value Measurements, Using		
	Total carrying value as of September 30, 2013	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cash equivalents	$41,792	$41,792	$ —	$—
Short-term investments	181,193	181,193	—	—
Long-term investments	7,971	3,671	—	4,300

The following table provides the assets carried at fair value measured on a recurring basis as of December 31, 2012 (in thousands):

		Fair Value Measurements, Using		
	Total carrying value as of December 31, 2012	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cash equivalents	$63,863	$63,863	$ —	$—
Short-term investments	158,018	154,018	—	4,000
Long-term investments	1,270	970	—	300

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's or liability’s classification is determined based on the lowest level input that is significant to the fair value measurement.

The Company's convertible promissory note investments were initially recorded at cost and are classified within investments on the consolidated balance sheets.

These convertible promissory note investments are inherently risky because they lack a ready market for resale and the note issuer’s success is dependent on numerous factors, including, among others, product development, market acceptance, operational efficiency, the ability of the investee companies to raise additional funds in financial markets that can be volatile, and other key business factors. Additionally, the companies that the Company has invested in could fail or not be able to raise additional funds when needed. Should one or more of these events occur, they could cause the Company's investments to become impaired. In addition, financial market volatility could negatively affect the Company's ability to realize value in the Company's investments through liquidity events, such as mergers and private sales.

The Company determines the fair value of its convertible promissory note investments portfolio quarterly. The fair value of the Company's convertible promissory note investments is determined through the consideration of whether an investee is experiencing financial difficulty and other factors. Management performs an evaluation of the probability that the borrower will be in payment default on any of its debt in the foreseeable future. The evaluation requires significant judgment and includes quantitative and qualitative analysis of identified events or circumstances affecting the investee, which may impact the fair value of the investment, such as:

- the investee’s revenue and earnings trends relative to pre-defined milestones and overall business prospects;
- the technological feasibility of the investee’s products and technologies;
- the general market conditions in the investee’s industry or geographic area, including adverse regulatory or economic changes;

- factors related to the investee’s ability to remain in business, such as the investee’s liquidity, debt ratios, and the rate at which the investee is using its cash; and

- the investee’s receipt of additional funding at a lower valuation.

If the fair value of a convertible promissory note investment is below the Company's carrying value, the asset will be written down to its fair value with a resulting charge to net income. Temporary impairments result in a write down of the investment to its fair value with the charge reported in shareholders’ equity. There were no impairments of non-marketable convertible promissory note investments as of September 30, 2013.

The following table is a reconciliation of the changes in fair value of the Company’s investments in convertible notes for the three and nine months ended September 30, 2013, which had been classified in Level 3 in the fair value hierarchy (in thousands):

	Three Months Ended September 30, 2013	Nine Months Ended September 30, 2013
Fair value of notes, beginning of period	$4,300	$4,300
Investments	—	—
Fair value of notes, end of period	$4,300	$4,300

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 Sponsored Research Agreement (as amended, the 2006 Research Agreement) was effective as of May 1, 2006 and had an original term of three years. On May 1, 2009, the Company amended the 2006 Research Agreement to extend the term of the agreement for an additional four 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 a total of $5.0 million in research and development expense for work performed under the 2006 Research Agreement during the extended term, which ended on April 30, 2013.

Effective June 1, 2013, the Company amended the 2006 Research Agreement again to extend the term of the agreement for an additional four years. As of September 30, 2013, the Company was obligated to pay USC up to $8.2 million for work actually performed during the remaining extended term, which expires April 30, 2017. From June 1, 2013 through September 30, 2013, the Company incurred $386,000 in research and development expense for work performed under the newly 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 1997 Amended License 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

$601,000 and $278,000 for the three months ended September 30, 2013 and 2012, respectively, and $2.1 million and $1.3 million for the nine months ended September 30, 2013 and 2012, 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.

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 expire in the U.S. between 2014 and 2018.

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 $440,000 as of March 9, 2011, which is being amortized over a period of 7.5 years.

On July 23, 2012, the Company entered into a Patent Sale Agreement (the Agreement) with Fujifilm. Under the Agreement, Fujifilm sold more than 1,200 OLED-related patents and patent applications to the Company in exchange for a cash payment of $105.0 million.

The Company recorded the $105.0 million plus $4.1 million of costs as acquired technology, which is being amortized over a period of 10 years.

Total amortization expense associated with acquired technology for the three month periods ended September 30, 2013 and 2012 was $2.7 million and $2.1 million, respectively, and for the nine months ended September 30, 2013 and 2012 was $8.2 million and $2.1 million, respectively. Amortization expense is included in the patent costs and amortization of acquired technology expense line item on the accompanying Consolidated Statements of Operations.

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 entireties 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, 2014.

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), which 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 and contains provisions that are substantially similar to those of the original OLED Materials Agreement. Under the New OLED Materials Agreement, PPG Industries continues to assist the Company in developing its proprietary OLED materials and to supply the Company with those materials for evaluation purposes and for resale to its customers.

Under the 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 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 each calendar half-year period ending on March 31 and September 30. If, however, this average closing price is less than $20.00, the Company is required to compensate PPG Industries in cash.

The Company also reimburses 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 recorded expense of $1.6 million for both the three months ended September 30, 2013 and 2012, and $4.9 million and $4.0 million for the nine months ended September 30, 2013 and 2012, respectively, in relation to the cash portion of the reimbursement of expenses and work performed by PPG Industries, excluding amounts paid for commercial chemicals. No shares were issued for services to PPG Industries for the three and nine months ended September 30, 2013 or 2012.

8. SHAREHOLDERS' EQUITY (in thousands, except for share and per share data)

	Series A Nonconvertible Preferred Stock		Common Stock		Additional Paid-In	Accumulated	Accumulated Other Comprehensive	Treasury Stock		Total Shareholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Loss	Shares	Amount	Equity
Balance, January 1, 2013	200,000	$2	46,561,437	$465	$564,883	$(204,211)	$(5,702)	(205,902)	$(5,202)	$350,235
Net income	—	—	—	—	—	16,166	—	—	—	16,166
Other comprehensive income	—	—	—	—	—	—	489	—	—	489
Repurchase of common stock	—	—	—	—	—	—	—	(195,599)	(5,456)	(5,456)
Exercise of common stock options, net of tendered shares	—	—	77,589	1	889	—	—	—	—	890
Stock-based employee compensation, net of shares withheld for employee taxes (A)	—	—	(13,904)	—	1,959	—	—	—	—	1,959

Issuance of common stock to Board of Directors and Scientific Advisory Board (B)	—	—	34,153	1	897	—	—	—	—	898
Issuance of common stock under an Employee Stock Purchase Plan	—	—	11,488	—	268	—	—	—	—	268
Balance, September 30, 2013	200,000	$2	46,670,763	$467	$568,896	$(188,045)	$(5,213)	(401,501)	$(10,658)	$365,449

(A) Includes $435 (13,356 shares) that was accrued for in a previous period and charged to expense when earned, but issued in 2013, less shares withheld for taxes in the amount of $153 (4,672 shares).

(B) Includes $300 (9,212 shares) that was earned in a previous period and charged to expense when earned, but issued in 2013.

