

UNITED STATES
 SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549
 FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2021

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 001-33155



IPG PHOTONICS CORPORATION
(Exact name of registrant as specified in its charter)

Delaware

*(State or other jurisdiction of
incorporation or organization)*

50 Old Webster Road, Oxford, Massachusetts
(Address of principal executive offices)

04-3444218

*(I.R.S. Employer
Identification Number)*

01540

(Zip code)

Registrant's telephone number, including area code: (508) 373-1100

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

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.0001 per share	IPGP	The Nasdaq Stock Market LLC

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data file required to be submitted 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 such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and

Large Accelerated Filer	☒	Accelerated Filer	☐
Non-Accelerated Filer	☐	Smaller Reporting Company	☐
Emerging Growth Company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of August 3, 2021, there were 53,496,953 shares of the registrant's common stock outstanding.

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PART I—FINANCIAL INFORMATION
ITEM 1. UNAUDITED INTERIM FINANCIAL STATEMENTS

IPG PHOTONICS CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2021	December 31, 2020
	(In thousands, except share and per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 754,199	\$ 876,231
Short-term investments	743,210	514,835
Accounts receivable, net	250,669	264,321
Inventories	404,547	364,993
Prepaid income taxes	64,810	69,893
Prepaid expenses and other current assets	73,157	57,804
Total current assets	2,290,592	2,148,077
Deferred income taxes, net	45,751	43,197
Goodwill	39,000	41,366
Intangible assets, net	59,070	62,114
Property, plant and equipment, net	612,420	597,527
Other assets	39,679	43,419
Total assets	\$ 3,086,512	\$ 2,935,700
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of long-term debt	\$ 3,846	\$ 3,810
Accounts payable	50,714	25,748
Accrued expenses and other current liabilities	192,164	176,740
Income taxes payable	9,181	8,280
Total current liabilities	255,905	214,578
Deferred income taxes and other long-term liabilities	92,102	92,854
Long-term debt, net of current portion	32,225	34,157
Total liabilities	380,232	341,589
Commitments and contingencies (Note 12)		
IPG Photonics Corporation equity:		
Common stock, \$0.0001 par value, 175,000,000 shares authorized; 55,725,678 and 53,491,889 shares issued and outstanding, respectively, at June 30, 2021; 55,461,246 and 53,427,234 shares issued and outstanding, respectively, at December 31, 2020.	6	6
Treasury stock, at cost, 2,233,789 and 2,034,012 shares held at June 30, 2021 and December 31, 2020, respectively.	(345,345)	(303,614)
Additional paid-in capital	883,546	854,301
Retained earnings	2,326,118	2,188,191
Accumulated other comprehensive loss	(159,407)	(146,065)
Total IPG Photonics Corporation equity	2,704,918	2,592,819
Non-controlling interests	1,362	1,292
Total equity	2,706,280	2,594,111
Total liabilities and equity	\$ 3,086,512	\$ 2,935,700

See notes to condensed consolidated financial statements.

IPG PHOTONICS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF INCOME

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	(In thousands, except per share data)			
Net sales	\$ 371,658	\$ 296,411	\$ 717,243	\$ 545,653
Cost of sales	191,130	159,962	372,724	306,328
Gross profit	180,528	136,449	344,519	239,325
Operating expenses:				
Sales and marketing	19,193	17,326	38,076	36,009
Research and development	35,191	31,584	68,530	63,422
General and administrative	31,066	26,399	61,158	53,523
Impairment of long-lived assets and other restructuring charges	—	1,165	—	1,165
Loss (gain) on foreign exchange	2,826	12,766	(4,339)	(6,799)
Total operating expenses	88,276	89,240	163,425	147,320
Operating income	92,252	47,209	181,094	92,005
Other (expense) income, net:				
Interest (expense) income, net	(407)	1,856	(902)	4,929
Other income, net	28	449	281	640
Total other (expense) income	(379)	2,305	(621)	5,569
Income before provision for income taxes	91,873	49,514	180,473	97,574
Provision for income taxes	22,196	11,148	42,574	22,442
Net income	69,677	38,366	137,899	75,132
Less: net (loss) income attributable to non-controlling interests	(123)	140	(28)	503
Net income attributable to IPG Photonics Corporation common stockholders	\$ 69,800	\$ 38,226	\$ 137,927	\$ 74,629
Net income attributable to IPG Photonics Corporation per common share:				
Basic	\$ 1.31	\$ 0.72	\$ 2.58	\$ 1.41
Diluted	\$ 1.29	\$ 0.71	\$ 2.55	\$ 1.39
Weighted average common shares outstanding:				
Basic	53,472	53,040	53,548	53,083
Diluted	53,999	53,530	54,145	53,628

See notes to condensed consolidated financial statements.

IPG PHOTONICS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	(In thousands)			
Net income	\$ 69,677	\$ 38,366	\$ 137,899	\$ 75,132
Other comprehensive income, net of tax:				
Translation adjustments	19,116	35,534	(13,363)	(37,883)
Unrealized gain (loss) on derivatives	51	(1)	119	35
Total other comprehensive income (loss)	19,167	35,533	(13,244)	(37,848)
Comprehensive income	88,844	73,899	124,655	37,284
Less: comprehensive income attributable to non-controlling interests	194	93	70	237
Comprehensive income attributable to IPG Photonics Corporation	\$ 88,650	\$ 73,806	\$ 124,585	\$ 37,047

See notes to condensed consolidated financial statements.

IPG PHOTONICS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Six Months Ended June 30,	
	2021	2020
	(In thousands)	
Cash flows from operating activities:		
Net income	\$ 137,899	\$ 75,132
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	47,976	47,350
Deferred income taxes	(1,856)	1,591
Stock-based compensation	18,678	17,653
Impairment of long-lived assets	—	671
Unrealized gain on foreign currency transactions	(1,728)	(8,737)
Other	3,571	2,635
Provisions for inventory, warranty and bad debt	32,654	24,484
Changes in assets and liabilities that provided (used) cash, net of acquisitions:		
Accounts receivable	12,525	33,011
Inventories	(61,220)	(15,160)
Prepaid expenses and other assets	(2,187)	(2,193)
Accounts payable	24,879	13,245
Accrued expenses and other liabilities	595	(15,590)
Income and other taxes payable	(8,596)	(43,836)
Net cash provided by operating activities	203,190	130,256
Cash flows from investing activities:		
Purchases of and deposits on property, plant and equipment	(54,344)	(37,370)
Proceeds from sales of property, plant and equipment	258	460
Purchases of short-term investments	(1,014,033)	(421,321)
Proceeds from short-term investments	785,023	422,912
Other	(547)	115
Net cash used in investing activities	(283,643)	(35,204)
Cash flows from financing activities:		
Principal payments on long-term borrowings	(1,896)	(1,862)
Proceeds from issuance of common stock under employee stock option and purchase plans less payments for taxes related to net share settlement of equity awards	10,567	8,271
Purchase of treasury stock, at cost	(41,731)	(28,230)
Payment of purchase price holdback from business combination	(2,624)	(1,650)
Net cash used in financing activities	(35,684)	(23,471)
Effect of changes in exchange rates on cash, cash equivalents and restricted cash	(8,217)	(4,523)
Net (decrease) increase in cash, cash equivalents and restricted cash	(124,354)	67,058
Cash, cash equivalents and restricted cash — Beginning of period	878,553	682,984
Cash and cash equivalents — End of period	\$ 754,199	\$ 750,042
Supplemental disclosure of cash flow information:		
Cash paid for interest	\$ 1,388	\$ 1,061
Cash paid for income taxes	\$ 41,809	\$ 53,670
Non-cash transactions:		
Demonstration units transferred from inventory to other assets	\$ 2,704	\$ 4,279
Inventory transferred to machinery and equipment	\$ 1,353	\$ 1,928
Changes in accounts payable related to property, plant and equipment	\$ 416	\$ 2,297
Leased assets obtained in exchange for new operating lease liabilities	\$ 1,258	\$ 1,440

See Note 4 for reconciliation of cash, cash equivalents and restricted cash between the condensed consolidated balance sheets and condensed consolidated statements of cash flows.

See notes to condensed consolidated financial statements.

IPG PHOTONICS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF EQUITY

Three Months Ended June 30,										
(In thousands, except share data)	Common Stock			Treasury Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Non-controlling Interest	Total Stockholders' Equity
	Shares	Amount		Shares	Amount					
Balance, April 1, 2021	53,623,865	\$ 6		(2,048,918)	\$ (306,662)	\$ 868,097	\$ 2,256,318	\$ (178,257)	\$ 1,168	\$ 2,640,670
Exercise of stock options and vesting of RSUs and PSUs	37,824	—		—	—	2,886	—	—	—	2,886
Common stock issued under employee stock purchase plan	15,071	—		—	—	2,700	—	—	—	2,700
Purchased common stock	(184,871)	—		(184,871)	(38,683)	—	—	—	—	(38,683)
Stock-based compensation	—	—		—	—	9,863	—	—	—	9,863
Net income	—	—		—	—	—	69,800	—	(123)	69,677
Foreign currency translation adjustments	—	—		—	—	—	—	18,799	317	19,116
Unrealized gain on derivatives, net of tax	—	—		—	—	—	—	51	—	51
Balance, June 30, 2021	53,491,889	\$ 6		(2,233,789)	\$ (345,345)	\$ 883,546	\$ 2,326,118	\$ (159,407)	\$ 1,362	\$ 2,706,280
Balance, April 1, 2020	53,127,181	\$ 6		(1,841,171)	\$ (278,446)	\$ 788,568	\$ 2,065,022	\$ (220,081)	\$ 861	\$ 2,355,930
Exercise of stock options and vesting of RSUs and PSUs	165,852	—		—	—	11,217	—	—	—	11,217
Common stock issued under employee stock purchase plan	20,484	—		—	—	2,550	—	—	—	2,550
Purchased common stock	(131,369)	—		(131,369)	(15,514)	—	—	—	—	(15,514)
Stock-based compensation	—	—		—	—	9,224	—	—	—	9,224
Net income	—	—		—	—	—	38,226	—	140	38,366
Foreign currency translation adjustments	—	—		—	—	—	—	35,581	(47)	35,534
Unrealized (loss) on derivatives, net of tax	—	—		—	—	—	—	(1)	—	(1)
Balance, June 30, 2020	53,182,148	\$ 6		(1,972,540)	\$ (293,960)	\$ 811,559	\$ 2,103,248	\$ (184,501)	\$ 954	\$ 2,437,306
Six Months Ended June 30,										
(In thousands, except share data)	Common Stock			Treasury Stock		Additional Paid In Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Non-controlling Interest	Total Stockholders' Equity
	Shares	Amount		Shares	Amount					
Balance, January 1, 2021	53,427,234	\$ 6		(2,034,012)	\$ (303,614)	\$ 854,301	\$ 2,188,191	\$ (146,065)	\$ 1,292	\$ 2,594,111
Exercise of stock options and vesting of RSUs and PSUs	249,361	—		—	—	7,867	—	—	—	7,867
Common stock issued under employee stock purchase plan	15,071	—		—	—	2,700	—	—	—	2,700
Purchased common stock	(199,777)	—		(199,777)	(41,731)	—	—	—	—	(41,731)
Stock-based compensation	—	—		—	—	18,678	—	—	—	18,678
Net income	—	—		—	—	—	137,927	—	(28)	137,899
Foreign currency translation adjustments	—	—		—	—	—	—	(13,461)	98	(13,363)
Unrealized gain on derivatives, net of tax	—	—		—	—	—	—	119	—	119
Balance, June 30, 2021	53,491,889	\$ 6		(2,233,789)	\$ (345,345)	\$ 883,546	\$ 2,326,118	\$ (159,407)	\$ 1,362	\$ 2,706,280
Balance, January 1, 2020	53,010,875	\$ 5		(1,732,352)	\$ (265,730)	\$ 785,636	\$ 2,028,734	\$ (146,919)	\$ 717	\$ 2,402,443
Exercise of stock options and vesting of RSUs and PSUs	390,977	1		—	—	5,720	—	—	—	5,721
Common stock issued under employee stock purchase plan	20,484	—		—	—	2,550	—	—	—	2,550
Purchased common stock	(240,188)	—		(240,188)	(28,230)	—	—	—	—	(28,230)
Stock-based compensation	—	—		—	—	17,653	—	—	—	17,653
Recently adopted accounting standards	—	—		—	—	—	(115)	—	—	(115)
Net income	—	—		—	—	—	74,629	—	503	75,132
Foreign currency translation adjustments	—	—		—	—	—	—	(37,617)	(266)	(37,883)
Unrealized gain on derivatives, net of tax	—	—		—	—	—	—	35	—	35
Balance, June 30, 2020	53,182,148	\$ 6		(1,972,540)	\$ (293,960)	\$ 811,559	\$ 2,103,248	\$ (184,501)	\$ 954	\$ 2,437,306

See notes to condensed consolidated financial statements.

