UNIVERSAL DISPLAY CORP \PA\
Form 10-Q
May 05, 2016
Table of Contents

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 March 31, 2016

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 (§ 232.405 of this chapter) 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. (Check one):

Large accelerated filer X	Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company)	Smaller reporting company ____

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

As of May 3, 2016, the registrant had outstanding 46,847,615 shares of common stock.

Table of Contents

TABLE OF CONTENTS

Table of Contents

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)
(in thousands, except share and per share data)

	March 31, 2016	December 31, 2015
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$110,091	$97,513
Short-term investments	269,498	297,981
Accounts receivable	20,866	24,729
Inventories	14,709	12,748
Deferred income taxes	12,548	12,326
Other current assets	4,683	2,387
Total current assets	432,395	447,684
PROPERTY AND EQUIPMENT, net of accumulated depreciation of $28,799 and $27,897	22,362	22,407
ACQUIRED TECHNOLOGY, net of accumulated amortization of $57,587 and $54,837	69,265	72,015
INVESTMENTS	16,092	2,187
DEFERRED INCOME TAXES	15,287	14,945
OTHER ASSETS	645	174
TOTAL ASSETS	$556,046	$559,412
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$7,294	$6,849
Accrued expenses	6,746	17,387
Deferred revenue	10,353	10,107
Other current liabilities	757	167
Total current liabilities	25,150	34,510
DEFERRED REVENUE	35,515	35,543
RETIREMENT PLAN BENEFIT LIABILITY	24,485	22,594
Total liabilities	85,150	92,647
COMMITMENTS AND CONTINGENCIES (Note 13)		
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, 48,147,715 and 48,132,223 shares issued and outstanding at March 31, 2016 and December 31, 2015, respectively	483	482
Additional paid-in capital	592,769	589,885
Accumulated deficit	(71,678)	(73,627)
Accumulated other comprehensive loss	(10,522)	(9,819)
Treasury stock, at cost (1,357,863 shares at March 31, 2016 and December 31, 2015)	(40,158)	(40,158)
Total shareholders' equity	470,896	466,765
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$556,046	$559,412

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

1

Table of Contents

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(UNAUDITED)
(in thousands, except share and per share data)

	Three Months Ended March 31, 2016	2015
REVENUE:		
Material sales	$24,304	$ 26,818
Royalty and license fees	5,342	4,375
Technology development and support revenue	57	30
Total revenue	29,703	31,223
OPERATING EXPENSES:		
Cost of material sales	5,052	8,581
Research and development	10,476	9,919
Selling, general and administrative	6,660	6,200
Patent costs and amortization of acquired technology	4,094	3,967
Royalty and license expense	875	785
Total operating expenses	27,157	29,452
Operating income	2,546	1,771
INTEREST INCOME	332	173
INTEREST EXPENSE	(8)	(12)
INCOME BEFORE INCOME TAXES	2,870	1,932
INCOME TAX EXPENSE	(921)	(618)
NET INCOME	$1,949	$ 1,314
NET INCOME PER COMMON SHARE:		
BASIC	$0.04	$ 0.03
DILUTED	$0.04	$ 0.03
WEIGHTED AVERAGE SHARES USED IN COMPUTING NET INCOME PER COMMON SHARE:		
BASIC	46,774,360	45,785,725
DILUTED	46,907,558	46,214,247

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

Table of Contents

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(UNAUDITED)
(in thousands)

	Three Months Ended March 31,	
	2016	2015
NET INCOME	$1,949	$1,314
OTHER COMPREHENSIVE (LOSS) INCOME, NET OF TAX:		
Unrealized (loss) gain on available-for-sale securities, net of tax of $82 and $8, respectively	(151)	14
Employee benefit plan:		
Actuarial loss, net of tax of $469 and none, respectively	(834)	—
Amortization of prior service cost and actuarial loss for retirement plan included in net periodic pension costs, net of tax of $159 and $87, respectively	282	156
Net change for employee benefit plan	(552)	156
TOTAL OTHER COMPREHENSIVE (LOSS) INCOME	(703)	170
COMPREHENSIVE INCOME	$1,246	$1,484

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

Table of Contents

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY
(UNAUDITED)
(in thousands, except for share data)

	Series A Nonconvertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated Deficit	Accumulated Other Comprehensive Loss	Treasury Stock		Total Shareholders' Equity
	Shares	Amount	Shares	Amount	Capital			Shares	Amount	
BALANCE, DECEMBER 31, 2015	200,000	$2	48,132,223	$482	$589,885	$(73,627)	$(9,819)	1,357,863	$(40,158)	$466,765
Net income	—	—	—	—	—	1,949	—	—	—	1,949
Other comprehensive loss	—	—	—	—	—	—	(703)	—	—	(703)
Exercise of common stock options	—	—	10,500	—	151	—	—	—	—	151
Issuance of common stock to employees	—	—	21,995	1	3,903	—	—	—	—	3,904
Shares withheld for employee taxes	—	—	(39,692)	—	(2,008)	—	—	—	—	(2,008)
Issuance of common stock to Board of Directors and Scientific Advisory Board	—	—	20,546	—	708	—	—	—	—	708
Issuance of common stock to employees under an ESPP	—	—	2,143	—	130	—	—	—	—	130
BALANCE, MARCH 31, 2016	200,000	$2	48,147,715	$483	$592,769	$(71,678)	$(10,522)	1,357,863	$(40,158)	$470,896

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

Table of Contents

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(in thousands)

	Three Months Ended March 31, 2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$1,949	$1,314
Adjustments to reconcile net income to net cash provided by operating activities:		
Amortization of deferred revenue	(2,032)	(1,177)
Depreciation	902	702
Amortization of intangibles	2,750	2,750
Amortization of premium and discount on investments, net	(297)	(135)
Stock-based compensation to employees	2,830	1,715
Stock-based compensation to Board of Directors and Scientific Advisory Board	408	366
Deferred income tax benefit	(169)	334
Retirement plan benefit expense	1,029	592
Decrease (increase) in assets:		
Accounts receivable	3,863	3,911
Inventories	(1,961)	(1,858)
Other current assets	(2,296)	703
Other assets	(472)	20
(Decrease) increase in liabilities:		
Accounts payable and accrued expenses	(9,134)	(8,584)
Other current liabilities	590	(55)
Deferred revenue	2,250	46,382
Net cash provided by operating activities	210	46,980
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(516)	(1,950)
Purchases of investments	(193,929)	(51,957)
Proceeds from sale of investments	208,571	90,876
Net cash provided by investing activities	14,126	36,969
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of common stock	99	90
Proceeds from the exercise of common stock options	151	702
Payment of withholding taxes related to stock-based employee compensation	(2,008)	(4,970)
Net cash used in financing activities	(1,758)	(4,178)
INCREASE IN CASH AND CASH EQUIVALENTS	12,578	79,771
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	97,513	45,418
CASH AND CASH EQUIVALENTS, END OF PERIOD	$110,091	$125,189
The following non-cash activities occurred:		
Unrealized (loss) gain on available-for-sale securities	$(233)	$22
Common stock issued to Board of Directors and Scientific Advisory Board that was earned in a previous period	300	300
Common stock issued to employees that was accrued for in a previous period	1,105	967
Net change in accounts payable and accrued expenses related to purchases of property and equipment	343	(686)