9. ACCUMULATED OTHER COMPREHENSIVE LOSS

Accumulated other comprehensive loss consists of the following (in thousands):

	Unrealized loss on available-for-sale securities	Net unrealized loss on retirement plan	Total
Balance January 1, 2013	$(18)	$(5,684)	$(5,702)
Other comprehensive loss before reclassification	(19)	—	(19)
Amounts reclassified from accumulated other comprehensive income	—	508	508
Net current-period other comprehensive (loss) income	(19)	508	489
Balance September 30, 2013	$(37)	$(5,176)	$(5,213)

Amounts related to the retirement plan reclassified out of accumulated other comprehensive loss and included in net periodic benefit costs (see Note 11) for the three and nine months ended September 30, 2013 were as follows (in thousands):

	Three Months Ended September 30, 2013	Nine Months Ended September 30, 2013
Amortization of prior service cost	$146	$438
Amortization of actuarial loss	23	70
Total	$169	$508

10. STOCK-BASED COMPENSATION

The Company recognizes in the statements of operations the grant-date fair value of stock options and other equity based compensation, such as shares issued under employee stock purchase plans, restricted stock awards, restricted stock units, performance unit awards and stock appreciation rights (SARs), 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 grant, exercise or vesting of share-based payment awards, as applicable.

Cash-settled SARs awarded in share-based payment transactions are classified as liability awards; accordingly, the Company records these awards as a component of accrued expenses on its consolidated balance sheets. The fair value of each SAR is estimated using the Black-Scholes option pricing model and is remeasured at each reporting period until the award is settled. Changes in the fair value of the liability award are recorded as expense or income in the statements of operations.

Performance unit awards are subject to either a performance-based or market-based vesting requirement. For performance-based vesting, the grant-date fair value of the award, based on fair value of the Company's common stock, is recognized over the service period, based on an assessment of the likelihood that the applicable performance goals will be achieved and compensation expense is periodically adjusted based on actual and expected performance. Compensation expense for performance unit awards with market-based vesting is calculated based on the estimated fair value as of the grant date utilizing a Monte Carlo simulation model and is recognized over the service period on a straight-line basis.

Equity Compensation Plan

In 1995, the Board of Directors of the Company (the Board) adopted a stock option plan, which was amended and restated in 2003, 2011 and 2013 and is now called the Equity Compensation Plan. The Equity Compensation Plan provides for the granting of incentive and nonqualified stock options, shares of common stock, SARs, 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. Through September 30, 2013, 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 September 1, 2015.

Restricted Stock Awards and Restricted Stock Units
During the nine months ended September 30, 2013, the Company granted 117,121 shares of restricted stock awards and restricted stock units to employees, which had a total fair value of $3.8 million on the respective dates of grant, and will vest over two to three years from the date of grant, provided that the grantee is still an employee of the Company on the applicable vesting date.

For the three months ended September 30, 2013 and 2012, the Company recorded general and administrative expense of $959,000 and $787,000 and research and development expense of $409,000 and $342,000, respectively, related to restricted stock awards and restricted stock units.

For the nine months ended September 30, 2013 and 2012, the Company recorded general and administrative expense of $2.9 million and $2.1 million and research and development expense of $1.2 million and $851,000, respectively, related to restricted stock awards and restricted stock units.

In connection with the vesting of restricted common stock previously issued to employees, for the nine months ended September 30, 2013, 94,209 shares of common stock with a fair value of $3.0 million were withheld in satisfaction of tax withholding obligations.

Performance Unit Awards
During the nine months ended September 30, 2013, the Company granted 35,776 performance units, of which 17,888 are subject to a performance-based vesting requirement and 17,888 are subject to a market-based vesting requirement and will vest over the terms described above. Total fair value of the performance unit awards granted was $1.4 million on the date of grant.

Each performance unit award is subject to both a performance-vesting requirement (either performance-based or market-based) and a service-vesting requirement.

The performance-based vesting requirement is tied to the Company's cumulative revenue growth compared to the cumulative revenue growth of companies comprising the Nasdaq Electronics Components Index, as measured over a two-year performance period beginning January 1, 2013 and ending December 31, 2014. The market-based vesting requirement is tied to the Company's total shareholder return relative to the total shareholder return of companies comprising the Nasdaq Electronics Components Index, as measured over a two-year performance period beginning January 1, 2013 and ending December 31, 2014.

The maximum number of performance units that may vest based on performance is two times the shares granted. Further, if the Company's total shareholder return is negative, the performance units may not vest above the shares granted.

For the three months ended September 30, 2013, the Company recorded general and administrative expense of $139,000 and research and development expense of $42,000 related to performance units.

For the nine months ended September 30, 2013, the Company recorded general and administrative expense of $314,000 and research and development expense of $95,000 related to performance units.

Employee Stock Grants
For the nine months ended September 30, 2012, the Company recorded research and development expense of $68,000 related to fully vested shares issued to employees.

No such grants were made or expenses recorded in 2013.

Stock Appreciation Rights

During 2011, the Company granted 24,000 cash-settled SARs to certain executive officers. The SARs represented 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 exceeded the base price of the SAR award. The base price of each SAR award was $34.78 per share. The SARs vested on the first anniversary of the date of grant, provided that the grantee was still an employee of the Company on the applicable vesting date. During the three months ended March 31, 2012, all SARs were settled, resulting in cash payments of $49,000. The Company recorded $1,000 to general and administrative expense, and $3,000 to research and development expense, for the nine months ended September 30, 2012, related to the SARs. No such grants were made in 2013 or 2012.

Other Compensation

During the nine months ended September 30, 2013, the Company issued 15,000 shares of common stock to members of the Board as partial compensation for their service on the Board. The Company recorded general and administrative expense of $126,000 and $162,000 for the three months ended September 30, 2013 and 2012, respectively, and $390,000 and $482,000 for the nine months ended September 30, 2013 and 2012, respectively, related to shares issued to members of the Board.

During the nine months ended September 30, 2013, the Company granted 7,370 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. The Company recorded research and development expense of $78,000 and $50,000 for the three months ended September 30, 2013 and 2012, respectively, and $207,000 and $166,000 for the nine months ended September 30, 2013 and 2012, respectively, related to shares issued to members of its Scientific Advisory Board.

Employee Stock Purchase Plan

On April 7, 2009, the Board 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, 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.

During the nine months ended September 30, 2013 and 2012, the Company issued 11,488 and 8,097 shares of its common stock, respectively, under the ESPP, resulting in proceeds of $268,000 and $244,000, respectively.

For the three months ended September 30, 2013 and 2012, the Company recorded general and administrative expense of $12,000 and $10,000 and research and development expense of $17,000 and $24,000, respectively, related to the ESPP.

For the nine months ended September 30, 2013 and 2012, the Company recorded general and administrative expense of $27,000 and $19,000 and research and development expense of $59,000 and $58,000, respectively, related to the ESPP.

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.

11. SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN

On March 18, 2010, the Compensation Committee and the Board approved and adopted the Universal Display Corporation Supplemental Executive Retirement Plan (SERP), effective as of April 1, 2010. The purpose of the SERP, which is unfunded, is to provide certain executive officers of the Company with supplemental pension benefits following a cessation of their employment. As of September 30, 2013, there were five 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, (in thousands):

	2013	2012
Service cost	$162	$144
Interest cost	85	96
Amortization of prior service cost	146	146
Amortization of actuarial loss	23	2
Total net periodic benefit cost	$416	$388

The components of net periodic pension cost were as follows for the nine months ended September 30, (in thousands):

	2013	2012
Service cost	$485	$432
Interest cost	257	288
Amortization of prior service cost	438	438
Amortization of actuarial loss	70	7
Total net periodic benefit cost	$1,250	$1,165

12. COMMITMENTS AND CONTINGENCIES

Commitments

On July 13, 2012, the Company entered into a three-year joint development agreement with Plextronics. Under the joint development agreement, the Company is committed to pay $1.0 million per year to Plextronics for three years starting on July 13, 2012.

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.

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

Patent Related Challenges and Oppositions

Each major jurisdiction in the world that grants patents provides third parties with opportunities and access to administrative proceedings whereby they can request for additional review of previously issued patents in the respective jurisdiction. Each jurisdiction provides unique procedures for undertaking such activities, as well as different vehicles to review and appeal the determinations made in connection with such reviews. The conclusions made by the administration bodies tend to be appealable and generally are limited in scope and applicability to the specific claims and jurisdiction in question.