IPG PHOTONICS CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

1. BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation — The accompanying unaudited condensed consolidated financial statements have been prepared by IPG Photonics Corporation, or "IPG", "its" or the "Company". Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). The condensed consolidated financial statements include the Company's accounts and those of its subsidiaries. All intercompany balances have been eliminated in consolidation. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto in the Company's Annual Report on Form 10-K for the year ended December 31, 2020.

In the opinion of the Company's management, the financial information for the interim periods presented reflects all adjustments necessary for a fair presentation of the Company's financial position, results of operations and cash flows. The results reported in these condensed consolidated financial statements are not necessarily indicative of results that may be expected for the entire year.

Accounts Receivable and Allowance for Doubtful Accounts — The Company maintains an allowance for doubtful accounts to provide for the estimated amount of accounts receivable that will not be collected. The allowance is based upon an estimate of expected credit losses over the life of outstanding receivables. The estimate involves an assessment of customer creditworthiness, historical payment experience, an assumption of future expected credit losses, and the age of outstanding receivables.

Activity related to the allowance for doubtful accounts was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Balance, beginning of period	\$ 2,307	\$ 2,135	\$ 2,156	\$ 2,547
Provision for bad debts, net of recoveries	(47)	(162)	141	(349)
Uncollectable accounts written off	(59)	(71)	(59)	(71)
Foreign currency translation	50	97	13	(128)
Balance, end of period	\$ 2,251	\$ 1,999	\$ 2,251	\$ 1,999

Subsequent Events — The Company has considered the impact of subsequent events through the filing date of these financial statements. There were no events through the filing date of these financial statements required to be disclosed.

2. RECENT ACCOUNTING PRONOUNCEMENTS

Adopted Pronouncements —

In December 2019, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2019-12, "Simplifying the Accounting for Income Taxes" ("ASU 2019-12"), which modifies ASC 740 to simplify the accounting for income taxes. The Company adopted ASU 2019-12 as of January 1, 2021. The impact from adopting this standard was immaterial.

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-13, "Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"), which adds an impairment model (known as the current expected credit loss ("CECL") model) that is based on expected losses rather than incurred losses. Under the new guidance, an entity recognizes an allowance for its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. The ASU is also intended to reduce the complexity by decreasing the number of credit impairment models that entities use to account for debt instruments. The Company adopted ASU 2016-03, along with its subsequent clarifications, as of January 1, 2020. The cumulative effect of the changes made to the Company's condensed consolidated January 1, 2020 balance sheet for the adoption of ASU 2016-13 was as follows:

IPG PHOTONICS CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(In thousands, except share and per share data)

	Balance at December 31, 2019	Adoption of ASU 2016-13	Balance at January 1, 2020
Balance Sheet			
Accounts receivable, net	\$ 238,479	\$ (148)	\$ 238,331
Deferred income taxes, net	31,395	33	31,428
Retained earnings	2,028,734	(115)	2,028,619

Other Pronouncements Currently Under Evaluation —

In March 2020, the FASB issued ASU No. 2020-04, "Reference Rate Reform (Topic 848)" ("ASU 2020-04"), which offers optional expedients related to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. ASU 2020-04, along with its subsequent clarifications, is effective from March 12, 2020 through December 31, 2022. The Company is currently evaluating the standard but does not expect that it will have a material effect on its condensed consolidated financial statements, if adopted.

3. REVENUE FROM CONTRACTS WITH CUSTOMERS

Sales are derived from products for different applications: fiber lasers, diode lasers, systems and accessories for materials processing; fiber lasers, diodes and amplifiers for advanced applications; fiber amplifiers and transceivers for communications applications; and fiber lasers, systems and fibers for medical applications.

The following tables represent a disaggregation of revenue from contracts with customers:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Sales by Application				
Materials processing	\$ 345,653	\$ 271,708	\$ 662,894	\$ 489,782
Other applications	26,005	24,703	54,349	55,871
Total	\$ 371,658	\$ 296,411	\$ 717,243	\$ 545,653
Sales by Product				
High Power Continuous Wave ("CW") Lasers	\$ 189,744	\$ 157,478	\$ 360,226	\$ 276,794
Medium Power CW Lasers	18,177	10,692	34,059	21,945
Pulsed Lasers	61,773	42,577	117,168	74,416
Quasi-Continuous Wave ("QCW") Lasers	15,525	13,708	29,191	23,581
Laser and Non-Laser Systems	29,597	24,942	56,713	43,576
Other Revenue including Amplifiers, Service, Parts, Accessories and Change in Deferred Revenue	56,842	47,014	119,886	105,341
Total	\$ 371,658	\$ 296,411	\$ 717,243	\$ 545,653

IPG PHOTONICS CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(In thousands, except share and per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Sales by Geography				
North America	\$ 66,134	\$ 53,901	\$ 139,518	\$ 121,240
Europe:				
Germany	21,748	17,634	48,008	35,045
Other including Eastern Europe/CIS	74,339	46,547	132,932	103,779
Asia and Australia:				
China	159,075	145,216	298,908	213,815
Japan	10,322	14,672	21,199	28,357
Other	37,654	16,874	70,764	39,697
Rest of World	2,386	1,567	5,914	3,720
Total	<u>\$ 371,658</u>	<u>\$ 296,411</u>	<u>\$ 717,243</u>	<u>\$ 545,653</u>
Timing of Revenue Recognition				
Goods and services transferred at a point in time	\$ 357,345	\$ 282,159	\$ 689,877	\$ 515,595
Goods and services transferred over time	14,313	14,252	27,366	30,058
Total	<u>\$ 371,658</u>	<u>\$ 296,411</u>	<u>\$ 717,243</u>	<u>\$ 545,653</u>

One of the Company's customers accounted for 27% and 21% of the Company's net accounts receivable as of June 30, 2021 and December 31, 2020, respectively.

The Company enters into contracts to sell lasers and spare parts, for which revenue is generally recognized upon shipment or delivery, depending on the terms of the contract. The Company also provides installation services and extended warranties. The Company frequently receives consideration from a customer prior to transferring goods to the customer under the terms of a sales contract. The Company records customer deposits related to these prepayments, which represent a contract liability. The Company also records deferred revenue related to installation services when consideration is received before the services have been performed. The standalone selling price for installation services is determined based on the estimated number of days of service technician time required for installation at standard service rates. The Company recognizes customer deposits and deferred revenue as net sales after control of the goods or services has been transferred to the customer and all revenue recognition criteria are met. The Company bills customers for extended warranties upon entering into the agreement with the customer, resulting in deferred revenue. The Company recognizes revenue over time on contracts for the sale of robotics systems. The timing of customer payments on these contracts generally differs from the timing of revenue recognized. If revenue recognized exceeds customer payments, a contract asset is recorded and if customer payments exceed revenue recognized, a contract liability is recorded. Contract assets are included within prepaid expense and other current assets on the condensed consolidated balance sheets. Contract liabilities are included within accrued expenses and other current liabilities on the condensed consolidated balance sheets. Certain deferred revenues related to extended warranties in excess one year from the balance sheet date are included within deferred income taxes and other long-term liabilities on the condensed consolidated balance sheets.

IPG PHOTONICS CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
(In thousands, except share and per share data)

The following table reflects the changes in the Company's contract assets and liabilities for the six months ended June 30, 2021 and 2020:

	June 30, 2021	December 31, 2020	Change	June 30, 2020	December 31, 2019	Change
Contract assets						
Contract assets	\$ 7,044	\$ 8,999	\$ (1,955)	\$ 8,349	\$ 9,645	\$ (1,296)
Contract liabilities						
Contract liabilities - current	80,366	71,246	9,120	54,587	59,531	(4,944)
Contract liabilities - long-term	2,856	2,189	667	2,242	1,820	422

During the three months ended June 30, 2021 and 2020 the Company recognized revenue of \$17,519 and \$16,447, respectively, that was included in contract liabilities at the beginning of each period. During the six months ended June 30, 2021 and 2020 the Company recognized revenue of \$47,897 and \$31,443, respectively, that was included in contract liabilities at the beginning of each period.

The Company has elected the practical expedient in ASC 606-10-50-14, whereby the performance obligations for contracts with an original expected duration of one year or less are not disclosed. The following table represents the Company's remaining performance obligations from contracts that are recognized over time as of June 30, 2021:

	Remaining Performance Obligations						
	2021 ^(a)	2022	2023	2024	2025	Thereafter	Total
Revenue expected to be recognized for extended warranty agreements	\$ 3,041	\$ 2,006	\$ 1,034	\$ 815	\$ 377	\$ 33	\$ 7,306
Revenue to be earned over time from contracts to sell robotic systems	23,892	2,589	237	—	—	—	26,718
Total	\$ 26,933	\$ 4,595	\$ 1,271	\$ 815	\$ 377	\$ 33	\$ 34,024

^(a) For the six-month period beginning July 1, 2021.

4. RESTRICTED CASH

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets to the total of the same amounts shown in the condensed consolidated statements of cash flows.

	June 30, 2021	June 30, 2020	December 31, 2020	December 31, 2019
Cash and cash equivalents	\$ 754,199	\$ 747,859	\$ 876,231	\$ 680,070
Restricted cash included in prepaid expenses and other current assets	—	2,183	2,322	—
Restricted cash included in other assets	—	—	—	2,914
Cash, cash equivalents and restricted cash in the condensed consolidated statements of cash flows	\$ 754,199	\$ 750,042	\$ 878,553	\$ 682,984

During the first quarter of 2021, the Company released \$2,127 of restricted cash held back related to the Company's acquisition of the submarine networks division (SND) of Padtec SA, for indemnities provided by the seller.

5. FAIR VALUE MEASUREMENTS

The Company's financial instruments consist of cash equivalents, short-term investments, accounts receivable, accounts payable, drawings on revolving lines of credit, long-term debt, interest rate swaps and contingent purchase consideration.

The valuation techniques used to measure fair value are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect internal market assumptions. These two types of inputs create the following fair value hierarchy: Level 1, defined as observable inputs such as quoted prices for identical instruments in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs for which little or no market data exists, therefore

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requiring an entity to develop its own assumptions. The Company classifies its financial instruments according to the prescribed criteria.