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

5

UNIVERSAL DISPLAY CORPORATION AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

1. BUSINESS:

Universal Display Corporation (the Company) is a leader in the research, development and commercialization of organic light emitting diode (OLED) technologies and materials. OLEDs are thin, lightweight and power-efficient solid-state devices that emit light, making them highly suitable for use in full-color displays and as lighting products. OLED displays are capturing a growing share of the display market. The Company believes this is because OLEDs offer potential advantages over competing display technologies with respect to power efficiency, contrast ratio, viewing angle, video response time, form factor and manufacturing cost. The Company also believes that OLED lighting products have the potential to replace many existing light sources in the future because of their high power efficiency, excellent color rendering index, low operating temperature and novel form factor. The Company's technology leadership and intellectual property position should enable it to share in the revenues from OLED displays and lighting products as they enter mainstream consumer and other markets.

The Company's primary business strategy is to (1) further develop and license its proprietary OLED technologies to manufacturers of products for display applications, such as mobile phones, televisions, tablets, wearables, portable media devices, notebook computers, personal computers, automotive interiors, and specialty and general lighting products; and (2) develop new OLED materials and sell existing and any new materials to those product manufacturers. The Company has established a significant portfolio of proprietary OLED technologies and materials, primarily through internal research and development efforts and acquisitions of patents and patent applications, as well as maintaining its relationships with world-class partners such as Princeton University (Princeton), the University of Southern California (USC), the University of Michigan (Michigan) and PPG Industries, Inc. (PPG Industries). The Company currently owns, exclusively licenses or has the sole right to sublicense more than 3,600 patents issued and pending worldwide.

The Company sells its proprietary OLED materials to customers for evaluation and use in commercial OLED products. The Company also enters into agreements with manufacturers of OLED display and lighting products under which it grants them licenses to practice under its patents and to use the Company's proprietary know-how. At the same time, the Company works with these and other companies who are evaluating the Company's OLED technologies and materials for possible use in commercial OLED display and lighting products.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

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 March 31, 2016 and results of operations for the three months ended March 31, 2016 and 2015, and cash flows for the three months ended March 31, 2016 and 2015. 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, 2015. 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.

Principles of Consolidation

The consolidated financial statements include the accounts of Universal Display Corporation and its wholly owned subsidiaries, UDC, Inc., UDC Ireland Limited, Universal Display Corporation Hong Kong Limited, Universal Display Corporation Korea, Y.H., and Universal Display Corporation Japan GK. All intercompany transactions and accounts have been eliminated.

Management’s Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (GAAP) 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 use and recoverability of inventories, income taxes including realization of deferred tax assets, stock-based compensation and retirement benefit plan liabilities. Actual results could differ from those estimates.

Table of Contents

Inventories

Inventories consist of raw materials, work-in-process and finished goods, including inventory consigned to customers, and are stated at the lower of cost, determined on a first-in, first-out basis, or market. Inventory valuation and firm committed purchase order assessments are performed on a quarterly basis and those items that are identified to be obsolete or in excess of forecasted usage are written down to their estimated realizable value. Estimates of realizable value are based upon management's analyses and assumptions, including, but not limited to, forecasted sales levels by product, expected product lifecycle, product development plans and future demand requirements. A 12-month rolling forecast based on factors, including, but not limited to, production cycles, anticipated product orders, marketing forecasts, backlog, and shipment activities is used in the forecast. If market conditions are less favorable than forecasts or actual demand from customers is lower than estimates, additional inventory write-downs may be required. If demand is higher than expected, inventories that had previously been written down may be sold.

Certain of the Company's customers have assumed the responsibility for maintaining the Company's inventory at their location based on the customers' demand forecast. Notwithstanding the fact that the Company builds and ships the inventory, the customer does not purchase the consigned inventory until the inventory is drawn or pulled by the customer to be used in the manufacture of the customer's product. Though the consigned inventory may be at the customer's physical location, it remains inventory owned by the Company until the inventory is drawn or pulled, which is the time at which the sale takes place.

Fair Value of Financial Instruments

The carrying values of accounts receivable, other current assets, and accounts payable approximate fair value in the accompanying financial statements due to the short-term nature of those instruments. The Company's other financial instruments, which include cash equivalents and investments are carried at fair value.

Revenue Recognition and Deferred Revenue

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 title passes, which is typically at the time of shipment or at the time of delivery, depending upon the contractual agreement between the parties.

The Company receives non-refundable license and royalty payments under certain commercial, development and technology evaluation agreements. These payments may include royalty and license fees made pursuant to license agreements and certain commercial supply agreements. Amounts received are deferred and classified as either current or non-current deferred revenue based upon current contractual remaining terms; however, based upon on-going relationships with customers, as well as future agreement extensions and other factors, amounts classified as current as of March 31, 2016 may not be recognized as revenue over the next twelve months. 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 and license fees included as part of commercial supply agreements are recognized when earned and the amount is fixed and determinable. If the Company used different estimates for the useful life of the licensed technology, or if fees are fixed and determinable, reported revenue during the relevant period would differ.

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.

In 2015, the Company entered into an OLED patent license agreement and an OLED commercial supply agreement with LG Display Co., Ltd. (LG Display), which were effective as of January 1, 2015 and superseded the 2007 commercial supply agreement between the parties. The new agreements have a term that is set to expire by the end of 2022. The patent license agreement provides LG Display a non-exclusive, royalty bearing portfolio license to make and sell OLED displays under the Company's patent portfolio. The patent license calls for license fees, prepaid royalties and running royalties on licensed products. The prepaid royalty amount is included in deferred revenue and a portion of this amount can be credited against total royalties due over the life of the contract. The agreements include customary provisions relating to warranties, indemnities, confidentiality, assignability and business terms. The agreements provide for certain other minimum obligations relating to the volume of materials sales anticipated over the term of the agreements as well as minimum royalty revenue to be generated under the patent license agreement. The Company expects to generate revenue under these agreements that are predominantly tied to LG Display sales of OLED licensed products. The OLED commercial supply agreement provides for the sales of materials for use by LG Display, which may include phosphorescent dopants and host materials.

The Company records taxes billed to customers and remitted to various governmental entities on a gross basis in both revenues and cost of material sales in the consolidated statements of income. The amounts of these pass through taxes reflected in revenues and cost of material sales were $56,000 and $615,000 for the three months ended March 31, 2016 and 2015, respectively.

All amounts are billed and due within a year and substantially all are transacted in U.S. dollars.