Below are summaries of certain proceedings that have been commenced against issued patents that are either exclusively licensed to the Company or which are now assigned to the Company. The Company notes that it currently has more than 3,000 issued patents and pending patent applications, worldwide, which are utilized in the Company's materials supply and device licensing business. The Company does not believe that the confirmation, loss or modification of the Company's rights in any individual claim or set of claim(s) that are the subject of the following legal proceedings would have a material impact on the Company's material sales or licensing business or on the Company's consolidated financial statements, including its consolidated statements of operations, as a whole. However, as noted within the descriptions, many of the following legal proceedings involve patents relating to the Company's key phosphorescent OLED technologies and the Company intends to vigorously defend against such claims, which may require the expenditure of significant amounts of the Company's resources. The entries marked with an "*" relate to our UniversalPHOLED phosphorescent OLED technology.

Opposition to European Patent No. 0946958

On December 8, 2006, Cambridge Display Technology Ltd. (CDT), which was acquired in 2007 by Sumitomo Chemical Company (Sumitomo), filed a Notice of Opposition to European Patent No. 0946958 (EP '958 patent), which relates to the Company's FOLED™ flexible OLED technology. 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 are exclusively licensed to the Company by Princeton, and 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 and on November 26, 2009 issued its written decision to reject the opposition and to maintain the patent as granted. CDT has filed an appeal to the EPO panel decision.

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*

Between March 8, 2007 and July 27, 2007, three companies filed Notices of Opposition to European Patent No. 1449238 (EP '238 patent). The three companies are Sumation Company Limited (Sumation), a joint venture between Sumitomo and CDT, Merck Patent GmbH, of Darmstadt, Germany, and BASF Aktiengesellschaft, of Mannheim, Germany. 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 applications 13/009,001, filed on January 19, 2011, and 13/205,290, filed on August 9, 2011 (hereinafter the “U.S. '828 Patent Family”). They are exclusively licensed to the Company by Princeton, and the Company is required to pay all legal costs and fees associated with this proceeding.

The EPO combined all three oppositions into a single opposition proceeding. The EPO conducted an Oral Hearing in this matter and 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. The official minutes from the Oral Hearing and written decision were published on January 13, 2012.

All the parties filed notices of appeal to the EPO's panel decision and submitted their initial papers in support of their respective requests for appellate review. An Oral Hearing has been scheduled by the EPO in the second half of 2013.

At this time, based on its current knowledge, Company management believes that the EPO will uphold the Company's positions on appeal. However, Company management cannot make any assurances of this result.

Opposition to European Patent No. 1394870*

On 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 13/035,051, filed on February 25, 2011 (hereinafter the “U.S. '238 Patent Family”). They are exclusively licensed to the Company by Princeton, and the Company is required to pay all legal costs and fees associated with this proceeding.

The five companies are Merck Patent GmbH; BASF Schweitz 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 an Oral hearing has been scheduled by the EPO in the second quarter of 2014.

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 the Company's 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 two 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 filed by Semiconductor Energy Laboratory Co., Ltd. (SEL) of Kanagawa, Japan. The JP '781 and '168 patents are also

Japanese counterpart patents, in part, to the above-noted U.S. '828 Patent Family and EP '238 Patent. They are exclusively licensed to the Company by Princeton, and the Company is required to pay all legal costs and fees associated with this proceeding.

On March 31, 2011, the Company learned that the Japanese Patent Office ("JPO") had issued decisions finding all claims in the JP '781 and JP '168 patents invalid. Company management believed that the JPO's decisions invalidating these claims were erroneous, and the Company filed appeals for both cases to the Japanese IP High Court.

Both parties filed appeal briefs in this matter with the Japanese IP High Court. The Japanese IP High Court held hearings for this matter on November 22, 2011, March 5, 2012, and June 18, 2012. On November 7, 2012, the Company was notified by the Company's Japanese counsel that the Japanese IP High Court had reversed the JPO's finding of invalidity and remanded the case back to the JPO for further consideration.

In a decision reported to the Company on April 15, 2013, all claims in the Company's JP '781 and JP '168 patents were upheld as valid by the JPO. The Company's opponent filed an appeal and submitted their appeal briefs. The Company has filed a timely response to the Opponent's papers.

At this time, based on its current knowledge, Company management believes that the claims on the patents should 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 Request for an Invalidation Trial was filed in Japan for its 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 Trials for the JP '781 and '168 patents. The JP '024 patent is a counterpart patent, in part, to the U.S. '238 Patent Family, which relate to the EP '870 patent, which is subject to one of the above-noted European oppositions and which relates to the Company's UniversalPHOLED phosphorescent OLED technology. They are exclusively licensed to the Company by Princeton, and the Company is required to pay all legal costs and fees associated with this proceeding.

On May 10, 2012, after a scheduled hearing, the Company learned that the JPO issued a decision upholding the validity of certain claimed inventions in the JP '024 Patent but invalidating the broadest claims in the patent.

The Company appealed the JPO’s decision to the Japanese IP High Court. After holding a Technical Hearing on May 30, 2013 and considering numerous supporting briefs filed by all relevant parties, the Japanese IP High Court delivered a decision on October 31, 2013, ruling that the prior art references relied on by the JPO did not support the JPO’s findings. The Japanese IP High Court reversed the JPO’s decision with respect to the previously invalidated broad claims in the JP ‘024 patent and remanded the matter back to the JPO for further consideration consistent with its decision.

At this time, based on its current knowledge, Company management believes that the patent being challenged should be declared valid and that all or a significant portion of the Company's claims should be upheld. However, Company management cannot make any assurances of this result.

Opposition to European Patent No. 1252803*

On July 12 and 13, 2011, Sumitomo, Merck Patent GmbH and BASF SE, of Ludwigshaven, Germany filed oppositions to the Company's European Patent No. 1252803 (the EP '803 patent). The EP '803 patent, which was issued on October 13, 2010, is a European counterpart patent, in part, to the U.S. '828 Patent Family. They are exclusively licensed to the Company by Princeton, and 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. On December 7, 2012 the EPO rendered a decision at an Oral Hearing wherein it upheld the broadest claim of the granted patent. All three opponents filed an appeal and have submitted their appeal briefs. The Company's responses are currently under preparation.

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 the Company's claims will be further upheld on appeal. However, Company management cannot make any assurances of this result.

Opposition to European Patent No. 1390962

On November 16, 2011, Osram AG and BASF SE each filed a Notice of Opposition to European Patent No. 1390962 (EP '962 patent), which relates to the Company's white phosphorescent OLED technology. The EP '962 patent, which was issued on February 16, 2011, is a European counterpart patent to U.S. patents 7,009,338 and 7,285,907. They are exclusively licensed to the Company by Princeton, and 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. The Company's response to the opponents' opposition briefs was timely filed on June 28, 2012.

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 the Company's claims will be upheld. However, Company management cannot make any assurances of this result.

Opposition to European Patent No. 1933395*

On February 24 and 27, 2012, Sumitomo, Merck Patent GmbH and BASF SE filed oppositions to the Company's European Patent No. 1933395 (the EP '395 patent). The EP '395 patent is a counterpart patent to the above-noted JP '168 patent and, in part, to the U.S. '828 Patent Family. This patent is exclusively licensed to the Company by Princeton, and the Company is required to pay all legal costs and fees associated with this proceeding.

At an Oral Hearing on October 14, 2013, the EPO panel issued a decision that affirmed the basic invention and broad patent coverage in the '395 patent, but narrowed the scope of the original claims.

The Company will likely appeal the ruling to reinstate a broader set of claims. This patent, as originally granted by the EPO, would be deemed valid during the pendency of an appeals process.