The following table presents fair value information related to the Company's assets and liabilities measured at amortized cost on the condensed consolidated balance sheets with the exception of the interest rate swap and contingent purchase consideration, which is measured at fair value:

	Fair Value Measurements at June 30, 2021			
	Total	Level 1	Level 2	Level 3
Assets				
Cash equivalents:				
Money market fund deposits and term deposits	\$ 263,058	\$ 263,058	\$ —	\$ —
Commercial paper	57,470	—	57,470	—
Corporate bonds	12,003	—	12,003	—
Municipal bonds	10,999	—	10,999	—
Short-term investments:				
Commercial paper	554,794	—	554,794	—
Corporate bonds	177,265	—	177,265	—
Municipal bonds	8,117	—	8,117	—
Certificates of deposit	3,000	—	3,000	—
Total	\$ 1,086,706	\$ 263,058	\$ 823,648	\$ —
Liabilities				
Long-term debt	\$ 36,285	\$ —	\$ 36,285	\$ —
Contingent purchase consideration	1,529	—	—	1,529
Interest rate swap	448	—	448	—
Total	\$ 38,262	\$ —	\$ 36,733	\$ 1,529
	Fair Value Measurements at December 31, 2020			
	Total	Level 1	Level 2	Level 3
Assets				
Cash equivalents:				
Money market fund deposits and term deposits	\$ 218,984	\$ 218,984	\$ —	\$ —
Commercial paper	162,749	—	162,749	—
Corporate bonds	29,010	—	29,010	—
U.S. Treasury and agency obligations	6,999	—	6,999	—
Short-term investments:				
Commercial paper	368,665	—	368,665	—
Corporate bonds	88,171	—	88,171	—
U.S. Treasury and agency obligations	49,996	—	49,996	—
Municipal bonds	7,997	—	7,997	—
Total	\$ 932,571	\$ 218,984	\$ 713,587	\$ —
Liabilities				
Long-term debt	\$ 38,402	\$ —	\$ 38,402	\$ —
Contingent purchase consideration	1,963	—	—	1,963
Interest rate swaps	603	—	603	—
Total	\$ 40,968	\$ —	\$ 39,005	\$ 1,963

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Short-term investments consist of liquid investments including U.S. government and government agency notes, corporate bonds, commercial paper and certificates of deposit with original maturities of greater than three months but less than one year and are recorded at amortized cost. There were no impairments for the investments considered held-to-maturity during the quarters ended June 30, 2021 and 2020. There were no current expected credit loss allowances for the investments considered held-to-maturity at June 30, 2021 and 2020. The Company holds highly-rated held-to-maturity instruments that are within one year of maturity.

The following table presents the effective maturity dates of debt investments, which are held-to-maturity:

	June 30, 2021		December 31, 2020	
	Book Value	Fair Value	Book Value	Fair Value
Investment maturity				
Less than 1 year	\$ 743,210	\$ 743,176	\$ 514,835	\$ 514,829

The Company entered into an interest rate swap that is designated as a cash flow hedge associated with a long-term note issued during the second quarter of 2016 that will terminate with the long-term note in May 2023. The fair value at June 30, 2021 for the interest rate swap considered pricing models whose inputs are observable for the securities held by the Company.

At June 30, 2021 and December 31, 2020, the Company's long-term notes consisted of a variable rate note and a fixed rate note, and are reported at amortized cost on the condensed consolidated balance sheets. For disclosure purposes, the fair value of the long-term notes was estimated using a discounted cash flow model using observable market interest rates and are classified as a level 2. Based on the discounted cash flow model, the fair values of the long-term notes at June 30, 2021 and December 31, 2020 were \$36,285 and \$38,402 respectively, as compared to the book value of \$36,071 and \$37,967, respectively.

The fair values of contingent purchase consideration at June 30, 2021 and December 31, 2020 were determined using an income approach at the respective business combination date and at the reporting date. The approach is based on significant inputs that are not observable in the market and include key assumptions such as assessing the probability of meeting certain milestones required to earn the contingent purchase consideration.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021		2021	
	2021	2020	2021	2020
Auction rate securities				
Balance, beginning of period	\$ —	\$ 594	\$ —	\$ 592
Change in fair value and accretion	—	2	—	4
Balance, end of period	\$ —	\$ 596	\$ —	\$ 596
Contingent purchase consideration				
Balance, beginning of period	\$ 1,343	\$ —	\$ 1,963	\$ 273
Cash payments	—	—	(466)	(272)
Foreign exchange adjustment	186	—	32	(1)
Balance, end of period	\$ 1,529	\$ —	\$ 1,529	\$ —

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NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
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6. INVENTORIES

Inventories consist of the following:

	June 30, 2021	December 31, 2020
Components and raw materials	\$ 224,486	\$ 190,775
Work-in-process	32,449	47,251
Finished goods	147,612	126,967
Total	<u>\$ 404,547</u>	<u>\$ 364,993</u>

The Company recorded inventory provisions totaling \$7,620 and \$5,990 for the three months ended June 30, 2021 and 2020, respectively and \$15,647 and \$14,441 for the six months ended June 30, 2021 and 2020. These provisions relate to the recoverability of the value of inventories due to technological changes and excess quantities. These provisions are reported as a reduction to components and raw materials and finished components and devices.

7. GOODWILL AND INTANGIBLES

The following table sets forth the changes in the carrying amount of goodwill:

	Six Months Ended June 30, 2021	2020
Balance at January 1	\$ 41,366	\$ 82,092
Adjustment to goodwill during measurement period	(2,205)	—
Foreign exchange adjustment	(161)	(181)
Balance at June 30	<u>\$ 39,000</u>	<u>\$ 81,911</u>

During the fourth quarter of 2020, the Company acquired Pi-Tecnologia S.A. ("PiTec"), which is located in Brazil, to support development in advanced photonics. The acquisition price was \$2,717, of which \$906 was paid at closing and the remainder of which may be earned over three years based on achievement of certain financial targets. The acquisition date contingent purchase consideration amount was \$1,811. The Company paid \$466 of the contingent purchase consideration on January 31, 2021. The liabilities related to the contingent purchase consideration were included in accrued expenses and other current liabilities and deferred taxes and other long-term liabilities as of June 30, 2021 and December 31, 2020. During the first quarter of 2021, the Company finalized the purchase price allocations related to the intangible assets, which resulted in adjusting the amounts that were provisionally reported as goodwill to intangible assets for customer relationships and production know-how. This adjustment reduced goodwill by \$2,205, increased intangible assets by \$2,929 and increased deferred tax liabilities by \$724. After completion of the purchase price allocations, the \$724 excess of the acquisition consideration over the fair value of assets acquired and liabilities assumed was recorded to goodwill. The goodwill arising from this acquisition will not be deductible for tax purposes.

Intangible assets, subject to amortization, consisted of the following:

	June 30, 2021				December 31, 2020			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Lives	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Lives
Customer relationships	\$ 60,033	\$ (20,785)	\$ 39,248	10 years	\$ 58,041	\$ (17,674)	\$ 40,367	11 years
Technology, trademark and trade name	40,578	(23,653)	16,925	7 years	40,518	(20,949)	19,569	7 years
Production know-how	10,596	(8,497)	2,099	7 years	9,325	(8,167)	1,158	7 years
Patents	8,036	(7,238)	798	8 years	8,036	(7,016)	1,020	8 years
Total	<u>\$ 119,243</u>	<u>\$ (60,173)</u>	<u>\$ 59,070</u>		<u>\$ 115,920</u>	<u>\$ (53,806)</u>	<u>\$ 62,114</u>	

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Amortization expense for the three months ended June 30, 2021 and 2020 was \$3,079 and \$2,949, respectively. Amortization expense for the six months ended June 30, 2021 and 2020 was \$6,336 and \$6,082, respectively. The estimated future amortization expense for intangibles for the remainder of 2021 and subsequent years is as follows:

	2021 ^(a)		2022		2023		2024		2025		Thereafter		Total
\$	6,118	\$	11,495		10,589	\$	8,107	\$	6,529	\$	16,232	\$	59,070

^(a) For the six-month period beginning July 1, 2021.

8. ACCRUED EXPENSES AND OTHER LIABILITIES

Accrued expenses and other liabilities consist of the following:

	June 30, 2021	December 31, 2020
Contract liabilities	\$ 80,366	\$ 71,246
Accrued compensation	68,858	62,785
Current portion of accrued warranty	25,116	24,345
Short-term lease liabilities	5,267	5,778
Other	12,557	12,586
Total	<u>\$ 192,164</u>	<u>\$ 176,740</u>

9. PRODUCT WARRANTIES

The Company typically provides one to five years parts and service warranties on lasers, laser and non-laser systems, and amplifiers. Most of the Company's sales offices provide support to customers in their respective geographic areas. Warranty reserves have generally been sufficient to cover product warranty repair and replacement costs.

Activity related to the warranty accrual was as follows:

	Six Months Ended June 30,	
	2021	2020
Balance at January 1	\$ 45,669	\$ 48,866
Provision for warranty accrual	16,706	9,975
Warranty claims	(13,764)	(13,614)
Foreign currency translation	(954)	(155)
Balance at June 30	<u>\$ 47,657</u>	<u>\$ 45,072</u>

Accrued warranty reported in the accompanying condensed consolidated financial statements as of June 30, 2021 and December 31, 2020 consisted of \$25,116 and \$24,345 in accrued expenses and other liabilities, respectively, and \$22,541 and \$21,324 in deferred income taxes and other long-term liabilities, respectively.

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NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - (Continued)
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10. FINANCING ARRANGEMENTS

The Company's borrowings under existing financing arrangements consist of the following:

	June 30, 2021	December 31, 2020
Total notes payable	\$ 36,071	\$ 37,967
Less: current portion	(3,846)	(3,810)
Total long-term debt	<u>\$ 32,225</u>	<u>\$ 34,157</u>

Term Debt:

At June 30, 2021, the Company has an unsecured long-term note with an outstanding principal balance of \$17,812, of which, \$1,187 is the current portion. The interest on this unsecured long-term note is variable at 1.20% above LIBOR and is fixed using an interest rate swap at 2.85% per annum. The unsecured long-term note matures in May 2023, at which time the outstanding principal balance will be \$15,438. Also at June 30, 2021, the Company has another long-term note that is secured by its corporate aircraft with an outstanding principal balance of \$18,259, of which, \$2,659 is the current portion. The interest on this collateralized long-term note is fixed at 2.74% per annum. The collateralized long-term note matures in July 2022, at which time the outstanding principal balance will be \$15,375.

The future principal payments for the Company's Notes as of June 30, 2021 are as follows:

2021 ^(a)	\$ 1,914
2022	18,126
2023	16,031
Total	<u>\$ 36,071</u>

^(a) For the six-month period beginning July 1, 2021.

Revolving Line of Credit Facilities:

The Company maintains a \$75,000 U.S. revolving line of credit and a €50,000 (\$59,389) line-of-credit in Germany, both of which are available to certain foreign subsidiaries and allow for borrowings in the local currencies of those subsidiaries. The Company also maintains a €2,000 (\$2,376) Italian overdraft facility. At June 30, 2021 and December 31, 2020, there were no amounts drawn on the U.S. line-of-credit, and there were \$3,302 and \$3,300, respectively, of guarantees issued against the facility which reduce the amount of the facility available to draw. At June 30, 2021 and December 31, 2020, there were no amounts drawn on the Euro line-of-credit, and there were \$2,620 and \$3,424, respectively, of guarantees issued against those facilities which reduce the amount available to draw. At June 30, 2021 and December 31, 2020, there were no amounts drawn on the Euro overdraft facility. After providing for the guarantees used, the total unused lines-of-credit and overdraft facilities are \$130,843 at June 30, 2021.