Cost of Material Sales

Cost of material sales consists of labor and material costs associated with the production of materials processed at the Company's manufacturing partners and at the Company's internal manufacturing processing facility. The Company's portion of cost of material sales also includes depreciation of manufacturing equipment, as well as manufacturing overhead costs and inventory adjustments for excess and obsolete inventory.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued a new revenue recognition standard entitled “Revenue from Contracts with Customers.” The objective of the standard is to establish the principles that an entity shall apply to report useful information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows from a contract with a customer. The standard is effective for annual reporting periods beginning after December 15, 2017. Earlier adoption as of the original date is optional; however, the Company will adopt the standard beginning January 1, 2018. The standard allows for either “full retrospective” adoption, meaning the standard is applied to all periods presented, or “modified retrospective” adoption, meaning the standard is applied only to the most current period presented in the financial statements. The Company is currently assessing which method it will choose for adoption, and is evaluating the impact of the adoption of this new accounting standard on its consolidated results of income and financial position.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory, which requires an entity that uses the first-in first-out method for inventory to report inventory cost at the lower of cost or net realizable value versus the current measurement principle of lower of cost or market. The ASU requires prospective adoption for inventory measurements for fiscal years beginning after December 15, 2016. Early adoption is permitted. The Company is evaluating the effect that ASU 2015-11 may have on its consolidated financial statements and related disclosures.

In November 2015, the FASB issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes, which requires the classification of all deferred tax assets and liabilities as noncurrent. The standard is effective for annual reporting periods beginning after December 15, 2016. The standard allows for either "prospective" adoption, meaning the standard is applied to the most current period presented in the financial statements or "full retrospective” adoption, meaning the standard is applied to all periods presented. Earlier adoption is permitted. The Company is evaluating the effect that ASU 2015-17 may have on its consolidated financial statements and related disclosures.

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Accounting. The objective of the standard is to simplify the accounting and related disclosures associated with employee share-based accounting. The standard is effective for annual reporting periods beginning after December 15, 2016. The ASU requires prospective adoption, meaning the standard is applied to the most current period presented in the financial statements. Earlier adoption is permitted. The Company is evaluating the effect that ASU 2016-09 may have on its consolidated financial statements and related disclosures.

Table of Contents

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 as of March 31, 2016 and December 31, 2015 consisted of the following (in thousands):

Investment Classification	Amortized Cost	Unrealized Gains	Unrealized (Losses)	Aggregate Fair Market Value
March 31, 2016				
Certificates of deposit	$ 11,513	$ 8	$ (3)	$ 11,518
Corporate bonds	229,513	—	(122)	229,391
U.S. Government bonds	44,962	—	(281)	44,681
	$ 285,988	$ 8	$ (406)	$ 285,590
December 31, 2015				
Certificates of deposit	$ 11,532	$ 3	$ (14)	$ 11,521
Corporate bonds	233,848	—	(139)	233,709
U.S. Government bonds	54,953	1	(16)	54,938
	$ 300,333	$ 4	$ (169)	$ 300,168

Table of Contents

4. INVENTORIES:

Inventories consisted of the following (in thousands):

	March 31, 2016	December 31, 2015
Raw materials	$ 6,538	$ 6,539
Work-in-process	1,734	1,064
Finished goods	6,437	5,145
Inventories	$ 14,709	$ 12,748

5. FAIR VALUE MEASUREMENTS:

The following table provides the assets and liabilities carried at fair value measured on a recurring basis as of March 31, 2016 (in thousands):

		Fair Value Measurements, Using		
	Total carrying value as of March 31, 2016	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cash equivalents	$ 64,580	$ 64,580	$ —	$ —
Short-term investments	269,498	269,498	—	—
Long-term investments	16,092	16,092	—	—

The following table provides the assets and liabilities carried at fair value measured on a recurring basis as of December 31, 2015 (in thousands):

		Fair Value Measurements, Using		
	Total carrying value as of December 31, 2015	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Cash equivalents	$ 34,980	$ 34,980	$ —	$ —
Short-term investments	297,981	297,981	—	—
Long-term investments	2,187	2,187	—	—

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.

Changes in fair value of the investments are recorded as unrealized gains and losses in other comprehensive income. If a decline in fair value of an investment is deemed to be other than temporary, the cost of the Company’s investment will be written down by the amount of the other-than-temporary impairment with a resulting charge to net income. There were no other-than-temporary impairments of investments as of March 31, 2016 or December 31, 2015.

6. RESEARCH AND LICENSE AGREEMENTS WITH PRINCETON UNIVERSITY, UNIVERSITY OF SOUTHERN CALIFORNIA AND THE UNIVERSITY OF 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.

10

Table of Contents

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 March 31, 2016, the Company was obligated to pay USC up to $3.4 million for work to be actually performed during the remaining extended term, which expires April 30, 2017. From June 1, 2013 through March 31, 2016, the Company incurred $3.2 million in research and development expense for work performed under the amended 2006 Research Agreement.

On October 9, 1997, the Company, Princeton and USC entered into an Amended License Agreement (as amended, the 1997 Amended License Agreement) under which Princeton and USC granted the Company worldwide, exclusive license rights, with rights to sublicense, to make, have made, use, lease and/or sell products and to practice processes based on patent applications and issued patents arising out of work performed by Princeton and USC under the 1997 Research Agreement. Under this 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 recorded royalty expense in connection with this agreement of $875,000 and $779,000 for the three months ended March 31, 2016 and 2015, 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.

7. ACQUIRED TECHNOLOGY:

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

	March 31, 2016
PD-LD, Inc.	$ 1,481
Motorola	15,909
Fujifilm	109,462
	126,852
Less: Accumulated amortization	(57,587)
Acquired technology, net	$ 69,265

Amortization expense for all intangible assets was $2.7 million for both the three months ended March 31, 2016 and 2015. Amortization expense is included in the patent costs and amortization of acquired technology expense line item on the Consolidated Statements of Income. Amortization expense related to acquired technology is expected to be $11.0 million for each of the next five fiscal years.

Table of Contents

Motorola Patent Acquisition

In 2000, the Company entered into a royalty-bearing 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.

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 is being amortized over a period of 7.5 years.

Fujifilm Patent Acquisition

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 in exchange for a cash payment of $105.0 million. plus costs incurred in connection with the purchase. The Agreement contains customary representations and warranties and covenants, including respective covenants not to sue by both parties thereto. The Agreement permitted the Company to assign all of its rights and obligations under the Agreement to its affiliates, and the Company assigned, prior to the consummation of the transactions contemplated by the Agreement, its rights and obligations to UDC Ireland Limited (UDC Ireland), a wholly-owned subsidiary of the Company formed under the laws of the Republic of Ireland. The transactions contemplated by the Agreement were consummated on July 26, 2012. The Company recorded the $105.0 million plus $4.5 million of purchase costs as acquired technology, which is being amortized over a period of 10 years.

8. EQUITY AND CASH COMPENSATION UNDER THE PPG 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.

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 ran through December 31, 2015 and shall be automatically renewed for additional one year terms, unless terminated by the Company by providing prior notice of one year or terminated by PPG by providing prior notice of two years. The agreement was automatically renewed through December 31, 2017. The New OLED Materials Agreement 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 supplying 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. No shares were issued for services to PPG for the three months ended March 31, 2016 or 2015.