13. CONCENTRATION OF RISK

Included in technology development and support revenue in the accompanying statements of operations is $143,000 and $658,000 for the three months ended September 30, 2013 and 2012, respectively, and $1.0 million and $3.0 million for the nine months ended September 30, 2013 and 2012, respectively, of revenue which was derived from contracts with United States government agencies. Revenues derived from contracts with United States government agencies represented less than 1% and 5% of the consolidated revenue for the three months ended September 30, 2013 and 2012, respectively, and 1% and 5% of the consolidated revenue for the nine months ended September 30, 2013 and 2012, respectively.

Revenues for the three months ended September 30, 2013 and 2012, and accounts receivable as of September 30, 2013, from our largest non-government customers were as follows:

	% of Total Revenue		Accounts Receivable (in thousands)
Customer	2013	2012	September 30, 2013
A	47%	54%	$10,857
B	34%	15%	3,459

Revenues for the nine months ended September 30, 2013 and 2012, were as follows:

	% of Total Revenue	
Customer	2013	2012

A	59%	63%
B	24%	9%

Revenues from outside of North America represented 99% and 93% of consolidated revenue for the three months ended September 30, 2013 and 2012, respectively. Revenues by geographic area are as follows (in thousands):

Country	2013	2012
United States	$269	$874
South Korea	18,707	7,735
Japan	13,160	3,352
Taiwan	441	398
Other	249	145
All foreign locations	32,557	11,630
Total revenue	$32,826	$12,504

Revenues from outside of North America represented 99% and 94% of consolidated revenue for the nine months ended September 30, 2013 and 2012, respectively. Revenues by geographic area are as follows (in thousands):

Country	2013	2012
United States	$1,353	$3,432
South Korea	66,509	38,689
Japan	28,257	10,055
Taiwan	659	2,387
Other	383	548
All foreign locations	95,808	51,679
Total revenue	$97,161	$55,111

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

Long-lived assets (net) by geographic area at September 30, 2013 and December 31, 2012 are as follows (in thousands):

	September 30, 2013	December 31, 2012
United States	$14,441	$11,512
Other	257	296
Total long-lived assets, net	$14,698	$11,808

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

14. INCOME TAXES

In July 2012, Samsung Mobile Display Co., Ltd (SMD) merged with SDC. Following the merger, all agreements between the Company and SMD were assigned to SDC, and SDC will honor all pre-existing agreements made between the Company and SMD.

The Company is subject to income taxes in both United States and foreign jurisdictions. For the three and nine months ended September 30, 2013, an income tax benefit of $1.1 million and an expense of $3.2 million, respectively, was recorded based on the Company's estimated annual effective tax rate for 2013 applied to the Company's income before income taxes. For the three and nine months ended September 30, 2012, an income tax benefit of $326,000 and an expense of $2.0 million, respectively, were recorded. The Company's estimated effective tax rate is primarily related to foreign taxes withheld on royalty and license fees paid to the Company. SDC has been required to withhold tax upon payment of royalty and license fees to the Company at a rate of 16.5%. Any potential foreign tax credits to be received by the Company for these amounts on its United States tax returns are currently offset by a full valuation allowance as noted below. The income tax benefit for the three months ended September 30, 2013, was primarily the result of an increase in the projected estimated income not subject to withholding taxes reducing the estimated annual effective tax rate for the year-to-date period and to a lesser extent the recording of $225,000 of discrete income tax items.

Based on previous earnings history, evaluation of expected future taxable income and other evidence, the Company determined it is not more likely than not that certain deferred tax assets will be realized. Therefore, the Company has established a full valuation allowance for significantly all its net deferred tax assets.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent on the Company's ability to continue to generate taxable income to obtain benefit from the reversal of temporary differences, net operating loss carryforwards and tax credits. The Company considers the scheduled reversal of deferred tax liabilities, historic earnings, projected future taxable income, and tax planning strategies in making this assessment. As of September 30, 2013, a full valuation allowance continued to be established for significantly all of the Company's net deferred tax assets because the Company incurred substantial consolidated operating losses from inception through 2010, as well as continuing losses in certain jurisdictions, and based on the aforementioned factors, the Company has assessed that the net deferred tax assets do not meet the criteria for realization. In future periods, if the Company determines it is more likely than not that net deferred tax assets will be realized, the related valuation allowance would be reduced and an income tax benefit would be recorded.

15.NET INCOME (LOSS) PER COMMON SHARE

Basic net income (loss) per common share is computed by dividing net income (loss) by the weighted-average number of shares of common stock outstanding for the period excluding unvested restricted stock awards, restricted stock units and performance units. 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, restricted stock units and performance units, and the impact of shares to be issued under the ESPP.

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, 2013 and 2012 (in thousands, except for share and per share data):

	2013	2012
Numerator:		
Net income (loss)	$5,542	$(5,468)
Denominator:		
Weighted average common shares outstanding - Basic	45,912,512	46,006,290
Effect of dilutive shares:		
Common stock equivalents arising from stock options, warrants and ESPP	494,536	—
Restricted stock awards and units and performance units	187,795	—
Weighted average common shares outstanding - Diluted	46,594,843	46,006,290
Net income (loss) per common share:		
Basic	$0.12	$(0.12)
Diluted	$0.12	$(0.12)

For the three months ended September 30, 2013 and 2012, the combined effects of unvested restricted stock awards and restricted stock units and outstanding stock options of 111,993 and 1,447,301, respectively, and the impact of shares to be issued under the ESPP for the three months ended September 30, 2012, which was minor, were excluded from the calculation of diluted EPS as their impact would have been antidilutive, or for performance units, as the units would not be issued if the end of the reporting period was the end of the performance period.

The following table is a reconciliation of net income and the shares used in calculating basic and diluted net income per common share for the nine months ended September 30, 2013 and 2012 (in thousands, except for share and per share data):

	2013	2012
Numerator:		
Net income	$16,166	$4,275
Denominator:		
Weighted average common shares outstanding - Basic	45,865,395	45,916,536
Effect of dilutive shares:		
Common stock equivalents arising from stock options, warrants and ESPP	500,749	701,351
Restricted stock awards and units and performance units	181,424	294,670
Weighted average common shares outstanding - Diluted	46,547,568	46,912,557
Net income per common share:		
Basic	$0.35	$0.09
Diluted	$0.35	$0.09

For the nine months ended September 30, 2013, the combined effects of unvested restricted stock awards, restricted stock units and performance units of 188,302 were excluded from the calculation of diluted EPS as their impact would have been antidilutive, or for performance units, as the units would not be issued if the end of the reporting period was the end of the performance period.

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 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,” “seek,” “will,” “m 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 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, 2012, as supplemented by disclosures, if any, 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 and materials for use in displays for smartphones, tablets and televisions as well as 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 attempting to commercialize these technologies and materials. We derive our revenue from the following:

- intellectual property and technology licensing;

- sales of OLED materials for evaluation, development and commercial manufacturing; and

- technology development and support, including government contract work and support provided to third parties for commercialization of their OLED products.

While we have made significant progress over the past few years developing and commercializing our family of OLED technologies (including our PHOLED, TOLED, FOLED technologies) and materials, we have incurred significant losses since our inception, resulting in an accumulated deficit of $188.0 million as of September 30, 2013.

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

- the timing, cost and volume of sales of our OLED materials;

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

- the timing and magnitude of expenditures we may incur in connection with our ongoing research and development and patent-related activities; and

- the timing and financial consequences of our formation of new business relationships and alliances.