11. DERIVATIVE FINANCIAL INSTRUMENTS

The Company's only outstanding derivative financial instrument is an interest rate swap that is classified as a cash flow hedge of its variable rate debt. The fair value amounts in the condensed consolidated balance sheets were:

	June 30, 2021	December 31, 2020
Notional amounts ⁽¹⁾	\$ 17,812	\$ 18,406
Fair values:		
Deferred income taxes and other long-term liabilities	\$ 448	\$ 603

⁽¹⁾ Notional amounts represent the gross contract/notional amount of the derivatives outstanding.

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The derivative gains and losses in the condensed consolidated financial statements related to the Company's current and previous interest rate swap contracts were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Effective portion recognized in other comprehensive income, pretax:				
Interest rate swap	\$ 66	\$ (2)	\$ 155	\$ 44

12. COMMITMENTS AND CONTINGENCIES

From time to time, the Company may be involved in disputes and legal proceedings in the ordinary course of its business. These proceedings may include allegations of infringement of intellectual property, commercial disputes and employment matters. As of June 30, 2021 and through the filing date of these condensed consolidated financial statements, the Company has no legal proceedings ongoing that management estimates could have a material effect on the Company's condensed consolidated financial statements.

13. INCOME TAXES

The effective tax rates were 24.2% and 22.5% for the three months ended June 30, 2021 and 2020, respectively, and 23.6% and 23.0% for the six months ended June 30, 2021, and 2020, respectively. There were net discrete tax benefits of \$137 and \$3,143 for the three months ended June 30, 2021 and 2020, respectively, and \$4,425 and \$5,930 for the six months ended June 30, 2021 and 2020, respectively, which were primarily related to the tax deductions for equity-based compensation that exceeded compensation expense recognized for books.

The Company accounts for its uncertain tax positions in accordance with the accounting standards for income taxes. The Company continues to classify interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes. The following is a summary of the activity of the Company's unrecognized tax benefits for six months ended June 30, 2021 and 2020:

	Six Months Ended June 30,	
	2021	2020
Balance at January 1,	\$ 14,706	\$ 11,416
Additions for tax positions in current period	2,000	700
Foreign currency translation	155	(565)
Balance at June 30,	<u>\$ 16,861</u>	<u>\$ 11,551</u>

The liability for uncertain tax benefits is included in deferred income taxes and other long-term liabilities at June 30, 2021 and December 31, 2020. Substantially all of the liability for uncertain tax benefits related to various federal, state and foreign income tax matters would benefit the Company's effective tax rate, if recognized.

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14. NET INCOME ATTRIBUTABLE TO IPG PHOTONICS CORPORATION PER COMMON SHARE

The following table sets forth the computation of diluted net income attributable to IPG Photonics Corporation per common share following the treasury stock method:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Net income attributable to IPG Photonics Corporation common stockholders	\$ 69,800	\$ 38,226	\$ 137,927	\$ 74,629
Basic weighted average common shares	53,472	53,040	53,548	53,083
Dilutive effect of common stock equivalents	527	490	597	545
Diluted weighted average common shares	53,999	53,530	54,145	53,628
Basic net income attributable to IPG Photonics Corporation per common share	\$ 1.31	\$ 0.72	\$ 2.58	\$ 1.41
Diluted net income attributable to IPG Photonics Corporation per common share	\$ 1.29	\$ 0.71	\$ 2.55	\$ 1.39

The computation of diluted weighted average common shares excludes common stock equivalents including non-qualified stock options, performance stock units ("PSUs"), restricted stock units ("RSUs") and employee stock purchase plan ("ESPP") because the effect of including them would be anti-dilutive. The weighted average anti-dilutive shares outstanding for the three and six months ended June 30, 2021 and 2020 were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Non-qualified stock options	202,000	561,100	202,700	597,200
Restricted stock units	124,200	107,400	90,200	240,700
Performance stock units	30,100	24,800	22,000	19,300
Total weighed average anti-dilutive shares outstanding	356,300	693,300	314,900	857,200

On May 5, 2020, the Company announced that its Board of Directors authorized the purchase of up to \$200,000 of IPG common stock. This authorization is separate from, and in addition to, the Company's \$125,000 stock repurchase program authorized in February 2019. Under the February 2019 authorization, IPG may repurchase shares of common stock in an amount not to exceed the lesser of the number of shares issued to employees and directors under the Company's various employee and director equity compensation and employee stock purchase plans from January 1, 2019 through December 31, 2020 or \$125,000. Under the 2020 authorization, the Company may purchase shares up to \$200,000. In both purchase authorizations, share limits are exclusive of fees, commissions or other expenses. Share repurchases may be made periodically in open-market transactions using the Company's working capital and are subject to market conditions, legal requirements and other factors. The share purchase program authorization does not obligate the Company to repurchase any dollar amount or number of its shares, and repurchases may be commenced or suspended from time to time without prior notice.

For the three months ended June 30, 2021, the Company repurchased 184,871 shares of common stock under the February 2019 authorization with an average price of \$209.22 per share in the open market. For the six months ended June 30, 2021, the Company repurchased 199,777 shares of common stock under the February 2019 authorization with an average price of \$208.86 per share in the open market. The impact on the reduction of weighted average shares for the three and six months ended June 30, 2021 was 87,541 shares and 51,735 shares, respectively. As of June 30, 2021 the remaining amount authorized under the programs was up to \$205,000.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with our condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q. This discussion contains forward looking statements that are based on management's current expectations, estimates and projections about our business and operations. Our actual results may differ materially from those currently anticipated and expressed in such forward-looking statements. See "Cautionary Statement Regarding Forward-Looking Statements."

Overview

We develop, manufacture and sell high-performance fiber lasers, fiber amplifiers and diode lasers that are used for diverse applications, primarily in materials processing. We also manufacture and sell complementary products used with our lasers including optical delivery cables, fiber couplers, beam switches, optical processing heads, in-line sensors and chillers. In addition, we offer laser-based and non-laser based systems for certain markets and applications. Our portfolio of laser solutions is used in materials processing, communications, medical and advanced applications. We sell our products globally to original equipment manufacturers ("OEMs"), system integrators and end users. We market our products internationally, primarily through our direct sales force. Our major manufacturing facilities are located in the United States, Germany, Russia and Belarus. We have sales service offices and applications laboratories worldwide.

We are vertically integrated such that we design and manufacture most of the key components used in our finished products, from semiconductor diodes to optical fiber preforms, finished fiber lasers, amplifiers and complementary products. Our vertically integrated operations allow us to reduce manufacturing costs, control quality, rapidly develop and integrate advanced products and protect our proprietary technology.

Factors and Trends That Affect Our Operations and Financial Results

In reading our financial statements, you should be aware of the following factors and trends that our management believes are important in understanding our financial performance.

COVID-19 Update. Global demand trends have been impacted by the ongoing COVID-19 pandemic and therefore remain uncertain at this time. Economic indicators continue to show improvement from the severe contraction experienced one year ago, which has led to an improvement in the recent demand environment in certain regions. It is difficult to predict whether the improvement in some macroeconomic indicators will be sustained or if it could change if there are additional restrictions imposed as a result of a resurgence in COVID-19 infections. This uncertainty continues to make forecasting our business challenging in the near to medium term.

Currently, our four major production facilities in the United States, Germany, Russia and Belarus remain open and are operating with enhanced employee safety and sanitization protocols that have not significantly impacted productivity and efficiency. We have vertically integrated manufacturing and many of the components that one facility supplies to another facility are single sourced internally and not available from third-party suppliers, for example our semiconductor diodes manufactured in Oxford, Massachusetts. While we have attempted to build safety stock of critical components at our various locations, if government restrictions to address COVID-19 become more severe or if absenteeism becomes significant as a result of a COVID-19 resurgence in the places where we operate, it could impact our internal supply chain.

We and our customers are experiencing increased lead times for certain components purchased from third-party suppliers, particularly electronic components. We and our customers have also faced constraints related to logistics, including available air cargo space and higher freight rates during the pandemic some of which continue. While the impact of logistics constraints has moderated, this and supply chain constraints could impact our ability to supply products and our customers' demand for our product or readiness to accept deliveries if there is a resurgence in COVID-19 or if governments implement new restrictions. We believe we have the ability to meet the near-term demand for our products, but the situation is fluid and subject to change.

We continue to monitor the rapidly evolving conditions and circumstances as well as guidance from international and domestic authorities, including public health authorities, and we may need to take additional actions based on their recommendations. The measures implemented by various authorities related to the COVID-19 outbreak have caused us to change our business practices including those related to where employees work, the distance between employees in our facilities, limitations on in-person meetings between employees and with customers, suppliers, service providers, and stakeholders as well as restrictions on business travel to domestic and international locations or to attend trade shows, investor conferences and other events. To date, we have been able to accommodate these changes to our business operations and continue to meet customer demand. If guidelines from relevant authorities becomes more restrictive due to a resurgence of COVID-19 in a particular region, the effect on our operations could be more significant.

Net sales. Our net sales have historically fluctuated from quarter to quarter. The increase or decrease in sales from a prior quarter can be affected by the timing of orders received from customers, the shipment, installation and acceptance of products at our customers' facilities, the mix of OEM orders and one-time orders for products with large purchase prices, competitive pressures, acquisitions, economic and political conditions in a certain country or region and seasonal factors such as the purchasing patterns and levels of activity throughout the year in the regions where we operate. Net sales can be affected by the time taken to qualify our products for use in new applications in the end markets that we serve. Our sales cycle varies substantially, ranging from a period of a few weeks to as long as one year or more, but is typically several months. The adoption of our products by a new customer or qualification in a new application can lead to an increase in net sales for a period, which may then slow until we penetrate new markets or obtain new customers.

Our business depends substantially upon capital expenditures by end users, particularly by manufacturers using our products for materials processing, which includes general manufacturing, automotive, other transportation, aerospace, heavy industry, consumer, semiconductor and electronics. Approximately 92% of our revenues for the first half of 2021 and 90% of our revenues for the full 2020 fiscal year were from customers using our products for materials processing. Although applications within materials processing are broad, the capital equipment market in general is cyclical and historically has experienced sudden and severe downturns. For the foreseeable future, our operations will continue to depend upon capital expenditures by end users of materials processing equipment and will be subject to the broader fluctuations of capital equipment spending.

In recent years, our net sales have been negatively impacted by tariffs and trade policy. New tariffs and other changes in U.S. trade policy could trigger retaliatory actions by affected countries, and certain foreign governments.

We are also susceptible to global or regional disruptions such as political instability, geopolitical conflicts, acts of terrorism, significant fluctuations in currency values, natural disasters, macroeconomic concerns and particularly the impact of the COVID-19 outbreak that affect the level of capital expenditures or global commerce. With respect to the COVID-19 outbreak specifically, while our financial results for the six months ended June 30, 2021 improved as compared to quarterly results achieved during 2020, the possible effect over the longer term continues to remain uncertain and dependent on future developments that cannot be accurately predicted at this time, such as the severity and transmission rate of the coronavirus or new variants, the extent and effectiveness of containment actions taken, the approval, effectiveness, timing and widespread vaccination of the global population, and the impact of these and other factors on our customer base and general commercial activity.

The average selling prices of our products generally decrease as the products mature. These decreases result from factors such as increased competition, decreased manufacturing costs and increases in unit volumes. We may also reduce selling prices in order to penetrate new markets and applications. Furthermore, we may negotiate discounted selling prices from time to time with certain customers that place high unit-volume orders.

The secular shift to fiber laser technology in large materials processing applications, such as cutting applications, had a positive effect on our sales trends in the past such that our sales trends were often better than other capital equipment manufacturers in both positive and negative economic cycles. As the secular shift to fiber laser technology matures in such applications, our sales trends are more susceptible to economic cycles which affect other capital equipment manufacturers.