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

The Company recorded research and development expense of $0.9 million and $1.6 million for the three months ended March 31, 2016 and 2015, respectively, in relation to the cash portion of the reimbursement of expenses and work performed by PPG Industries, excluding amounts paid for commercial chemicals.

Table of Contents

9. SHAREHOLDERS' EQUITY:

Scientific Advisory Board and Employee Awards

During the three months ended March 31, 2016 and 2015, the Company issued a total of 27,967 and 35,205 shares, respectively, of fully vested common stock to employees and non-employee members of the Scientific Advisory Board for services performed in 2015 and 2014, respectively. The fair value of the shares issued was $1.1 million and $967,000, respectively, for employees and $300,000 and $300,000, respectively, for non-employee members of the Scientific Advisory Board, which amounts were accrued at December 31, 2015 and 2014, respectively. In connection with the issuance of these grants, 8,106 and 9,565 shares, respectively, with fair values of $410,000 and $346,000, respectively, were withheld in satisfaction of employee tax withholding obligations in 2016 and 2015, respectively.

10. ACCUMULATED OTHER COMPREHENSIVE LOSS:

Amounts related to the changes in accumulated other comprehensive loss were as follows (in thousands):

	Unrealized gain (loss) on marketable securities	Net unrealized loss on retirement plan(2)	Total	Affected line items in the consolidated statements of income
Balance December 31, 2015, net of tax	$ (111)	$ (9,708)	$ (9,819)	
Other comprehensive income before reclassification	(151)	—	(151)	
Actuarial loss	—	(834)	(834)	
Reclassification to net income (1)	—	282	282	Selling, general and administrative and research and development
Change during period	(151)	(552)	(703)	
Balance March 31, 2016, net of tax	$ (262)	$ (10,260)	$ (10,522)	

	Unrealized gain (loss) on marketable securities	Net unrealized loss on retirement plan(2)	Total	Affected line items in the consolidated statements of income
Balance December 31, 2014, net of tax	$ (28)	$ (4,354)	$ (4,382)	
Other comprehensive loss before reclassification	14	—	14	
Reclassification to net income (1)	—	156	156	Selling, general and administrative and research and development
Change during period	14	156	170	
Balance March 31, 2015, net of tax	$ (14)	$ (4,198)	$ (4,212)	

(1) The Company reclassified amortization of prior service cost and actuarial loss for its retirement plan from accumulated other comprehensive loss to net income in the amounts of $282,000 and $156,000 for the three months ended March 31, 2016 and 2015, respectively.

(2) Refer to Note 12: Supplemental Executive Retirement Plan.

11. STOCK-BASED COMPENSATION:

The Company recognizes in the statements of income the grant-date fair value of equity based awards such as shares issued under employee stock purchase plans, restricted stock awards, restricted stock units and performance unit awards issued to employees and directors.

13

Table of Contents

The grant-date fair value of stock awards and units is based on the closing price of the stock on the date of grant. 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 issues new shares upon the respective grant, exercise or vesting of share-based payment awards, as applicable.

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 adopted a stock option plan, which has been amended and/or restated several times (most recently in 2014) and is now called the Equity Compensation Plan. The Equity Compensation Plan provides for the granting of incentive and nonqualified stock options, shares of common stock, stock appreciation rights and performance units to employees, directors and consultants of the Company. Stock options are exercisable over periods determined by the Compensation Committee, but for no longer than 10 years from the grant date. Through March 31, 2016, the Company’s shareholders have approved increases in the number of shares reserved for issuance under the Equity Compensation Plan to 10,500,000 and have extended the term of the plan through 2024. At March 31, 2016, there were 2,713,605 shares that remained available to be granted under the Equity Compensation Plan.

Stock Awards

Restricted Stock Awards and Units

The Company has issued restricted stock awards and units to employees and non-employee members of the Scientific Advisory Board with vesting terms of one to six years. The fair value is equal to the market price of the Company’s common stock on the date of grant for awards granted to employees and equal to the market price at the end of the reporting period for unvested non-employee awards or upon the date of vesting for vested non-employee awards. Expense for restricted stock awards and units is amortized ratably over the vesting period for the awards issued to employees and using a graded vesting method for the awards issued to non-employee members of the Scientific Advisory Board.

During the three months ended March 31, 2016, the Company granted 41,543 shares of restricted stock units to employees and non-employee members of the Scientific Advisory Board, which had a total fair value of $2.1 million on the respective dates of grant, and will vest over three years from the date of grant, provided that the grantee is still an employee of the Company or is still providing services for the Company on the applicable vesting date.

For the three months ended March 31, 2016 and 2015, the Company recorded, as compensation charges related to all restricted stock awards and units, selling, general and administrative expense of $1.7 million and $868,000, respectively, research and development expense of $572,000 and $397,000, respectively, and cost of material sales of $164,000 and none, respectively. In connection with the vesting of restricted stock awards and units during the three months ended March 31, 2016 and 2015, respectively, 31,586 and 92,000 shares, with aggregate fair values of $1.6 million and $3.9 million, respectively, were withheld in satisfaction of tax withholding obligations.

For the three months ended March 31, 2016 and 2015, the Company recorded as compensation charges related to all restricted stock units to non-employee members of the Scientific Advisory Board, research and development expense of $43,000 and $189,000, respectively.

Board of Directors Compensation

The Company has granted restricted stock units to non-employee members of the Board of Directors with quarterly vesting over a period of approximately one year. The fair value is equal to the market price of the Company's common stock on the date of grant. The restricted stock units are issued and expense is recognized ratably over the vesting period. For the three months ended March 31, 2016 and 2015, the Company recorded compensation charges for services performed, related to all restricted stock units granted to non-employee members of the Board of Directors, selling, general and administrative expense of $365,000 and $177,000, respectively. Restricted stock issued to non-employee members of the Board of Directors during the three months ended March 31, 2016 and 2015 was 7,500 and 6,667 shares, respectively.

Performance Unit Awards

During the three months ended March 31, 2016, the Company granted 25,045 performance units, of which 12,520 are subject to a performance-based vesting requirement and 12,525 are subject to a market-based vesting requirement and will vest over the terms described below. Total fair value of the performance unit awards granted was $1.5 million on the date of grant.

Table of Contents

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 specific performance period. 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 specific performance period. 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 at all.

For the three months ended March 31, 2016 and 2015, the Company recorded selling, general and administrative expense of $278,000 and $329,000, respectively, research and development expense of $77,000 and $97,000, respectively, and cost of material sales of $28,000 and none, respectively, related to performance units. In connection with the vesting of performance units during the three months ended March 31, 2016 and 2015, respectively, none and 16,071 shares, with aggregate fair values of none and $752,000, respectively, were withheld in satisfaction of tax withholding obligations.

Employee Stock Purchase Plan

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

Eligible employees may elect to contribute to the ESPP through payroll deductions during consecutive three-month purchase periods. 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 three months ended March 31, 2016 and 2015, the Company issued 2,143 and 3,790 shares, respectively, of its common stock under the ESPP, resulting in proceeds of $99,000 and $90,000, respectively. For the three months ended March 31, 2016 and 2015, the Company recorded charges of $10,000 and $11,000, respectively, to selling, general and administrative expense , $17,000 and $13,000, respectively, to research and development expense and $4,000 and none, respectively, to cost of material sales related to the ESPP equal to the amount of the discount and the value of the look-back feature.

12. SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN:

On March 18, 2010, the Compensation Committee and the Board of Directors of the Company approved and adopted the Universal Display Corporation Supplemental Executive Retirement Plan (SERP), effective as of April 1, 2010. On March 3, 2015, the Compensation Committee and the Board of Directors amended the SERP to include salary and bonus as part of the plan. Prior to this amendment, the SERP benefit did not take into account any bonuses. This change will increase the liability related to the SERP. The purpose of the SERP, which is unfunded, is to provide certain of the Company's executive officers with supplemental pension benefits following a cessation of their employment. As of March 31, 2016 there were six participants in the SERP.

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.

Table of Contents

The components of net periodic pension cost were as follows (in thousands):

	Three Months Ended March 31,	
	2016	2015
Service cost	$357	$229
Interest cost	231	120
Amortization of prior service cost	437	243
Amortization of loss	4	—
Total net periodic benefit cost	$1,029	$592

13. COMMITMENTS AND CONTINGENCIES:

Commitments

Under the 2006 Research Agreement with USC, the Company is obligated to make certain payments to USC based on work performed by USC under that agreement, and by Michigan under its subcontractor agreement with USC. See Note 6 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 6 for further explanation.

The Company has agreements with six executive officers which provide for certain cash and other benefits upon termination of employment of the officer in connection with a change in control of the Company. 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.

In order to manage manufacturing lead times and help ensure adequate material supply, the Company entered into a New OLED Materials Agreement (see note 8) that will allow PPG Industries to procure and produce inventory based upon criteria as defined by the Company. These purchase commitments consist of firm, noncancelable and unconditional commitments. In certain instances, this agreement allows the Company the option to reschedule and adjust the Company's requirements based on its business needs prior to firm orders being placed. As of March 31, 2016 and December 31, 2015, the Company had purchase commitments for inventory of $8.9 million and $9.0 million, respectively.

Patent Related Challenges and Oppositions

Each major jurisdiction in the world that issues patents provides both third parties and applicants an opportunity to seek a further review of an issued patent. The process for requesting and considering such reviews is specific to the jurisdiction that issued the patent in question, and generally does not provide for claims of monetary damages or a review of specific claims of infringement. The conclusions made by the reviewing administrative bodies tend to be appealable and generally are limited in scope and applicability to the specific claims and jurisdiction in question.

The Company believes that opposition proceedings are frequently commenced in the ordinary course of business by third parties who may believe that one or more claims in a patent do not comply with the technical or legal requirements of the specific jurisdiction in which the patent was issued. The Company views these proceedings as reflective of its goal of obtaining the broadest legally permissible patent coverage permitted in each jurisdiction. Once a proceeding is initiated, as a general matter, the issued patent continues to be presumed valid until the jurisdiction’s applicable administrative body issues a final non-appealable decision. Depending on the jurisdiction, the outcome of these proceedings could include affirmation, denial or modification of some or all of the originally issued claims. The Company believes that as OLED technology becomes more established and its patent portfolio increases in size, so will the number of these proceedings.

Table of Contents

Below are summaries of certain active 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 does not believe that the confirmation, loss or modification of the Company's rights in any individual claim or set of claims that are the subject of the following legal proceedings would have a material impact on the Company's materials sales or licensing business or on the Company's consolidated financial statements, including its consolidated statements of income, as a whole. However, as noted within the descriptions, some of the following proceedings involve issued patents that relate to the Company's fundamental phosphorescent OLED technologies and the Company intends to vigorously defend against claims that, in the Company's opinion, seek to restrict or reduce the scope of the originally issued claim, which may require the expenditure of significant amounts of the Company's resources. In certain circumstances, when permitted, the Company may also utilize the proceedings to request modification of the claims to better distinguish the patented invention from any newly identified prior art and/or improve the claim scope of the patent relative to commercially important categories of the invention. The entries marked with an "*" relate to the Company's UniversalPHOLED phosphorescent OLED technology, some of which may be commercialized by the Company.

Opposition to European Patent No. 1394870*

On April 20, 2010, 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 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.

An Oral Hearing was held before an EPO panel of first instance in Munich, Germany, on April 8-9, 2014. The panel rejected the original claims and amended the claims to comply with EPO requirements by more narrowly defining the scope of the claims. The '870 patent, in its amended form, was held by the panel to comply with the EPO requirements.

The Company believes the EPO's decision relating to the broad original claims is erroneous and has appealed the ruling to reinstate a broader set of claims. This patent, as originally granted by the EPO, is deemed valid during the pendency of the appeals process.

At this time, based on the Company's current knowledge, the Company 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, the Company 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 by Semiconductor Energy Laboratory, Co., Ltd. for its Japanese Patent No. JP-4511024 (the JP '024 patent), which issued on May 14, 2010. 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, 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. On October 31, 2013, the Japanese IP High Court ruled that the prior art references relied on by the JPO did not support the JPO’s findings, 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. The JPO subsequently 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 decision to reinstate a broader set of claims but the IP High Court declined to reinstate the broader set of claims. The Company appealed the IP High Court's decision to the Japanese Supreme Court for reconsideration of the legal basis of the IP High Court's decision. This patent, as originally granted by the JPO, is deemed valid during the pendency of the appeals process.

Although the Company cannot provide any assurances as to the possible outcome of future appellate proceedings which the Company may elect to pursue, if any, the patent is expected to be maintained at least with respect to the narrower set of claims which were not the subject of the IP High Court's invalidation ruling.

Table of Contents

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, and a hearing on this matter was held in December 2015, wherein the EPO Opposition Division revoked the patent claims for alleged insufficiencies under EPC Article 83. The Company believes the EPO's decision relating to the original claims is erroneous, and will appeal the decision. The patent, as originally granted, is deemed valid during the pendency of the appeals process.

At this time, based on its current knowledge, the Company 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, the Company 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 to the EP '637 patent, and, in part, to U.S. Patents 7,001,536; 6,902,830; and 6,830,828; and to JP patents 4358168 and 4357781. 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 EP '395 patent, but narrowed the scope of the original claims.

On February 26, 2014, the Company appealed the ruling to reinstate a broader set of claims. The patent, as originally granted by the EPO, is deemed to be valid during the pendency of an appeals process. Two of the three opponents also filed their own appeals of the ruling. In January 2015, Sumitomo withdrew its opposition of the '395 patent, and the EPO accepted the withdrawal notice. The EPO also issued a notice that the appeal proceedings will proceed in the second quarter of 2016.

In addition to the above proceedings and now-concluded proceedings which have been referenced in prior filings, from time to time, the Company may have other proceedings that are pending which relate to patents the Company acquired as part of the Fuji Patent acquisition or which relate to technologies that are not currently widely utilized in the marketplace.