RESULTS OF OPERATIONS

Three Months Ended September 30, 2013 Compared to Three Months Ended September 30, 2012

We had operating income of $4.2 million for the three months ended September 30, 2013, compared to an operating loss of $6.1 million for the three months ended September 30, 2012. The increase in operating income was due to the following:

- an increase in revenue of $20.3 million, which includes increases in both material sales and royalty and license fees, offset by

- an increase in operating expenses of $10.0 million, which includes a $8.7 million increase in the cost of material sales and a $1.1 million increase in selling, general and administrative expenses, both of which are described below.

We had net income of $5.5 million (or $0.12 per basic and diluted share) for the three months ended September 30, 2013, compared to a net loss of $5.5 million (or $(0.12) per basic and diluted share) for the three months ended September 30, 2012.

Our revenues were $32.8 million for the three months ended September 30, 2013, compared to $12.5 million for the three months ended September 30, 2012. The increase in our overall revenue was primarily due to increases in material sales. The increase includes a $21.9 million increase in commercial material sales, offset by a $2.6 million decrease in development chemical sales, due to changes in sales mix.

Material sales increased to $30.3 million for the three months ended September 30, 2013, compared to $11.0 million for the same period in 2012. Material sales relate to the sale of our OLED materials for our customers' evaluation, manufacture and development activities, and for incorporation into their commercial OLED products. The increase in material sales resulted primarily from increased commercial chemical sales due to the increased adoption of our technology and materials in the marketplace by display manufacturers, particularly from SDC.

Material sales included sales of both phosphorescent emitter and host materials. Phosphorescent emitter sales were 62% of our total material sales for the three months ended September 30, 2013, compared to 83% of our total material sales for the three months ended September 30, 2012. Host material sales were 38% of our total material sales for the three months ended September 30, 2013, compared to 17% of our total material sales for the three months ended September 30, 2012.

Phosphorescent emitter sales increased by approximately $9.7 million due to an increase in commercial phosphorescent emitter sales, offset by a decrease in development phosphorescent emitter sales. Commercial green emitter sales increased by approximately $12.5 million due to expanded use of our green emitter in customer products. Commercial red emitter sales decreased slightly due to a decrease in the average price per gram of red emitter based on the cumulative volume of purchases; however, the number of grams sold increased.

Host material sales increased by $9.6 million due to an increase in the number of grams sold, offset by a decrease in the average price per gram sold. Host material sales are mainly related to the use of commercial host materials with our green emitter materials. We believe we can participate in the host materials business due to our long experience in developing emitter materials, which are used together with host materials in the emissive layer of an OLED. However, our customers are not required to purchase our host materials in order to utilize our phosphorescent emitter materials, and the host material sales business is more competitive than the phosphorescent emitter material sales business. Thus, 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.

Royalty and license fees increased to $1.5 million for the three months ended September 30, 2013, compared to $396,000 for the three months ended September 30, 2012. The increase was related to an increase in license fees attributable to material sales to certain customers, which increased during the three months ended September 30, 2013, as compared to the three months ended September 30, 2012.

In August 2011, we entered into a patent license agreement with SDC which runs through December 31, 2017. The patent license agreement with SDC covers the manufacture and sale of specified OLED display products. Under the agreement, SDC has agreed to pay us a fixed license fee, payable in semi-annual installments over the agreement term. These installments, which are due in the second and fourth quarter of each annual period, increase on an annual basis over the term of the license agreement. Based upon the extended payment arrangement, such amounts are not considered fixed and determinable for revenue recognition purposes until such time the installments become due and payable. As a result, license fees under our new agreement with SDC will be recognized as they become due and payable, which is currently scheduled to be in the second and fourth quarter of each year; therefore our quarterly license fees, will fluctuate accordingly, depending on the timing of such payments.

At the same time we entered into the current patent license agreement with SDC, we also entered into a new supplemental material purchase agreement with SDC. Under the current supplemental material purchase agreement, SDC agrees to purchase from us a minimum dollar amount of phosphorescent emitter materials for use in the manufacture of licensed products. This minimum purchase commitment is subject to SDC’s requirements for phosphorescent emitter materials and our ability to meet these requirements over the term of the supplemental agreement. The minimum purchase amounts increase on an annual basis over the term of the supplemental agreement. These amounts were determined through negotiation based on a number of factors, including, without limitation, estimates of SDC’s OLED business growth as a percentage of published OLED market forecasts and SDC’s projected minimum usage of red and green phosphorescent emitter materials over the term of the agreement.

Technology development and support revenue was $1.1 million for both the three months ended September 30, 2013 and 2012.

Cost of material sales increased to $9.8 million for the three months ended September 30, 2013, compared to $1.1 million for the three months ended September 30, 2012, mainly due to the aforementioned 176% increase in material sales as well as the product mix of materials sold. Cost of material sales 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 materials, which have already been included in research and development expense. Commercial materials are materials that have been validated by us for use in commercial OLED products.

During the three months ended September 30, 2012, cost of materials related to our green emitter material sales excluded costs that had been previously included in research and development expenses; however, during the three months ended September 30, 2013, cost of materials related to sales of our green emitter materials included all costs to produce the materials sold.

Depending on the amounts, timing and stage of materials being classified as commercial, we expect cost of materials sales to fluctuate from quarter to quarter. As a result of these fluctuations, and due to increased sales of commercial materials, cost of material sales increased for the three months ended September 30, 2013, compared to the same period in 2012. For the three months ended September 30, 2013 and 2012, costs associated with $28.3 million and $6.4 million, respectively, of material sales relating to commercial materials were included in cost of material sales.

We incurred research and development expenses of $7.9 million for the three months ended September 30, 2013, compared to $8.2 million for the three months ended September 30, 2012. The decrease was primarily due to a decrease in subcontract costs of $209,000.

Selling, general and administrative expenses were $6.4 million for the three months ended September 30, 2013, compared to $5.3 million for the three months ended September 30, 2012. The increase was primarily due to increased costs associated with bonus and stock-based compensation for certain executive officers as well as increased salaries and salary-related expenses associated with new employees.

Patent costs and amortization of acquired technology increased to $3.9 million for the three months ended September 30, 2013, compared to $3.7 million for the three months ended September 30, 2012. We have increased our number of patents, including those of the newly acquired technology, and the increase reflects the additional maintenance costs of these new patents.

Royalty and license expense increased to $624,000 for the three months ended September 30, 2013, compared to $283,000 for the three months ended September 30, 2012. The increase was mainly due to increased royalties incurred under our amended license agreement with Princeton, USC, and Michigan, resulting from higher material sales and increased royalty and license fees. See Note 5 in Notes to Consolidated Financial Statements for further discussion.

Interest income decreased to $206,000 for the three months ended September 30, 2013, compared to $272,000 for the three months ended September 30, 2012.

We recorded an income tax benefit of $1.1 million and $326,000 for the three months ended September 30, 2013 and 2012, respectively. See "Provision for Income Tax" below for additional information.

Nine Months Ended September 30, 2013 Compared to Nine Months Ended September 30, 2012

We had operating income of $18.8 million for the nine months ended September 30, 2013, compared to operating income of $5.3 million for the nine months ended September 30, 2012. The increase in operating income was due to the following:

- an increase in revenue of $42.1 million, which includes increases in both material sales and royalty and license fees, offset by

- an increase in operating expenses of $28.5 million, which includes a $17.4 million increase in the cost of material sales, a $5.2 million increase in patent costs and amortization of acquired technology, a $3.2 million increase in selling, general and administrative costs, and a $2.0 million increase in research and development costs, described below.

We had net income of $16.2 million (or $0.35 per basic and diluted share) for the nine months ended September 30, 2013, compared to net income of $4.3 million (or $0.09 per basic and diluted share) for the nine months ended September 30, 2012.