Gross margin. Our total gross margin in any period can be significantly affected by total net sales in any period, by competitive factors, by product mix, and by other factors such as changes in foreign exchange rates relative to the U.S. Dollar, some of which are not under our control. For instance,

- As our products mature, we can experience additional competition which tends to decrease average selling prices and affects gross margin;
- Our gross margin can be significantly affected by product mix. Within each of our product categories, the gross margin is generally higher for devices with greater average power. The higher power products often have better performance, more difficult specifications to attain and fewer competing products in the marketplace;
- Higher power lasers also use a greater number of optical components, improving absorption of fixed overhead costs and enabling economies of scale in manufacturing;
- The gross margin for certain specialty products may be higher because there are fewer or sometimes no equivalent competing products;

- Customers that purchase devices in greater unit volumes generally are provided a lower price per device than customers that purchase fewer units. In general, lower selling prices to high unit volume customers reduce gross margin although this may be partially offset by improved economies of scale; and finally,
- Gross margin on systems and communication components can be lower than the gross margin for our laser and amplifier sources, depending on the configuration, volume and competitive forces, among other factors.

We expect that some new technologies, products and systems will have returns above our cost of capital but may have gross margins below our corporate average. If we are able to develop opportunities that are significant in size, competitively advantageous or leverage our existing technology base and leadership, our current gross margin levels may not be maintained. Instead, we aim to deliver industry-leading gross margin by growing sales, by taking market share in existing markets, or by developing new applications and markets we address, by reducing the cost of our products and by optimizing the efficiency of our manufacturing operations.

As a high proportion of our costs is fixed, they are generally difficult to adjust or may take time to adjust in response to changes in demand. In addition, our fixed costs increase as we expand our capacity. If we expand capacity faster than is required by sales growth, gross margins could be negatively affected. Gross margins generally decline if production volumes are lower as a result of a decrease in sales or a reduction in inventory because the absorption of fixed manufacturing costs will be reduced. Gross margins generally improve when the opposite occurs. If both sales and inventory decrease in the same period, the decline in gross margin may be greater if we cannot reduce fixed costs or choose not to reduce fixed costs to match the decrease in the level of production. If we experience a decline in sales that reduces absorption of our fixed costs, or if we have production issues, our gross margins will be negatively affected.

We also regularly review our inventory for items that are slow-moving, have been rendered obsolete or determined to be excess. Any provision for such slow-moving, obsolete or excess inventory affects our gross margins. For example, we recorded provisions for slow-moving, obsolete or excess inventory totaling \$7.6 million and \$6.0 million for the three months ended June 30, 2021 and 2020, respectively, and \$15.6 million and \$14.4 million for the six months ended June 30, 2021 and 2020, respectively.

Selling and general and administrative expenses. In the past, we have invested in selling and general and administrative costs in order to support continued growth in the Company. As the secular shift to fiber laser technology matures, our sales growth becomes more susceptible to the cyclical trends typical of capital equipment manufacturers. Accordingly, our future management of and investments in selling and general and administrative expenses will also be influenced by these trends, although we may still invest in selling or general and administrative functions to support certain initiatives even in economic down cycles. Certain general and administrative expenses are not related to the level of sales and may vary quarter to quarter based primarily upon the level of acquisitions and litigation.

Research and development expenses. We plan to continue to invest in research and development to improve our existing components and products and develop new products, components, systems and applications technology. We believe that these investments will sustain our position as a leader in the fiber laser industry and will support development of new products that can address new markets and growth opportunities. The amount of research and development expense we incur may vary from period to period.

Goodwill and long-lived assets impairments. We review our intangible assets and property, plant and equipment for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is required to be tested for impairment at least annually. Negative industry or economic trends, including reduced estimates of future cash flows, disruptions to our business, slower growth rates, lack of growth in our relevant business units or differences in the estimated product acceptance rates could lead to impairment charges against our long-lived assets, including goodwill and other intangible assets.

Our valuation methodology for assessing impairment requires management to make significant judgments and assumptions based on historical experience and to rely heavily on projections of future operating performance at many points during the analysis. Also, the process of evaluating the potential impairment of goodwill is subjective. We operate in a highly competitive environment and projections of future operating results and cash flows may vary significantly from actual results. If our analysis indicates potential impairment to goodwill in one or more of our reporting units, we may be required to record charges to earnings in our financial statements, which could negatively affect our results of operations.

As discussed above, we continue to monitor the effect of the COVID-19 pandemic on our business and the potential affect it may have on the recoverability of our long-lived assets. The future effects of COVID-19 remain uncertain as more variants start to emerge on a global basis. If the future effects of COVID-19 accumulate and become larger or if our ability to predict the impact becomes more certain, it may become a triggering event which would cause us to evaluate the carrying value

of our amortizable long-lived assets or to evaluate the carrying value of goodwill prior to the annual assessment date. If our analysis indicates potential impairment to goodwill, amortizable intangibles or right-of-use assets in one or more of our reporting units, we may be required to record charges to earnings in our financial statements, which would negatively affect our results of operations.

Foreign exchange. Because we are a U.S.-based company doing business globally, we have both translational and transactional exposure to fluctuations in foreign currency exchange rates. Changes in the relative exchange rate between the U.S. dollar and the foreign currencies in which our subsidiaries operate directly affects our sales, costs and earnings. Differences in the relative exchange rates between where we sell our products and where we incur manufacturing and other operating costs (primarily in the U.S., Germany, Russia and Belarus) also affects our costs and earnings. Certain currencies experiencing significant exchange rate fluctuations like the Euro, the Russian Ruble, the Japanese Yen and Chinese Yuan have had and could have an additional significant impact on our sales, costs and earnings. The appreciation of the Russian Ruble and Euro, partially offset by the appreciation of the Chinese Yuan created a foreign exchange loss for the quarter ended June 30, 2021 because our Russian and European subsidiaries have certain net assets denominated in U.S. Dollars, and our Chinese subsidiary has certain net liabilities denominated in U.S. Dollars. Our ability to adjust the foreign currency selling prices of products in response to changes in exchange rates is limited and may not offset the impact of the changes in exchange rates on the translated value of sales or costs. In addition, if we increase the selling price of our products in local currencies, this could have a negative impact on the demand for our products.

Major customers. While we have historically depended on a few customers for a large percentage of our annual net sales, the composition of this group can change from year to year. Net sales derived from our five largest customers as a percentage of our net sales was 23% for the six months ended June 30, 2021 and 24%, 21% and 26% for the full years 2020, 2019 and 2018, respectively. One of our customers accounted for 27% and 21% of our net accounts receivable as of June 30, 2021 and December 31, 2020, respectively. We seek to add new customers and to expand our relationships with existing customers. We anticipate that the composition of our significant customers will continue to change. We generally do not enter into agreements with our customers obligating them to purchase a fixed number or large volume of our fiber lasers or amplifiers. If any of our significant customers substantially reduced their purchases from us, our results would be adversely affected.

Results of Operations for the Three Months Ended June 30, 2021 Compared to the Three Months Ended June 30, 2020

Net sales. Net sales increased by \$75.3 million, or 25.4%, to \$371.7 million for the three months ended June 30, 2021 from \$296.4 million for the three months ended June 30, 2020.

The table below sets forth sales by application:

		Three Months Ended June 30,						Change	
		2021		2020					
		(In thousands, except for percentages)							
Sales by Application		% of Total		% of Total					
Materials processing	\$	345,653	93.0 %	\$	271,708	91.7 %	\$	73,945	27.2 %
Other applications		26,005	7.0 %		24,703	8.3 %		1,302	5.3 %
Total	\$	371,658	100.0 %	\$	296,411	100.0 %	\$	75,247	25.4 %

The table below sets forth sales by type of product and other revenue:

Three Months Ended June 30,										Change		
2021				2020								
(In thousands, except for percentages)												
Sales by Product		% of Total			% of Total							
High Power Continuous Wave ("CW") Lasers	\$	189,744	51.1	%	\$	157,478	53.1	%	\$	32,266	20.5	%
Medium Power CW Lasers		18,177	4.9	%		10,692	3.6	%		7,485	70.0	%
Pulsed Lasers		61,773	16.6	%		42,577	14.4	%		19,196	45.1	%
Quasi-Continuous Wave ("QCW") Lasers		15,525	4.2	%		13,708	4.6	%		1,817	13.3	%
Laser and Non-Laser Systems		29,597	8.0	%		24,942	8.4	%		4,655	18.7	%
Other Revenue including Amplifiers, Service, Parts, Accessories and Change in Deferred												
Revenue		56,842	15.2	%		47,014	15.9	%		9,828	20.9	%
Total	\$	371,658	100.0	%	\$	296,411	100.0	%	\$	75,247	25.4	%

Materials processing

Sales for materials processing applications increased due to higher sales from high power lasers, pulsed lasers, other laser products and service, medium power lasers, laser and non-laser systems, and QCW lasers. Sales for materials processing applications improved as markets recover from being negatively affected by the COVID-19 pandemic in early 2020.

- The increase in high power laser sales related to metal cutting and welding applications. Within cutting applications, increased sales were attributable to a recovery in the global demand environment from the impacts of a global lockdown related to the COVID-19 pandemic. Even though the decrease in average selling prices moderated as compared to one year ago, the overall growth was partially offset by a decline in average selling prices and increased competition in China. The increase in sales of high power lasers used in welding applications was driven by higher sales into electric vehicle battery and general manufacturing industries.
- Medium power sales increased due to increased demand from 3D printing for metal-based additive manufacturing, welding and cutting applications.
- Pulsed laser sales increased due to growth in sales of green pulsed lasers used for solar cell manufacturing and infrared pulsed lasers used for marking and engraving as well as battery processing applications, partially offset by decreased demand of pulsed lasers used for ablation applications.
- QCW laser sales increased due to increased demand for fine processing and consumer electronics applications.
- The increase of revenue in laser systems was attributable to higher demand for laser systems used for cutting applications. The increase of revenue in non-laser systems was attributable to higher demand in the transportation sector.
- Other revenue for materials processing increased due to higher parts and service revenue.

Other applications

Sales from other applications increased due to higher demand in lasers used for medical procedures and advanced applications, partially offset by decreased demand in telecom products.

Cost of sales and gross margin. Cost of sales increased by \$31.1 million, or 19.4%, to \$191.1 million for the three months ended June 30, 2021 from \$160.0 million for the three months ended June 30, 2020. Our gross margin increased to 48.6% for the three months ended June 30, 2021 from 46.0% for the three months ended June 30, 2020. The increase in gross margin was driven by a reduction of manufacturing costs as a percentage of sales and an increase in absorption of manufacturing expenses into inventory as a percent of sales primarily due to higher sales versus the year ago period. These benefits were partially offset by an increase in cost of product sold from inventory as a percentage of sales which is primarily a result of lower average selling prices and variation in product mix.

Sales and marketing expense. Sales and marketing expense increased by \$1.9 million, or 11.0%, to \$19.2 million for the three months ended June 30, 2021 compared with \$17.3 million for the three months ended June 30, 2020. This change was primarily a result of increases in personnel costs. As a percentage of sales, sales and marketing expense decreased to 5.2% for the three months ended June 30, 2021 from 5.8% for the three months ended June 30, 2020, mainly due to increased sales.

Research and development expense. Research and development expense increased by \$3.6 million, or 11.4%, to \$35.2 million for the three months ended June 30, 2021, compared to \$31.6 million for the three months ended June 30, 2020. This change was primarily a result of increases in personnel costs and materials used for research and development projects. As a percentage of sales, research and development expense decreased to 9.5% for the three months ended June 30, 2021 from 10.7% for the three months ended June 30, 2020, mainly due to the increase in sales.