14. CONCENTRATION OF RISK:

Included in technology development and support revenue in the accompanying statement of income is $57,000 and $11,000 for the three months ended March 31, 2016 and 2015, respectively, of revenue which was derived from contracts with United States government agencies. Revenue derived from contracts with United States government agencies represented less than 1% of the consolidated revenue for the both three months ended March 31, 2016, and 2015.

Revenues and accounts receivable from the Company's largest customers were as follows (in thousands):

Customer	% of Revenues for the three months ended March 31, 2016	2015	Accounts Receivable as of March 31, 2016
A	50%	26%	$ 12,206
B	36%	41%	5,816
C	6%	1%	1,651

Table of Contents

Revenues from outside of North America represented approximately 99% of the consolidated revenue for both the three months ended March 31, 2016 and 2015. Revenues by geographic area are as follows (in thousands):

	Three Months Ended March 31,	
Country	2016	2015
South Korea	$25,963	$22,222
Japan	1,287	7,760
Other non-U.S. locations	2,370	1,016
Total non-U.S. locations	29,620	30,998
United States	83	225
Total revenue	$29,703	$31,223

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

Long-lived assets (net), by geographic area are as follows (in thousands):

	March 31, 2016	December 31, 2015
United States	$ 22,167	$ 22,187
Other	195	220
Total long-lived assets	$ 22,362	$ 22,407

Substantially all chemical materials were purchased from one supplier. See Note 8.

15. INCOME TAXES:

The Company is subject to income taxes in both the United States and foreign jurisdictions. The effective income tax rate was 32.1% and 32.0%, for the three months ended March 31, 2016 and 2015, respectively. For the three months ended March 31, 2016 and 2015, the Company recorded income tax expense of $921,000 and $618,000, respectively.

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 generate future taxable income to obtain benefit from the reversal of temporary differences, net operating loss carryforwards and tax credits. As part of its assessment management considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies. At this time there is no evidence to release the valuation allowances that relate to UDC Ireland, U.S. foreign tax credits and New Jersey research and development credits.

16. NET INCOME PER COMMON SHARE:

The Company computes earnings per share in accordance with ASC Topic 260, Earnings per Share ("ASC 260"), which requires earnings per share for each class of stock to be calculated using the two-class method. The two-class method is an allocation of income between the holders of common stock and the Company's participating security holders. Under the two-class method, income for the reporting period is allocated between common shareholders and other security holders based on their respective participation rights in undistributed income. Unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents are participating securities and, therefore, are included in computing earnings per share pursuant to the two-class method.

Basic net income per common share is computed by dividing net income allocated to common shareholders by the weighted-average number of shares of common stock outstanding for the period excluding unvested restricted stock units and performance units. Net income allocated to the holders of the Company's unvested restricted stock awards is calculated based on the shareholders proportionate share of weighted average shares of common stock outstanding on an if-converted basis. The effect of using the two-class method is immaterial to the consolidated financial statements and does not change the reported earnings per share figures and thus will not be presented herein.

For purposes of determining diluted net income per common share, basic net income per share is further adjusted to include the effect of potential dilutive common shares outstanding, including stock options, restricted stock units and performance units, and the impact of shares to be issued under the ESPP.

19

Table of Contents

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 three months ended March 31, 2016 and 2015 (in thousands, except share and per share data):

	Three Months Ended March 31,	
	2016	2015
Numerator:		
Net income	$1,949	$ 1,314
Denominator:		
Weighted average common shares outstanding – Basic	46,774,360	45,785,725
Effect of dilutive shares:		
Common stock equivalents arising from stock options and ESPP	9,442	163,779
Restricted stock awards and units and performance units	123,756	264,743
Weighted average common shares outstanding – Diluted	46,907,558	46,214,247
Net income per common share:		
Basic	$0.04	$ 0.03
Diluted	$0.04	$ 0.03

For the three months ended March 31, 2016, the combined effects of certain unvested restricted stock units and performance unit awards of 710 were excluded from the calculation of diluted EPS as their impact would have been antidilutive. For the three months ended March 31, 2015, the effects of certain performance award units of 37,132 were excluded from the calculation of diluted EPS as their impact would have been antidilutive as the units would not have been issued if the end of the reporting period was the end of the performance period.

Table of Contents

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," "n 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 that 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, 2015, 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 wearables, mobile phones, televisions, tablets, portable media devices, laptop computers, personal computers, and automotive interiors, as well as solid-state lighting applications. Since 1994, we have been exclusively engaged, and expect to continue to be primarily engaged, in funding and performing research and development activities relating to OLED technologies and materials, and commercializing these technologies and materials. We derive our revenue from the following:

- sales of OLED materials for evaluation, development and commercial manufacturing;
- intellectual property and technology licensing; and
- technology development and support, including government contract work and support provided to third parties for commercialization of their OLED products.

Material sales relate to our sale of OLED materials for incorporation into our 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.

We receive license and royalty payments under certain commercial, development and technology evaluation agreements, some of which are non-refundable advances. These payments may include royalty and license fees made pursuant to license agreements and also license fees included as part of certain commercial supply agreements. For arrangements with extended payment terms, where the fee is not fixed or determinable, we recognize revenue when the payment is due and payable. Royalty revenue and license fees included as part of commercial supply agreements are recognized when earned and the amount is fixed and determinable.

Currently, our most significant commercial license agreement, which runs through the end of 2017, is with SDC and covers the manufacture and sale of specified OLED display products. Under this agreement, we are 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 our 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 our 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.

Table of Contents

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.

In 2015, we entered into an OLED patent license agreement and an OLED commercial supply agreement with LG Display Co., Ltd. (LG Display), which were effective as of January 1, 2015 and superseded the existing 2007 commercial supply agreement between the parties. The new agreements have a term that is set to expire by the end of 2022. The patent license agreement provides LG Display a non-exclusive, royalty bearing portfolio license to make and sell OLED displays under the Company's patent portfolio. The patent license calls for license fees, prepaid royalties and running royalties on licensed products. The agreements include customary provisions relating to warranties, indemnities, confidentiality, assignability and business terms. The agreements provide for certain other minimum obligations relating to the volume of materials sales anticipated over the life of the agreements as well as minimum royalty revenue to be generated under the patent license agreement. The Company expects to generate revenue under these agreements that are predominantly tied to LG Display's sales of OLED licensed products. The OLED commercial supply agreement provides for the sales of materials for use by LG Display, which may include phosphorescent dopants and host materials.

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 we incur in relation to our government contracts. Revenues are recognized proportionally as research and development costs are incurred, or as defined milestones are achieved.

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, and have generated net income over the past three years, we incurred significant losses prior to this period, resulting in an accumulated deficit of $71.7 million as of March 31, 2016.

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 March 31, 2016 Compared to Three Months Ended March 31, 2015

We had operating income of $2.5 million for the three months ended March 31, 2016, compared to operating income of $1.8 million for the three months ended March 31, 2015. The increase in operating income was primarily due to the following:

- a decrease in operating expenses of $2.3 million, which was mainly due to a $3.5 million decrease in the cost of material sales; offset by
- a decrease in revenue of $1.5 million.