Our revenues were $97.2 million for the nine months ended September 30, 2013, compared to $55.1 million for the nine months ended September 30, 2012. The increase in our overall revenue was primarily due to increases in both material sales and royalty and license fees, which included a $42.5 million increase in commercial material sales as well as an increase in royalty and license fees of $7.7 million, offset by a $6.7 million decrease in development chemical sales due to changes in sales mix, as well as a $1.5 million decrease in technology development and support revenue.

Material sales increased to $70.2 million for the nine months ended September 30, 2013, compared to $34.4 million for the same period in 2012. Material sales relate to the sale of our OLED materials for our customers' evaluation, manufacture and development activities, and for incorporation into their commercial OLED products. The increase in material sales resulted primarily from increased commercial chemical sales due to the overall expanded adoption of our technology and materials in the marketplace by display manufacturers, particularly from SDC.

Material sales included sales of both phosphorescent emitter and host materials. Phosphorescent emitter sales were 65% of our total material sales for the nine months ended September 30, 2013, compared to 83% of our total material sales for the nine months ended September 30, 2012. Host material sales were 35% of our total material sales for the nine months ended September 30, 2013, compared to 17% of our total material sales for the nine months ended September 30, 2012.

Phosphorescent emitter sales increased by approximately $17.2 million due to an increase in commercial phosphorescent emitter sales, offset by a decrease in development phosphorescent emitter sales. Commercial green emitter sales increased by approximately

$27.2 million due to expanded use of our green emitter in customer products. Commercial red emitter sales decreased by approximately $3.7 million mainly due to a decrease in the average price per gram of red emitter based on the cumulative volume of purchases as well as a reduction in the number of grams sold, as we believe our customers utilized our materials more efficiently.

Host material sales increased by $18.7 million, due to an increase in the number of grams sold, which was offset by a decrease in the average price per gram sold. Host material sales are mainly related to the use of commercial host materials with our green emitter materials. We believe we can participate in the host materials business due to our long experience in developing emitter materials, which are used together with host materials in the emissive layer of an OLED. However, our customers are not required to purchase our host materials in order to utilize our phosphorescent emitter materials, and the host material sales business is more competitive than the phosphorescent emitter material sales business. Thus, 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.

Royalty and license fees increased to $24.0 million for the nine months ended September 30, 2013, compared to $16.3 million for the nine months ended September 30, 2012. The increase was mainly related to the receipt and therefore recognition of $20.0 million of royalty and license fee payments under our patent license agreement with SDC in the second quarter of 2013, compared to $15.0 million in the prior period. The increase was also related to an increase in license fees attributable to material sales to certain customers, which increased during the nine months ended September 30, 2013, as compared to the nine months ended September 30, 2012.

In August 2011, we entered into a patent license agreement with SDC which runs through December 31, 2017. The patent license agreement with SDC covers the manufacture and sale of specified OLED display products. Under the agreement, SDC has agreed to pay us a fixed license fee, payable in semi-annual installments over the agreement term. These installments, which are due in the second and fourth quarter of each annual period, increase on an annual basis over the term of the license agreement. Based upon the extended payment arrangement, such amounts are not considered fixed and determinable for revenue recognition purposes until such time the installments become due and payable. As a result, license fees under our new agreement with SDC will be recognized as they become due and payable, which is currently scheduled to be in the second and fourth quarter of each year; therefore our quarterly license fees, will fluctuate accordingly, depending on the timing of such payments.

At the same time we entered into the current patent license agreement with SDC, we also entered into a new supplemental material purchase agreement with SDC. Under the current supplemental material purchase agreement, SDC agrees to purchase from us a minimum dollar amount of phosphorescent emitter materials for use in the manufacture of licensed products. This minimum purchase commitment is subject to SDC's requirements for phosphorescent emitter materials and our ability to meet these requirements over the term of the supplemental agreement. The minimum purchase amounts increase on an annual basis over the term of the supplemental agreement. These amounts were determined through negotiation based on a number of factors, including, without limitation, estimates of SDC's OLED business growth as a percentage of published OLED market forecasts and SDC's projected minimum usage of red and green phosphorescent emitter materials over the term of the agreement.

Technology development and support revenue decreased to $3.0 million for the nine months ended September 30, 2013, compared to $4.5 million for the same period in 2012 due to fewer outstanding contracts in the current period when compared to the prior period.

Cost of material sales increased to $21.2 million for the nine months ended September 30, 2013, compared to $3.8 million for the nine months ended September 30, 2012, partially due to the aforementioned 104% increase in material sales and partially due to the product mix of materials sold. Cost of material sales 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 materials, which have already been included in research and development expense. Commercial materials are materials that have been validated by us for use in commercial OLED products.

During the nine months ended September 30, 2012, costs of materials related to a majority of our green emitter material sales excluded costs that had been previously included in research and development expenses; however, during the nine months ended September 30, 2013, costs of materials related to sales of our green emitter materials included all costs to produce the materials sold.

Depending on the amounts, timing and stage of materials being classified as commercial, as well as changes in the market price of certain raw materials, we expect cost of materials sales to fluctuate from quarter to quarter. As a result of these fluctuations and raw material cost increases, and due to increased sales of commercial materials, cost of material sales increased for the nine months ended September 30, 2013, compared to the same period in 2012. For the nine months ended September 30, 2013 and 2012, costs associated with $64.4 million and $22.0 million, respectively, of material sales relating to commercial materials were included in cost of material sales.

We incurred research and development expenses of $24.1 million for the nine months ended September 30, 2013, compared to $22.1 million for the nine months ended September 30, 2012. The overall increase was primarily due to:

- increased costs of $1.3 million associated with sponsored research and development contracts;
- increased costs of $919,000 incurred under our agreement with PPG Industries, which represents the cost of scaling up of a new red emitter material and validating the new material to commercial status, as well as to supply us with those materials for evaluation purposes; and
- increased costs of $702,000 due to increased employee costs related to bonus compensation, as well as salaries and salary related expenses for new employees; offset by
- decreased subcontract costs of $678,000.

Selling, general and administrative expenses were $17.9 million for the nine months ended September 30, 2013, compared to $14.8 million for the nine months ended September 30, 2012. The increase was primarily due to increased costs associated with bonus and stock-based compensation for certain executive officers as well as increased salaries and salary-related expenses associated with new and existing employees.

Patent costs and amortization of acquired technology increased to $13.0 million for the nine months ended September 30, 2013, compared to $7.9 million for the nine months ended September 30, 2012. The increase was mainly due to increased amortization costs of $6.1 million due to the amortization expense associated with technology acquired in July 2012 (see Note 6 in Notes to Consolidated Financial Statements for further discussion).

Royalty and license expense increased to $2.1 million for the nine months ended September 30, 2013, compared to $1.3 million for the nine months ended September 30, 2012. The increase was mainly due to increased royalties incurred under our amended license agreement with Princeton, USC, and Michigan, resulting from higher material sales and increased royalty and license fees. See Note 5 in Notes to Consolidated Financial Statements for further discussion.

Interest income decreased to $594,000 for the nine months ended September 30, 2013, compared to $986,000 for the nine months ended September 30, 2012. The decrease was mainly attributable to interest earned on lower average cash and investment balances as a result of the purchase of acquired technology in July 2012 (see Note 6 in Notes to Consolidated Financial Statements for further discussion).

We recorded income tax expense of $3.2 million and $2.0 million for the nine months ended September 30, 2013 and 2012, respectively. See "Provision for Income Tax" below for additional information.