General and administrative expense. General and administrative expense increased by \$4.7 million, or 17.8%, to \$31.1 million for the three months ended June 30, 2021 from \$26.4 million for the three months ended June 30, 2020. This change was primarily a result of increases in personnel costs. As a percentage of sales, general and administrative expense decreased to 8.4% for the three months ended June 30, 2021 from 8.9% for the three months ended June 30, 2020, mainly due to the increase in sales.

Impairment of long-lived assets and other restructuring charges. We did not incur impairment of long-lived assets and other restructuring charges for the three months ended June 30, 2021, compared to charges of \$1.2 million in total for the three months ended June 30, 2020, of which \$0.4 million related to severance and \$0.1 million related to lease termination costs as part of restructuring of our submarine network division. We also incurred \$0.7 million of non-cash long-lived impairments related to machinery and equipment.

Effect of exchange rates on net sales, gross profit and operating expenses. We estimate that, if exchange rates relative to the U.S. Dollar had been the same as one year ago, which were on average Euro 0.91, Russian Ruble 72, Japanese Yen 108 and Chinese Yuan 7.09, respectively, we would have expected net sales to be \$22.9 million lower, gross profit to be \$12.8 million lower and total operating expenses to be \$1.3 million lower.

Loss (gain) on foreign exchange. We incurred a foreign exchange loss of \$2.8 million for the three months ended June 30, 2021 as compared to a \$12.8 million loss for the three months ended June 30, 2020. Our Russian and European subsidiaries have certain net assets denominated in U.S. Dollars, and our Chinese subsidiary has certain net liabilities denominated in U.S. Dollars. The foreign exchange loss for the three months ended June 30, 2021 was primarily attributable to appreciation of the Russian Ruble and Euro, partially offset by a gain attributed to appreciation of the Chinese Yuan as compared to the U.S. Dollar. The foreign exchange loss for the three months ended June 30, 2020 was primarily attributable to appreciation of the Russian Ruble and Euro as compared to the U.S. Dollar.

Interest (expense) income, net. Interest expense, net was \$0.4 million for the three months ended June 30, 2021 as compared to interest income, net of \$1.9 million for the three months ended June 30, 2020. The change in interest (expense) income, net is due to a reduction in yields on cash equivalents and short term investments.

Provision for income taxes. Provision for income taxes was \$22.2 million for the three months ended June 30, 2021 compared to \$11.1 million for the three months ended June 30, 2020, representing an effective tax rate of 24.2% and 22.5% for the three months ended June 30, 2021 and 2020, respectively. The increase in tax expense in 2021 is primarily due to an increase in income. For the three months ended June 30, 2021 and 2020, the net discrete tax benefits were \$0.1 million and \$3.1 million, respectively, primarily related tax deductions for equity-based compensation that exceeded compensation expense recognized.

Net income attributable to IPG Photonics Corporation. Net income attributable to IPG Photonics Corporation increased by \$31.6 million to \$69.8 million for the three months ended June 30, 2021 compared to \$38.2 million for the three months ended June 30, 2020. Net income attributable to IPG Photonics Corporation as a percentage of our net sales increased by 5.9 percentage points to 18.8% for the three months ended June 30, 2021 from 12.9% for the three months ended June 30, 2020 due to the factors described above.

Results of Operations for the Six Months Ended June 30, 2021 Compared to the Six Months Ended June 30, 2020

Net sales. Net sales increased by \$171.5 million, or 31.4%, to \$717.2 million for the six months ended June 30, 2021 from \$545.7 million for the six months ended June 30, 2020.

The table below sets forth sales by application:

		Six Months Ended June 30,					
		2021		2020		Change	
		(In thousands, except for percentages)					
<u>Sales by Application</u>		% of Total			% of Total		
Materials processing	\$	662,894	92.4 %	\$	489,782	89.8 %	\$ 173,112 35.3 %
Other applications		54,349	7.6 %		55,871	10.2 %	(1,522) (2.7)%
Total	\$	717,243	100.0 %	\$	545,653	100.0 %	\$ 171,590 31.4 %

The table below sets forth sales by type of product and other revenue:

Sales by Product	Six Months Ended June 30,						Change		
	2021			2020					
	(In thousands, except for percentages)								
		% of Total			% of Total				
High Power CW Lasers	\$	360,226	50.2 %	\$	276,794	50.7 %	\$	83,432	30.1 %
Medium Power CW Lasers		34,059	4.8 %		21,945	4.0 %		12,114	55.2 %
Pulsed Lasers		117,168	16.3 %		74,416	13.6 %		42,752	57.5 %
QCW Lasers		29,191	4.1 %		23,581	4.3 %		5,610	23.8 %
Laser and Non-Laser Systems		56,713	7.9 %		43,576	8.0 %		13,137	30.1 %
Other Revenue including Amplifiers, Service, Parts, Accessories and Change in Deferred Revenue		119,886	16.7 %		105,341	19.4 %		14,545	13.8 %
Total	\$	717,243	100.0 %	\$	545,653	100.0 %	\$	171,590	31.4 %

Materials processing

Sales for materials processing applications increased due to higher sales of high power lasers, pulsed lasers, other laser products and service, laser and non-laser systems, medium power lasers, and QCW lasers.

- The increase in high power laser sales related to metal cutting and welding applications. Within cutting applications, increased sales were attributable to a stronger global demand due to recovery from the COVID-19 pandemic, partially offset by continued competition affecting average selling prices in China. The increase in sales of high power lasers used in welding applications was driven by higher sales into electric vehicle battery and general manufacturing industries.
- The increase in medium power sales related to an increase in demand from 3D printing and laser sintering used for metal-based additive manufacturing, cutting and welding applications.
- Pulsed laser sales increased due to growth in sales of green pulsed lasers used for solar cell manufacturing and infrared pulsed lasers used for marking and engraving as well as battery processing applications including foil cutting, partially offset by decreased demand of pulsed lasers used for ablation applications.
- QCW laser sales increased due to higher demand for fine processing and consumer electronics applications.
- The increase of revenue in laser systems was attributable to higher demand for laser systems used for cutting and welding applications. The increase of revenue in non-laser systems was attributable to higher demand in the transportation sector.
- Other revenue for materials processing increased due to higher demand of parts and service.

Other Applications

Sales from other applications decreased due to decreased demand for lasers used for medical procedures and telecom products, partially offset by higher sales for lasers used for advanced applications.

Cost of sales and gross margin. Cost of sales increased by \$66.4 million, or 21.7%, to \$372.7 million for the six months ended June 30, 2021 from \$306.3 million for the six months ended June 30, 2020. Our gross margin increased to 48.0% for the six months ended June 30, 2021 from 43.9% for the six months ended June 30, 2020. Gross margin increased mainly due to a reduction of manufacturing costs as a percentage of sales and an increase in absorption of manufacturing expenses into inventory as a percent of sales primarily due to higher sales versus the year ago period. Gross margin also benefitted from a decrease in cost of product sold from inventory as a percent of sales as compared to the six months ended June 30, 2020.

Sales and marketing expense. Sales and marketing expense increased by \$2.1 million, or 5.8%, to \$38.1 million for the six months ended June 30, 2021 from \$36.0 million for the six months ended June 30, 2020, primarily as a result of increases in personnel costs. As a percentage of sales, sales and marketing expense decreased to 5.3% of sales for the six months ended June 30, 2021 from 6.6% for the six months ended June 30, 2020, mainly due to the increase in sales.

Research and development expense. Research and development expense increased by \$5.1 million, or 8.0%, to \$68.5 million for the six months ended June 30, 2021, compared to \$63.4 million for the six months ended June 30, 2020, primarily as a result of an increase in personnel costs and expenses related to materials used for research and development projects, partially offset by a decrease in expenses for outside processing. As a percentage of sales, research and development expense decreased to 9.6% for the six months ended June 30, 2021 from 11.6% for the six months ended June 30, 2020, mainly due to the increase in sales.

General and administrative expense. General and administrative expense increased by \$7.7 million, or 14.4%, to \$61.2 million for the six months ended June 30, 2021 from \$53.5 million for the six months ended June 30, 2020, primarily as a result of increases in personnel costs, information systems, gifts and donations, and outside processing. As a percentage of sales, general and administrative expense decreased to 8.5% for the six months ended June 30, 2021 from 9.8% for the six months ended June 30, 2020, mainly due to the increase in sales.

Impairment of long-lived assets and other restructuring charges. We did not incur impairment of long-lived assets and other restructuring charges for the six months ended June 30, 2021, compared to charges of \$1.2 million in total for the six months ended June 30, 2020, of which \$0.4 million related to severance and \$0.1 million related to lease termination costs as part of restructuring of our submarine network division. We also incurred \$0.7 million of non-cash long-lived impairments related to machinery and equipment.

Effect of exchange rates on net sales, gross profit and operating expenses. We estimate that, if exchange rates relative to the U.S. Dollar had been the same as one year ago, which were on average Euro 0.91, Russian Ruble 69, Japanese Yen 108 and Chinese Yuan 7.04, respectively, we would have expected net sales for the six months ended June 30, 2021 to be \$39.8 million lower, gross profit to be \$22.8 million lower and total operating expenses would have been \$0.7 million lower.

(Gain) loss on foreign exchange. We reported a foreign exchange gain of \$4.3 million for the six months ended June 30, 2021 as compared to a gain of \$6.8 million for the six months ended June 30, 2020. Our Russian and European subsidiaries have certain net assets denominated in U.S. Dollars, and our Chinese subsidiary has certain net liabilities denominated in U.S. Dollars. The gain for the six months ended June 30, 2021 was primarily attributable to depreciation of the Euro, partially offset by appreciation of the Russian Ruble as compared to the U.S. Dollar. The gain for the six months ended June 30, 2020 was primarily attributable to depreciation of the Russian Ruble, partially offset by depreciation of the Chinese Yuan as compared to the U.S. Dollar.

Interest (expense) income, net. Interest expense, net, was \$0.9 million for the six months ended June 30, 2021 as compared to \$4.9 million of income for the six months ended June 30, 2020. The change in interest (expense) income, net is due to a reduction in yields on cash equivalents and short term investments that resulted in lower market interest rates as compared to prior year rates.

Provision for income taxes. Provision for income taxes was \$42.6 million for the six months ended June 30, 2021 compared to \$22.4 million for the six months ended June 30, 2020, representing an effective tax rate of 23.6% and 23.0% for the six months ended June 30, 2021 and 2020, respectively. The increase in expense is primarily related to an increase in income. For the six months ended June 30, 2021 and 2020, the net discrete tax benefits were \$4.4 million and \$5.9 million, respectively, primarily related to the tax deductions for equity-based compensation that exceeded compensation expense recognized.

Net income attributable to IPG Photonics Corporation. Net income attributable to IPG Photonics Corporation increased by \$63.3 million to \$137.9 million for the six months ended June 30, 2021 compared to \$74.6 million for the six months ended June 30, 2020. Net income attributable to IPG Photonics Corporation as a percentage of our net sales increased by 5.5

percentage points to 19.2% for the six months ended June 30, 2021 from 13.7% for the six months ended June 30, 2020 due to the factors described above.

Liquidity and Capital Resources

The following table presents our principal sources of liquidity:

	June 30, 2021	(In thousands)	December 31, 2020
Cash and cash equivalents	\$	754,199	\$ 876,231
Short-term investments		743,210	514,835
Unused credit lines and overdraft facilities		130,843	132,048
Working capital (excluding cash, cash equivalents and short-term investments)		537,278	542,433

Short-term investments at June 30, 2021, consist of liquid investments including corporate bonds, commercial paper, certificates of deposit and municipal bonds with original maturities of greater than three months but less than one year. See Note 5, "Fair Value Measurements" in the notes to the condensed consolidated financial statements for further information about our short-term investments.