We had net income of $1.9 million, or $0.04 per basic and diluted share, for the three months ended March 31, 2016, compared to net income of $1.3 million, or $0.03 per basic and diluted share, for the three months ended March 31, 2015. The increase in net income was primarily due to:

- the increase in operating income of approximately $0.8 million; offset by
- a increase in income tax expense of $0.3 million.

Table of Contents

Revenue

The following table details our revenues for the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months Ended March 31,		(Decrease) Increase	
	2016	2015	$	%
REVENUE:				
Material sales	$24,304	$26,818	$(2,514)	(9)%
Royalty and license fees	5,342	4,375	967	22 %
Technology development and support revenue	57	30	27	90 %
Total revenue	$29,703	$31,223	$(1,520)	(5)%

Total revenue for the three months ended March 31, 2016 decreased by $1.5 million compared to the three months ended March 31, 2015. The decrease in revenue was primarily the result of decreased commercial chemical sales, mostly related to decreased sales of host materials, slightly offset by an increase in royalty and license fee revenue, as discussed below.

Material sales

The following table details our revenues derived from material sales for the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months Ended March 31,		(Decrease) Increase	
	2016	2015	$	%
Material sales:				
Commercial material sales	$22,114	$25,630	$(3,516)	(14)%
Developmental material sales	2,190	1,188	1,002	84 %
Total material sales	$24,304	$26,818	$(2,514)	(9)%

Commercial material sales for the three months ended March 31, 2016 decreased by $3.5 million compared to the three months ended March 31, 2015, primarily due to lower host sales.

Developmental material sales for the three months ended March 31, 2016 increased by $1.0 million compared to the three months ended March 31, 2015. The increase in our development material sales was primarily due to an increase in the number of grams sold.

Material sales included sales of both phosphorescent emitter and host materials which were comprised of the following for the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months Ended March 31,		Increase (Decrease)	
	2016	2015	$	%
Material sales:				
Phosphorescent emitter sales	$23,864	$21,411	$2,453	11 %
Host material sales	440	5,407	(4,967)	(92)%
Total material sales	$24,304	$26,818	$(2,514)	(9)%

Phosphorescent emitter sales for the three months ended March 31, 2016 increased by $2.5 million compared to the three months ended March 31, 2015. The increase in our phosphorescent emitter sales was primarily due to an increase in the number of grams, partially offset by a decrease in the price per gram sold.

Host material sales for the three months ended March 31, 2016 decreased by $5.0 million compared to the three months ended March 31, 2015. As we have discussed in our previous filings, the decrease in our host material sales, which began in 2014. was primarily due to a decrease in the number of grams sold due to what we believe was a result of our customer's continuing to sell new products that do not include our host materials. Based on our current sales forecast, we anticipate that sales of existing host material will be minimal. 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.

23

Table of Contents

Royalty and license fees

Royalty and license fees were as follows for the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months Ended March 31,		Increase	
	2016	2015	$	%
Royalty and license fees	$5,342	$4,375	$967	22%

Royalty and license fees for the three months ended March 31, 2016 increased by $1.0 million compared to the three months ended March 31, 2015. The increase was due to an increase in royalties recognized from a major customer, which were not recognized in the same period in the prior year due to the fact that those royalties are recognized one quarter in arrears. The increase was also due to an increase in license fees attributable to material sales to certain customers, which increased during the three months ended March 31, 2016. This increase was partially offset by the fact that we did not recognize any milestone payments in the three months ended March 31, 2016 compared to the recognition of a $1.9 million milestone payment during the three months ended March 31, 2015.

Royalty and license fees for both the three months ended March 31, 2016 and 2015 do not include revenues from SDC. Our patent license agreement with SDC is payable to us in semi-annual installments due in the second and fourth quarters of each annual period.

Cost of material sales

Cost of commercial material sales were as follows for the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months Ended March 31,	
	2016	2015
Commercial material sales	$22,114	$25,630
Cost of commercial material sales	4,992	8,521
% of commercial material sales	23 %	33 %

Cost of commercial material sales for the three months ended March 31, 2016 decreased by $3.5 million compared to the three months ended March 31, 2015, primarily due to the decrease in host material sales, which have less favorable margins than our emitter materials.

Cost of commercial 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 has already been included in research and development expense.

Research and development

Research and development expenses were $10.5 million for the three months ended March 31, 2016, compared to $9.9 million for the three months ended March 31, 2015. The increase was primarily due to increased salary and salary related expenses, including post-retirement benefits and stock-based compensation.

Selling, general and administrative

Selling, general and administrative expenses were $6.7 million for the three months ended March 31, 2016, compared to $6.2 million for the three months ended March 31, 2015. The increase was primarily due to an increase in salary and salary related expenses, including post-retirement benefits and stock based compensation.

Patent costs and amortization of acquired technology

Patent costs and amortization of acquired technology expenses were $4.1 million for the three months ended March 31, 2016, compared to $4.0 million for the three months ended March 31, 2015.

Royalty and license expense

Royalty and license expenses were $0.9 million for the three months ended March 31, 2016, compared to $0.8 million for the three months ended March 31, 2015. See Note 6 in Notes to Consolidated Financial Statements for further discussion.

Income taxes

The effective income tax rate was 32.1% and 32.0%, for the three months ended March 31, 2016 and 2015, respectively. For the three months ended March 31, 2016 and 2015, the Company recorded income tax expense of $921,000 and $618,000, respectively.

Table of Contents

In assessing the realizability of deferred tax assets, we consider 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 our ability to generate future taxable income to obtain benefit from the reversal of temporary differences, net operating loss carryforwards and tax credits. As part of our assessment, we consider the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies. At this time there is no evidence to release the valuation allowances that relate to UDC Ireland, foreign tax credits and New Jersey research and development credits.

Liquidity and Capital Resources

Our principle sources of liquidity are our cash and cash equivalents and our short-term investments. As of March 31, 2016, we had cash and cash equivalents of $110.1 million and short-term investments of $269.5 million, for a total of $379.6 million. This compares to cash and cash equivalents of $97.5 million and short-term investments of $298.0 million, for a total of $395.5 million, as of December 31, 2015. The increase in cash and cash equivalents of $12.6 million was primarily due to cash provided by investing activities related to proceeds received from the net sale of short-term investments.

Cash provided by operating activities was $0.2 million for the three months ended March 31, 2016, compared to cash provided by operating activities of $47.0 million for the three months ended March 31, 2015. The decrease in cash provided by operating activities was primarily due to the fact that the Company did not receive a large prepaid royalty and license fee from a customer in the three months ended March 31, 2016 compared to the receipt of $42 million from a customer for prepaid royalty and license fees in the three months ended March 31, 2015.

Cash provided by investing activities was $14.1 million for the three months ended March 31, 2016, compared to cash provided by investing activities of $37.0 million for the three months ended March 31, 2015. The decrease in cash provided by investing activities was mainly due to the timing of maturities and purchases of investments resulting in net sales of $14.6 million for the three months ended March 31, 2016, compared to net sales of $38.9 million for the three months ended March 31, 2015.