Provision for Income Tax

The effective income tax rate was (24.8)% and 16.6% for the three and nine months ended September 30, 2013, respectively. For the three and nine months ended September 30, 2013, income tax benefit of $1.1 million and an expense of $3.2 million, respectively, was recorded based on the Company's estimated annual effective tax rate for 2013 applied to the Company's income before income taxes. For the three and nine months ended September 30, 2012, an income tax benefit of $326,000 and an expense of $2.0 million were recorded, respectively. Our estimated effective tax rate is primarily related to foreign taxes on South Korean royalty and license fee income. The income tax benefit for the three months ended September 30, 2013, was primarily the result of an increase in the projected estimated income not subject to withholding taxes reducing the estimated annual effective tax rate for the year-to-date period and to a lesser extent the recording of $225,000 of discrete income tax items.

Based on previous earnings history, evaluation of expected future taxable income and other evidence, we determined it is not more likely than not that certain deferred tax assets will be realized. Therefore we have established a full valuation allowance for significantly all of our net deferred tax assets.

The ultimate realization of deferred tax assets is dependent upon the continued generation of taxable income to obtain benefit from the reversal of temporary differences, net operating loss carryforwards and tax credits. We consider the scheduled reversal of deferred tax liabilities, historic earnings, projected future taxable income, and tax planning strategies in making this assessment. Our level of future profitability could cause us to conclude that all or a portion of our deferred tax assets will be realizable. We continue to assess our current and projected taxable income in the jurisdictions in which we operate on a quarterly basis and provided that we sustain actual profitability and can demonstrate sustained forecasted profitability and/or upon the implementation of certain tax planning strategies, we could release all or a portion of our deferred tax valuation allowance to reflect the realizability of our deferred tax assets and would begin to provide for income taxes at a rate equal to our combined federal, state and foreign effective rates, at that time.

Currently, a full valuation allowance continues to be established for significantly all our net deferred tax assets because we incurred substantial consolidated operating losses from inception through 2010, as well as continuing losses in certain jurisdictions, and based on the aforementioned factors, we have assessed that the net deferred tax assets did not meet the criteria for realization as of September 30, 2013.

At this time, the amount and timing of any future release of the deferred tax valuation allowance, if any, and resulting future effective tax rates cannot be determined, but could be material to both our financial position and results of operations and may occur in the near term, including the fourth quarter of 2013, if expected operating trends continue.

Liquidity and Capital Resources

As of September 30, 2013, we had cash and cash equivalents of $67.1 million and short-term investments of $181.2 million, for a total of $248.3 million. This compares to cash and cash equivalents of $85.9 million and short-term investments of $158.0 million, for a total of $243.9 million, as of December 31, 2012.

Cash provided by operating activities was $22.6 million for the nine months ended September 30, 2013, compared to cash provided by operating activities of $7.2 million for the same period in 2012. The increase in cash provided by operating activities was primarily due to the following:

- an increase in pretax net income of approximately $19.1 million, which excludes the impact of non-cash items; and

- the impact of the timing of inventory purchases of $8.8 million; offset by

- the impact of the timing of receipts of accounts receivable of $12.0 million; and

- the timing of payments of accounts payable and accrued expenses of $1.3 million.

Cash used in investing activities was $34.1 million for the nine months ended September 30, 2013, compared to cash used in investing activities of $42.2 million for the same period in 2012. The decrease in cash used in investing activities was mainly due to the purchase of intangibles during the nine months ended September 30, 2012, offset by the timing of maturities of investments, and purchases of investments and equipment.

Cash used in financing activities was $7.3 million for the nine months ended September 30, 2013, compared to cash used of $2.6 million for the same period in 2012. The increase in cash used in financing activities was primarily due to repurchases of common stock of $5.5 million, as well as a decrease in the proceeds from the exercise of stock options of $433,000. This was offset by a decrease in the payment of taxes related to stock-based employee compensation of $1.1 million.

Working capital was $258.9 million as of September 30, 2013, compared to $245.2 million as of December 31, 2012, mainly due to the increase in short-term investments of $23.2 million, accounts receivable of $9.1 million and other current assets of $2.5 million. This was offset by a decrease in cash and cash equivalents of $18.8 million primarily from increases in cash used in investing and financing activities as well as a decrease in inventory of $3.2 million resulting from increased material sales.

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.

It should be noted 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. 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. 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

We have various share-based compensation awards under the Equity Compensation Plan, which include stock options, restricted stock awards, restricted stock units and performance-based units. On March 7 and 8, 2013, the Board, upon the recommendation of the Compensation Committee of the Board, granted restricted stock units and performance units under the Equity Compensation Plan to its executive officers. See Note 10 in the Notes to Consolidated Financial Statements in Item 1. Financial Statements for further detail.

Refer to our Annual Report on Form 10-K for the year ended December 31, 2012, for additional discussion of our critical accounting policies.

Contractual Obligations

Effective June 1, 2013, the Company amended its Research Agreement with the University of Southern California (USC) to extend the term of the agreement for an additional four years. As of September 30, 2013, the Company was obligated to pay USC up to $8.2 million for work actually performed during the remaining extended term, which expires April 30, 2017.

Refer to our Annual Report on Form 10-K for the year ended December 31, 2012 for a discussion of our other contractual obligations.

Off-Balance Sheet Arrangements

Refer to our Annual Report on Form 10-K for the year ended December 31, 2012 for a discussion of off-balance sheet arrangements. As of September 30, 2013, 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 investments disclosed in Note 4 to the consolidated financial statements included herein. We generally invest in investment grade financial instruments to reduce our exposure related to investments. Our primary market risk exposure with regard to such financial instruments is to changes in interest rates, which would impact interest income earned on investments. However, based upon the conservative nature of our investment portfolio and current experience, we do not believe a decrease in investment yields would have a material negative effect on our interest income.

Substantially all our revenue is derived from outside of North America. All revenue is primarily denominated in U.S. dollars and therefore we bear no significant foreign exchange risk.

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, 2013. 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, 2013 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

Patent Related Challenges and Oppositions

Each major jurisdiction in the world that grants patents provides third parties with opportunities and access to administrative proceedings whereby they can request for additional review of previously issued patents in the respective jurisdiction. Each jurisdiction provides unique procedures for undertaking such activities, as well as different vehicles to review and appeal the determinations made in connection with such reviews. The conclusions made by the administration bodies tend to be appealable and generally are limited in scope and applicability to the specific claims and jurisdiction in question.

Below are summaries of certain proceedings that have been commenced against issued patents that are either exclusively licensed to us or which are now assigned to us. We note that we currently have more than 3,000 issued patents and pending patent applications, worldwide, which are utilized in our materials supply and device licensing business. We do not believe that the confirmation, loss or modification of our rights in any individual claim or set of claim(s) that are the subject of the following legal proceedings would have a material impact on our material sales or licensing business or on our consolidated financial statements, including our consolidated statements of operations, as a whole. However, as noted within the descriptions, many of the following legal proceedings involve patents relating to our key phosphorescent OLED technologies and we intend to vigorously defend against such claims, which may require the expenditure of significant amounts of our resources. The entries marked with an "*" relate to our UniversalPHOLED phosphorescent OLED technology.

Opposition to European Patent No. 0946958

On December 8, 2006, Cambridge Display Technology Ltd. (CDT), which was acquired in 2007 by Sumitomo Chemical Company (Sumitomo), filed a Notice of Opposition to European Patent No. 0946958 (EP '958 patent), which relates to our FOLED™ flexible OLED technology. 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 are exclusively licensed to us by Princeton, and 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 and on November 26, 2009 issued its written decision to reject the opposition and to maintain the patent as granted. CDT has filed an appeal to the EPO panel decision.

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.

Opposition to European Patent No. 1449238*

Between March 8, 2007 and July 27, 2007, three companies filed Notices of Opposition to European Patent No. 1449238 (EP '238 patent). The three companies are Sumation Company Limited (Sumation), a joint venture between Sumitomo and CDT, Merck Patent GmbH, of Darmstadt, Germany, and BASF Aktiengesellschaft, of Mannheim, Germany. 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 applications 13/009,001, filed on January 19, 2011, and 13/205,290, filed on August 9, 2011 (hereinafter the "U.S. '828 Patent Family"). They are exclusively licensed to us by Princeton, and we are required to pay all legal costs and fees associated with this proceeding.