We believe that our existing cash and cash equivalents, short-term investments, our cash flows from operations and our existing lines of credit provide us with the financial flexibility to meet our liquidity and capital needs. We expect to continue investments in capital expenditures, to assess acquisition opportunities and to repurchase shares of our stock in accordance with our repurchase program. The extent and timing of such expenditures may vary from period to period. Our future long-term capital requirements will depend on many factors including our level of sales, the impact of the economic environment on our growth including any ongoing impact of the COVID-19 pandemic on certain global or regional economies, global or regional recessions, the timing and extent of spending to support development efforts, expansion of global sales and marketing activities, government regulation including trade sanctions, the timing and introductions of new products, the need to ensure access to adequate manufacturing capacity and the continuing market acceptance of our products.

The following table details our line-of-credit facilities and long-term notes as of June 30, 2021:

Description	Total Facility/ Note	Interest Rate	Maturity	Security
U.S. Revolving Line of Credit ⁽¹⁾	\$75.0 million	LIBOR plus 0.80% to 1.20%, depending on our performance	April 2025	Unsecured
Euro Credit Facility (Germany) ⁽²⁾	Euro 50.0 million (\$59.4 million)	Euribor plus 0.75% or EONIA plus 1.00%	July 2023	Unsecured, guaranteed by parent company and German subsidiary
Other Euro Facility ⁽³⁾	Euro 2.0 million (\$2.4 million)	Euribor plus 2.02%	December 2021	Common pool of assets of Italian subsidiary
Long-term Secured Note ⁽⁴⁾	\$18.3 million	Fixed at 2.74%	July 2022	Secured by the corporate aircraft
Long-term Unsecured Note ⁽⁵⁾	\$17.8 million	1.20% above LIBOR, fixed using an interest rate swap at 2.85% per annum	May 2023	Unsecured

⁽¹⁾ This facility is available to certain foreign subsidiaries in their respective local currencies. At June 30, 2021, there were no amounts drawn on this line; however, there were \$3.3 million of guarantees issued against the line which reduces total availability.

⁽²⁾ This facility is also available to certain foreign subsidiaries in their respective local currencies. At June 30, 2021, there were no drawings on this facility; however, there were \$2.6 million of guarantees issued against the line which reduces total availability.

⁽³⁾ At June 30, 2021, there were no drawings. This facility renews annually.

⁽⁴⁾ At maturity, the outstanding note balance will be \$15.4 million.

⁽⁵⁾ At maturity, the outstanding note balance will be \$15.4 million.

Our largest committed credit lines are with Bank of America N.A. and Deutsche Bank AG in the amounts of \$75.0 million and \$59.4 million (or 50.0 million Euro as described above), respectively, and neither of them is syndicated. We plan to seek amendments of our credit agreements and notes to modify LIBOR and Euribor reference rates as these rates are phased out as borrowing reference rates.

We are required to meet certain financial covenants associated with our U.S. revolving line of credit and long-term debt facility. These covenants, tested quarterly, include an interest coverage ratio and a funded debt to earnings before interest, taxes, depreciation and amortization ("EBITDA") ratio. The interest coverage covenant requires that we maintain a trailing twelve-month ratio of EBITDA to interest on all obligations that is at least 3.0:1.0. The funded debt to EBITDA covenant requires that the sum of all indebtedness for borrowed money on a consolidated basis be less than three times our trailing twelve months EBITDA. Funded debt is decreased by our cash and available marketable securities not classified as long-term investments in the U.S.A. in excess of \$50 million up to a maximum of \$500 million. We were in compliance with all such financial covenants as of and for the three months ended June 30, 2021.

The financial covenants in our loan documents may cause us to not make or to delay investments and actions that we might otherwise undertake because of limits on capital expenditures and amounts that we can borrow or lease. In the event that we do not comply with any one of these covenants, we would be in default under the loan agreement or loan agreements, which may result in acceleration of the debt, cross-defaults on other debt or a reduction in available liquidity, any of which could harm our results of operations and financial condition.

See Note 10, "Financing Arrangements" in the notes to the condensed consolidated financial statements for further information about our facilities and term debt.

The following table presents cash flow activities:

	Six Months Ended June 30,			
	2021		2020	
	(In thousands)			
Cash provided by operating activities	\$	203,190	\$	130,256
Cash used in investing activities		(283,643)		(35,204)
Cash used in financing activities		(35,684)		(23,471)

Operating activities. Net cash provided by operating activities increased by \$72.9 million to \$203.2 million for the six months ended June 30, 2021 from \$130.3 million for the six months ended June 30, 2020, primarily due to an increase in net income and noncash expenses, partially offset by an increase in cash used by changes in other assets and liabilities, including working capital. Our largest working capital items typically are inventory and accounts receivable. Items such as accounts payable to third parties, prepaid expenses and other current assets and accrued expenses and other liabilities are not as significant as our working capital investment in accounts receivable and inventory because of our vertically integrated structure. Accruals and payables for personnel costs including bonuses and income and other taxes payable are largely dependent on the timing of payments for those items. The increase in cash provided by operating activities in 2021 primarily resulted from an increase in cash provided by net income after adding back non-cash charges, a decrease in cash used by income and other taxes payable; an increase in cash provided by accrued expenses and an increase in cash provided by accounts payable; partially offset by an increase in cash used by inventory and a decrease in cash provided by accounts receivable.

Investing activities. Net cash used in investing activities was \$283.6 million for the six months ended June 30, 2021 as compared to cash used in investing activities of \$35.2 million in 2020. The cash used in investing activities in 2021 related to \$229.0 million of net purchases of short-term investments and \$54.3 million of capital expenditures. The cash used in investing activities in 2020 related to \$37.4 million of capital expenditures, partially offset by \$1.6 million of net proceeds of short-term investments.

In 2021, we expect to incur between \$130 million to \$150 million in capital expenditures, excluding acquisitions. Capital expenditures include investments in property, facilities and equipment to add capacity worldwide to support anticipated revenue growth, increase vertical integration, increase redundant manufacturing capacity for critical components and enhance research and development capabilities. The timing and extent of any capital expenditures in and between periods can have a significant effect on our cash flow. If we obtain financing for certain projects, our cash expenditures would be reduced in the year of expenditure. Many of the capital expenditure projects that we undertake have long lead times and are difficult to cancel or defer to a later period.

Financing activities. Net cash used in financing activities was \$35.7 million for the six months ended June 30, 2021 as compared to net cash used of \$23.5 million in 2020. The cash used in financing activities in 2021 related to the purchase of treasury stock of \$41.7 million, \$2.6 million of payments of purchase price holdbacks from business combinations and \$1.9 million of principal payments on our long-term borrowings; partially offset by, proceeds of \$10.6 million from the exercise of stock options net of amounts disbursed in relation to shares withheld to cover employee income taxes due upon the vesting and release of restricted stock units. The cash used in financing activities in 2020 was related to the purchase of treasury stock of \$28.2 million, \$1.9 million of principal payments on our long-term borrowings and \$1.7 million of payment of a purchase price holdback from a business combination, partially offset by \$8.3 million from the exercise of stock options net of amounts disbursed in relation to shares withheld to cover employee income taxes due upon the vesting and release of restricted stock units.

Cautionary Statement Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and we intend that such forward-looking statements be subject to the safe harbors created thereby. For this purpose, any statements contained in this Quarterly Report on Form 10-Q except for historical information are forward-looking statements. Without limiting the generality of the foregoing, words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "continue" or the negative or other variations thereof or comparable terminology are intended to identify forward-looking statements. In addition, any statements that refer to projections of our future financial performance, trends in our businesses, or other characterizations of future events or circumstances are forward-looking statements.

The forward-looking statements included herein are based on current expectations of our management based on available information and involve a number of risks and uncertainties, all of which are difficult or impossible to accurately predict and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in Item 1, "Business" and Item 1A, "Risk Factors" of Part 1 of the Form 10-K filed with the SEC for the year ended December 31, 2020 (the "Annual Report"). Readers should carefully review these risks, as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission. In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to rely on such forward-looking information. We undertake no obligation to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

Recent Accounting Pronouncements

See Note 2 in the Notes to Condensed Consolidated Financial Statements for a full description of recent accounting pronouncements, including the respective dates of adoption or expected adoption and effects on our condensed consolidated financial statements contained in Item 1 of this Quarterly Report.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk in the ordinary course of business, which consists primarily of interest rate risk associated with our cash and cash equivalents and our debt and foreign exchange rate risk.

Interest rate risk. Certain interest rates are variable and fluctuate with current market conditions. Our investments have limited exposure to market risk. We maintain a portfolio of cash, cash equivalents and short-term investments consisting primarily of bank deposits, money market funds, certificates of deposit, commercial paper, corporate bonds and government and agency securities. None of these investments have a maturity date in excess of one year. Because of the short-term nature of these instruments, a sudden change in market interest rates would not be expected to have a material impact on our financial condition or results of operations.

We are also exposed to market risk as a result of increases or decreases in the amount of interest expense we must pay on our bank debt and borrowings on our bank credit facilities. Our interest obligations on our long-term debt are fixed either by the underlying agreement or by means of an interest rate swap agreement. Although our U.S. revolving line of credit and our Euro credit facility have variable rates, we do not believe that a 10% change in market interest rates would have a material impact on our financial position or results of operations.

Exchange rates. Due to our international operations, a significant portion of our net sales, cost of sales and operating expenses are denominated in currencies other than the U.S. Dollar, principally the Euro, the Russian Ruble, the Chinese Yuan

and the Japanese Yen. As a result, our international operations give rise to transactional market risk associated with exchange rate movements of the U.S. Dollar, the Euro, the Russian Ruble, the Chinese Yuan and the Japanese Yen. The loss on foreign exchange transactions totaled \$2.8 million for the three months ended June 30, 2021 compared to a loss of \$12.8 million for the three months ended June 30, 2020. Management attempts to minimize these exposures by partially or fully off-setting foreign currency denominated assets and liabilities at our subsidiaries that operate in different functional currencies. The effectiveness of this strategy can be limited by the volume of underlying transactions at various subsidiaries and by our ability to accelerate or delay inter-company cash settlements. As a result, we are unable to create a perfect offset of the foreign currency denominated assets and liabilities. At June 30, 2021, our material foreign currency exposure is net U.S. Dollar denominated assets at subsidiaries where the Euro or the Russian Ruble is the functional currency and U.S. Dollar denominated liabilities where the Chinese Yuan is the functional currency. The U.S. Dollar denominated assets are comprised of cash, third party receivables and inter-company receivables. The U.S. Dollar denominated liabilities are comprised of inter-company payables. A 5% change in the relative exchange rate of the U.S. Dollar to the Euro as of June 30, 2021 applied to the net U.S. Dollar asset balances, would result in a foreign exchange gain of \$9.3 million if the U.S. Dollar appreciated and a \$9.7 million foreign exchange loss if the U.S. Dollar depreciated. A 5% change in the relative exchange rate of the U.S. Dollar to the Russian Ruble as of June 30, 2021 applied to the net U.S. Dollar asset balances, would result in a foreign exchange gain of \$3.6 million if the U.S. Dollar appreciated and a \$3.8 million foreign exchange loss if the U.S. Dollar depreciated. A 5% change in the relative exchange rate of the U.S. Dollar to the Chinese Yuan as of June 30, 2021 applied to the net U.S. Dollar liabilities balances, would result in a foreign exchange loss of \$5.5 million if the U.S. Dollar appreciated and a \$5.7 million foreign exchange gain if the U.S. Dollar depreciated. It is possible that the COVID-19 pandemic may create additional volatility in exchange rates going forward.