Cash used in financing activities was $1.8 million for the three months ended March 31, 2016, compared to $4.2 million for the three months ended March 31, 2015. The decrease in cash used in financing activities was primarily due to a decrease in the payment of withholding taxes related to employee stock based compensation of $3.0 million in the three months ended March 31, 2016 compared to the three months ended March 31, 2015.

Working capital was $407.2 million as of March 31, 2016, compared to $413.2 million as of December 31, 2015. The decrease in working capital is primarily due to the decrease in short term investments and accounts receivable, offset by an increase in cash and cash equivalents and a decrease in accrued expenses.

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 twelve months.

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

Critical Accounting Policies and Estimates

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

We believe that our accounting policies related to revenue recognition and deferred revenue, the valuation and recoverability of acquired technology, stock-based compensation, income taxes and our Supplemental Executive Retirement Plan, are our “critical accounting policies” as contemplated by the SEC.

Refer to our Annual Report on Form 10-K for the year ended December 31, 2015, for additional discussion of our critical accounting policies.

Table of Contents

Contractual Obligations

Refer to our Annual Report on Form 10-K for the year ended December 31, 2015 for a discussion of our contractual obligations.

Off-Balance Sheet Arrangements

As of March 31, 2016, we had no off-balance sheet arrangements in the nature of guarantee contracts, retained or contingent interests in assets transferred to unconsolidated entities (or similar arrangements serving as credit, liquidity or market risk support to unconsolidated entities for any such assets), or obligations (including contingent obligations) arising out of variable interests in unconsolidated entities providing financing, liquidity, market risk or credit risk support to us, or that engage in leasing, hedging or research and development services with us.

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 “Fair Value Measurements” in Note 5 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 March 31, 2016. 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 quarter ended March 31, 2016 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 issues patents provides both third parties and applicants an opportunity to seek a further review of an issued patent. The process for requesting and considering such reviews is specific to the jurisdiction that issued the patent in question, and generally does not provide for claims of monetary damages or a review of specific claims of infringement. The conclusions made by the reviewing administrative bodies tend to be appealable and generally are limited in scope and applicability to the specific claims and jurisdiction in question.

Table of Contents

We believe that opposition proceedings are frequently commenced in the ordinary course of business by third parties who may believe that one or more claims in a patent do not comply with the technical or legal requirements of the specific jurisdiction in which the patent was issued. We view these proceedings as reflective of our goal of obtaining the broadest legally permissible patent coverage permitted in each jurisdiction. Once a proceeding is initiated, as a general matter, the issued patent continues to be presumed valid until the jurisdiction’s applicable administrative body issues a final non-appealable decision. Depending on the jurisdiction, the outcome of these proceedings could include affirmation, denial or modification of some or all of the originally issued claims. We believe that as OLED technology becomes more established and as our patent portfolio increases in size, so will the number of these proceedings.

Below are summaries of certain active proceedings that have been commenced against issued patents that are either exclusively licensed to us or which are now assigned to us. We do not believe that the confirmation, loss or modification of our rights in any individual claim or set of claims that are the subject of the following legal proceedings would have a material impact on our materials sales or licensing business or on our consolidated financial statements, including our consolidated statements of income, as a whole. However, as noted within the descriptions, some of the following proceedings involve issued patents that relate to our fundamental phosphorescent OLED technologies and we intend to vigorously defend against claims that, in our opinion, seek to restrict or reduce the scope of the originally issued claim, which may require the expenditure of significant amounts of our resources. In certain circumstances, when permitted, we may also utilize the proceedings to request modification of the claims to better distinguish the patented invention from any newly identified prior art and/or improve the claim scope of the patent relative to commercially important categories of the invention. The entries marked with an "*" relate to our UniversalPHOLED phosphorescent OLED technology, some of which may be commercialized by us.

Opposition to European Patent No. 1394870*

On April 20, 2010, 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 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.

An Oral Hearing was held before an EPO panel of first instance in Munich, Germany on April 8-9, 2014. After the completion of the hearing, the panel decided that the broad claims originally issued did not satisfy EPO requirements and amended the claims to more narrowly define the scope of the claims. The '870 patent, in its amended form, was held by the panel to comply with EPO requirements.

We believe the EPO's decision relating to the broad original claims is erroneous and have appealed the ruling to reinstate a broader set of claims. This patent, as originally granted by the EPO, is deemed valid during the pendency of the appeals process.

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.

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 by Semiconductor Energy Laboratory, Co., Ltd. for our Japanese Patent No. JP-4511024 (the JP '024 patent), which issued on May 14, 2010. 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, 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. On October 31, 2013, the Japanese IP High Court ruled that the prior art references relied on by the JPO did not support the JPO’s findings, 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. The JPO subsequently 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 decision to reinstate a broader set of claims but the IP High Court declined to reinstate the broader claims. We have appealed the IP High Court ruling to the Japanese Supreme Court for reconsideration of the legal basis of the IP High Court's decision. This patent, as originally granted by the JPO, is deemed valid during the pendency of the appeals process.

Although we cannot provide any assurances as to the possible outcome of future appellate proceedings which we may elect to pursue, if any, the patent is expected to be maintained at least with respect to the narrower set of claims which were not the subject of the IP High Court's invalidation ruling.

Table of Contents

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 and a hearing was held in December 2015, wherein the EPO Opposition Division revoked the patent claims for alleged insufficiencies under EPC Article 83. We believe the EPO's decision relating to the original claims is erroneous, and we will appeal the decision. This patent, as originally granted, is deemed valid during the pendency of the appeals process.

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. 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 EP '637 patent, and, in part, to the U.S. Patents 7,001,536; 6,902,830; and 6,830,828 and to JP patents 4358168 and 4357781. 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 EP '395 patent, but narrowed the scope of the original claims.

On February 26, 2014, we appealed the ruling to reinstate a broader set of claims. The patent, as originally granted by the EPO, is deemed to be valid during the pendency of the appeals process. Two of the three opponents also filed their own appeals of the ruling. In January 2015, Sumitomo withdrew its opposition of the '395 patent, and the EPO accepted the withdrawal notice. The EPO issued a notice that the appeal proceedings will proceed in the second quarter of 2016.

In addition to the above proceedings, from time to time, we may have other proceedings that are pending which relate to patents we acquired as part of the Fuji Patent acquisition or which relate to technologies that are not currently widely utilized in the marketplace.

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, 2015.

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

Share Repurchases

During the quarter ended March 31, 2016, we acquired 9,751 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 first quarter of 2016 (dollar amounts in thousands, other than per share amounts):

Period	Total Number of Shares Purchased	Weighted Average Price Paid per Share	
January 1 - January 31	—	$	—
February 1 - February 29	—	—	
March 1 - March 31	9,751	51.40	
Total	9,751		

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

28

Table of Contents

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

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

Exhibit Number	Description
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

Explanation of footnotes to listing of exhibits:

* Filed herewith.

** Furnished herewith.

Table of Contents

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

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

Date: May 5, 2016