The EPO combined all three oppositions into a single opposition proceeding. The EPO conducted an Oral Hearing in this matter and 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. The official minutes from the Oral Hearing and written decision were published on January 13, 2012.

All the parties filed notices of appeal to the EPO's panel decision and submitted their initial papers in support of their respective requests for appellate review. An Oral Hearing has been scheduled by the EPO in the second half of 2013.

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

Opposition to European Patent No. 1394870*

On 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 13/035,051, filed on February 25, 2011 (hereinafter the “U.S. '238 Patent Family”). They are exclusively licensed to us by Princeton, and we are required to pay all legal costs and fees associated with this proceeding.

The five companies are Merck Patent GmbH; BASF Schweitz 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 an Oral hearing has been scheduled by the EPO in the second quarter of 2014.

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 our 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 two 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 filed by Semiconductor Energy Laboratory Co., Ltd. (SEL). The JP '781 and '168 patents are also Japanese counterpart patents, in part, to the above-noted U.S. '828 Patent Family and EP '238 Patent. They are exclusively licensed to us by Princeton, and we are required to pay all legal costs and fees associated with this proceeding.

On March 31, 2011, we learned that the Japanese Patent Office ("JPO") had issued decisions finding all claims in the JP '781 and JP '168 patents invalid. We believed 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 filed appeal briefs in this matter with the Japanese IP High Court. The Japanese IP High Court held hearings for this matter on November 22, 2011, March 5, 2012, and June 18, 2012. On November 7, 2012, we were notified by our Japanese counsel that the Japanese IP High Court had reversed the JPO's finding of invalidity and remanded the case back to the JPO for further consideration.

In a decision reported to us on April 15, 2013, all claims in our JP '781 and JP '168 patents were upheld as valid by the JPO. Our opponent filed an appeal and submitted their appeal briefs. Our responses were timely filed.

At this time, based on our current knowledge, we believe that the claims on the patents should 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 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 Trials for the JP '781 and '168 patents. The JP '024 patent is a counterpart patent, in part, to the U.S. '238 Patent Family, which relate to the EP '870 patent, which is subject to one of the above-noted European oppositions and which relates to our UniversalPHOLED phosphorescent OLED technology. They are exclusively licensed to us by Princeton, and we are required to pay all legal costs and fees associated with this proceeding.

On May 10, 2012, after a scheduled hearing, we learned that the JPO issued a decision upholding the validity of certain claimed inventions in the JP '024 Patent but invalidating the broadest claims in the patent. We appealed the JPO’s decision to the Japanese IP High Court.   After holding a Technical Hearing on May 30, 2013 and considering numerous supporting briefs filed by all relevant parties, the Japanese IP High Court delivered a decision on October 31, 2013, ruling that the prior art references relied on by the JPO did not support the JPO's findings. The Japanese IP High Court reversed the JPO's decision with respect to the previously invalidated broad claims in the JP '024 patent and remanded the matter back to the JPO for further consideration consistent with its decision.

At this time, based on our current knowledge, we believe that the patent being challenged should be declared valid and that all or a significant portion of our claims should be upheld. However, we cannot make any assurances of this result.

Opposition to European Patent No. 1252803*

On July 12 and 13, 2011, Sumitomo, Merck Patent GmbH and BASF SE, of Ludwigshaven, Germany filed oppositions to our European Patent No. 1252803 (the EP '803 patent). The EP '803 patent, which was issued on October 13, 2010, is a European counterpart patent, in part, to the U.S. '828 Patent Family. They are exclusively licensed to us by Princeton, and we are required to pay all legal costs and fees associated with this proceeding.

The EPO combined the oppositions into a single opposition proceeding. On December 7, 2012 the EPO rendered a decision at an Oral Hearing wherein it upheld the broadest claim of the granted patent. All three opponents filed an appeal and have submitted their appeal briefs. Our responses are currently under preparation.

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 our claims will be further upheld on appeal. However, we cannot make any assurances of this result.

Opposition to European Patent No. 1390962

On November 16, 2011, Osram AG and BASF SE each filed a Notice of Opposition to European Patent No. 1390962 (EP '962 patent), which relates to our white phosphorescent OLED technology. The EP '962 patent, which was issued on February 16, 2011, is a European counterpart patent to U.S. patents 7,009,338 and 7,285,907. They are exclusively licensed to us by Princeton, and we are required to pay all legal costs and fees associated with this proceeding.

The EPO combined the oppositions into a single opposition proceeding. Our response to the opponents' opposition briefs was timely filed on June 28, 2012.

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 our claims will be upheld. However, we cannot make any assurances of this result.

Opposition to European Patent No. 1933395*

On February 24 and 27, 2012, Sumitomo, Merck Patent GmbH and BASF SE filed oppositions to our European Patent No. 1933395 (the EP '395 patent). The EP '395 patent is a counterpart patent to the above-noted JP '168 patent, and, in part, to the U.S. '828 Patent Family. This patent is exclusively licensed to us by Princeton, and we are required to pay all legal costs and fees associated with this proceeding.

At an Oral Hearing on October 14, 2013, the EPO panel issued a decision that affirmed the basic invention and broad patent coverage in the '395 patent, but narrowed the scope of the original claims.

We will likely appeal the ruling to reinstate a broader set of claims. This patent, as originally granted by the EPO, would be deemed valid during the pendency of an appeals process.

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, 2012.

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

Share Repurchases

During the quarter ended December 31, 2012, we announced that the Board of Directors had approved a program to repurchase up to $50 million of our outstanding shares of our common stock from time to time over the next twelve months (the Repurchase Program). The amount and timing of repurchases will depend on a number of factors, including the price, availability of shares of the Company's common stock, trading volume and general market conditions. The repurchases may be made on the open market, in block trades or otherwise. The Repurchase Program may be suspended or discontinued at any time.

Additionally, we acquired 122 shares of common stock through transactions related to the vesting of restricted share awards previously granted to employees of ours. Upon vesting, the employees turned in shares of common stock in amounts sufficient to pay the minimum statutory tax withholding at rates required by the relevant tax authorities.

The following table provides information relating to the shares we received and repurchased during the three months ended September 30, 2013 (dollar amounts in thousands, other than per share amounts):

Period	Total Number of Shares Purchased	Weighted Average Price Paid per Share	Total Number of Shares Purchased as Part of Repurchase Program	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
July 1 - July 31	—	$—	—	$39,342
August 1 - August 31	122	33.86	—	39,342
September 1 - September 30	—	—	—	39,342
Total	122		—	

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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*	Amendment No. 2 to the Sponsored Research Agreement between the registrant and the University of Southern California, dated as of June 1, 2013
31.1*	Certifications of Steven V. Abramson, Chief Executive Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)
31.2*	Certifications of Sidney D. Rosenblatt, Chief Financial Officer, as required by Rule 13a-14(a) or Rule 15d-14(a)
32.1**	Certifications of Steven V. Abramson, Chief Executive Officer, as required by Rule 13a-14(b) or Rule 15d-14(b), and by 18 U.S.C. Section 1350 (This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. Further, this exhibit shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.)
32.2**	Certifications of Sidney D. Rosenblatt, Chief Financial Officer, as required by Rule 13a-14(b) or Rule 15d-14(b), and by 18 U.S.C. Section 1350 (This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section. Further, this exhibit shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.)
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.
** Furnished herewith.

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.

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 7, 2013	By:	/s/ Sidney D. Rosenblatt Sidney D. Rosenblatt Executive Vice President and Chief Financial Officer