In addition, we are exposed to foreign currency translation risk for those subsidiaries whose functional currency is not the U.S. Dollar as changes in the value of their functional currency relative to the U.S. Dollar can adversely affect the translated amounts of our revenue, expenses, net income, assets and liabilities. This can, in turn, affect the reported value and relative growth of sales and net income from one period to the next. In addition, changes in the translated value of assets and liabilities due to changes in functional currency exchange rates relative to the U.S. Dollar result in foreign currency translation adjustments that are a component of other comprehensive income or loss.

Foreign currency derivative instruments can also be used to hedge exposures and reduce the risks of certain foreign currency transactions; however, these instruments provide only limited protection and can carry significant cost. We have no foreign currency derivative instruments as of June 30, 2021. We will continue to analyze our exposure to currency exchange rate fluctuations and may engage in financial hedging techniques in the future to attempt to minimize the effect of these potential fluctuations. Exchange rate fluctuations may adversely affect our financial results in the future.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Under the supervision of our chief executive officer and our chief financial officer, our management has evaluated the effectiveness of the design and operation of our "disclosure controls and procedures" (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of the end of the period covered by this Quarterly Report on Form 10-Q (the "Evaluation Date"). Based upon that evaluation, our chief executive officer and our chief financial officer have concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective.

Changes in Internal Controls

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act) that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. We are continually monitoring and assessing the changes to business processes resulting from COVID-19, such as increases in remote work or absenteeism, to ensure the design and operating effectiveness of our controls are adequate.

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Information with respect to this item may be found in Note 12, "Commitments and Contingencies" in the Notes to Condensed Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report and is incorporated herein by reference.

ITEM 1A. RISK FACTORS

In addition to the other information in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2020, which could materially and adversely affect our financial condition, results of operations or cash flows, or cause our actual results to differ materially from those projected in any forward-looking statements. We may also face other risks and uncertainties that are not presently known, are not currently believed to be material, or are not identified in our Annual Report because they are common to all businesses.

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

Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

There have been no sales of unregistered securities for the three months ended June 30, 2021.

Issuer Purchases of Equity Securities

The following table reflects issuer purchases of equity securities for the three months ended June 30, 2021:

	Total Number of Shares (or Units) Purchased		Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
April 1, 2021 — April 30, 2021	53,468	(2), (3)	\$ 225.05	53,468	\$ 231,303
May 1, 2021 — May 31, 2021	66,211	(1), (2), (3)	198.47	65,749	218,252
June 1, 2021 — June 30, 2021	65,654	(2), (3)	207.06	65,654	204,658
Total	185,333		\$ 209.18	184,871	\$ 204,658

(1) In 2012, our Board of Directors approved "withhold to cover" as a tax payment method for vesting of restricted stock awards for certain employees. Pursuant to the "withhold to cover" method, we withheld from such employees the shares noted in the table above to cover tax withholding related to the vesting of their awards. For the three months ended June 30, 2021 a total of 462 shares were withheld at an average price of \$195.96.

(2) On February 12, 2019, we announced that our Board of Directors authorized the purchase of up to \$125 million of IPG common stock (the "February 2019 program") following the completion of our \$125 million repurchase program authorized in July 2018. Under the February 2019 program, we are authorized to repurchase shares of common stock in an amount not to exceed the lesser of (a) the number of shares issued to employees and directors under the Company's various employee and director equity compensation and employee stock purchase plans from January 1, 2019 through December 31, 2020 and (b) \$125 million, exclusive of any fees, commissions or other expenses. We repurchased 184,871 shares in the second quarter of 2021 under the February 2019 authorization.

(3) On May 5, 2020, we announced that our Board of Directors authorized the purchase of up to \$200 million of IPG common stock (the "May 2020 program"), exclusive of any fees, commissions or other expenses. The May 2020 program is separate from, and in addition to, the repurchases authorized under the February 2019 program. There were no shares purchased in the second quarter of 2021 under the May 2020 authorization.

Share repurchases under both purchase authorizations may be made periodically in open-market transactions using the Company's working capital, and are subject to market conditions, legal requirements and other factors. The share purchase program authorizations do not obligate us to repurchase any dollar amount or number of our shares, and repurchases may be commenced or suspended from time to time without prior notice.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

(a) Exhibits

Exhibit No.	Description
10.1	Employment Agreement dated May 4, 2021 between Registrant and Dr. Valentin P. Gapontsev.
10.2	Secondment Agreement dated May 4, 2021 among the Registrant, IPG Laser GmbH and Dr. Eugene Scherbakov.
10.3	Service Agreement dated May 4, 2021 between IPG Laser GmbH and Dr. Eugene Scherbakov.
10.4	Confidentiality, Non-Competition and Confirmatory Assignment Agreement dated May 4, 2021 between the Registrant and Dr. Eugene Scherbakov.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 1350
101.INS	Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

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.

IPG PHOTONICS CORPORATION

Date: August 4, 2021

By: /s/ Eugene A. Scherbakov
Eugene A. Scherbakov
Chief Executive Officer
(Principal Executive Officer)

Date: August 4, 2021

By: /s/ Timothy P.V. Mammen
Timothy P.V. Mammen
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

EMPLOYMENT AGREEMENT

This Employment Agreement ("Agreement"), executed on this 4th day of May, 2021 (the "Effective Date"), by and between IPG Photonics Corporation, a Delaware corporation having an office at 50 Old Webster Road, Oxford, MA 01540 (the "Corporation"), and Valentin P. Gapontsev ("Executive"). The Corporation and Executive are referred to jointly below as the "Parties."

WHEREAS, the Corporation and Executive previously entered into an amended and restated employment agreement dated in May 2019 (the "Prior Agreement");

WHEREAS, Executive currently serves as Chief Executive Officer of the Corporation under the terms of the Prior Agreement;

WHEREAS, the Board of Directors of the Corporation and Executive have mutually determined that the Executive shall transition to the role of Executive Chairman of the Corporation's Board of Directors (the "Board") as of the Effective Date;

WHEREAS, the Corporation and Executive desire to amend and restate the Prior Agreement to reflect the Executive's transition to the role of Executive Chairman of the Corporation;

WHEREAS, the Corporation desires to continue to employ Executive and Executive desires to continue his employment with the Corporation on the terms and conditions set forth in this Agreement; and

WHEREAS, the Parties acknowledge and agree that this amendment and restatement of the Prior Agreement and the Executive's transition to the role of Executive Chairman of the Board does not constitute a termination, expiration, or similar term of like meaning for purposes of the Prior Agreement or any employee benefit plans, programs, agreements, or arrangements of the Corporation.

NOW, THEREFORE, in consideration of the employment of Executive, the mutual terms and conditions set forth below, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **Employment.** Executive will be employed by the Corporation in the position of Executive Chair of the Board. Executive will report to the Board. Executive will have such powers and duties commensurate with the position of Executive Chair of the Board of a company of the size and nature of the Corporation and such other duties as shall be assigned from time to time by the Board, subject to applicable laws, and ethical duties. During the Term (as defined below), Executive shall devote Executive's reasonable best efforts, energies, and abilities and Executive's full business time, skill, and attention to the business and affairs of the Corporation and its Affiliates (as defined below), and shall act at all times according to the highest professional standards, for the purpose of advancing the business of the Corporation and its Affiliates. For purposes of this Agreement, an "Affiliate" shall mean a corporation that, for

purposes of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), is a Parent or Subsidiary of the Corporation within the meaning of Code Sections 424(e) and 424(f).

2. Term. This Agreement shall commence on the Effective Date and shall expire on 5:00 pm E.S.T. on December 31, 2022 (the "Initial Term"), unless terminated earlier pursuant to the provisions of Sections 6, 7, 8, or 10 hereof. The term of employment shall be renewed automatically for successive periods of one (1) year each (a "Renewal Term") after the expiration of the Initial Term, unless the Corporation provides Executive, or Executive provides the Corporation, with written notice to the contrary at least one hundred eighty (180) calendar days prior to the end of the Initial Term or any Renewal Term. The Initial Term and any Renewal Terms are collectively referred to herein as the "Term." If either the Corporation or Executive elect not to renew the Term of this Agreement in accordance with this Section 2, the Executive's employment with the Corporation will terminate upon the end of the Term. In the event of a "Change in Control" of the Corporation (as such term is defined in the IPG Photonics Corporation 2006 Incentive Compensation Plan, as amended or any successor thereto (the "Equity Plan")) during the Term, the Term automatically will be extended until the later of (i) the second anniversary of the Change in Control, or (ii) the scheduled expiration of the then-current Term.

3. Compensation.

(i) Salary. The Corporation shall pay to Executive an annual base salary ("Base Salary") of \$1,000,000.00 effective as of the Effective Date. The Corporation will pay Executive's Base Salary in equal installments in accordance with the Corporation's standard payroll policies and schedule, subject to tax and elective withholding and deductions. Thereafter, the Board, or such committee of the Board as is responsible for setting the compensation of the Executive Chairman of the Board, shall review Executive's performance and Base Salary annually in January of each year, in light of competitive data, the Corporation's performance, Executive's performance, and such other factors as the Board deems appropriate, and determine whether to adjust Executive's Base Salary, retroactive to January 1 of the year. The first review shall be in January 2022. Such adjusted annual salary then shall become Executive's "Base Salary" for purposes of this Agreement.

(ii) Annual Bonus. Executive will be eligible for an annual cash bonus (the "Bonus"), based on performance, and calculated as a percentage of Executive's Base Salary. The Bonus will be paid at the time payment is made to other similarly situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture, and is intended to qualify for the short-term deferral exception to Code Section 409A.

(iii) Equity Compensation. Executive will be eligible to participate in any long-term incentive plans and/or equity-based compensation plans established or maintained by the Corporation for its senior executive officers or employees, including, but not limited to, the Equity Plan.

4. Benefits.

(i) Executive shall be entitled to the extent eligible to participate in any benefit plans as may be adopted and modified by the Corporation from time to time, including without limitation health, dental and medical plans, life and disability insurance, paid vacation, holiday, and retirement plans. The benefits available to Executive shall be no less favorable than those available to other executives at similar levels within the organization or to the employees of the Corporation at the location where Executive works. Benefits provided under this Agreement shall be subject to the terms and conditions of any applicable benefit plan, including any eligibility and vesting requirements, as such plans may be in effect from time to time, and to the Corporation's ability to amend, modify, or terminate such plan(s) at any time and from time to time.

(ii) Executive shall be entitled to five weeks of paid vacation each year. The maximum number of accrued vacation hours that Executive can have at any point in time is equal to the total vacation hours earned in the last twelve (12) months, plus one week of vacation carried over from the prior twelve (12) months of service.

5. Other Activities. The employment of Executive shall be on a full-time basis, but Executive may be an investor or otherwise have an interest in or serve on the board of directors or advisory board to other businesses, partnerships and entities so long as: (i) the other activities of Executive do not (a) materially interfere with the performance of Executive's duties to the Corporation, (b) violate the other provisions of either this Agreement or the Corporation's Code of Conduct, or (c) cause Executive to violate the Restrictive Covenants defined and incorporated herein in Section 12 of this Agreement; and (ii) Executive discloses all such activities to the Chair of the Board's Compensation Committee in writing, provided that, Executive may not serve on the board of directors of a private or publicly traded company (other than the Corporation or a not-for-profit organization) without the Compensation Committee's written consent and Executive may not serve as chairman of another publicly traded company without the Board's written consent. Nothing in this provision or this Agreement limits or restricts Executive's duties and obligations, including the duty of loyalty, that arise under the law.

6. Termination by the Corporation. The Corporation may terminate Executive's employment during the Term:

(i) without Cause (as defined below) by giving Executive thirty (30) calendar days' prior written notice, or

(ii) for Cause by delivering to Executive a copy of a resolution duly adopted by the affirmative vote of a majority of the independent directors of the Board then in office at a meeting of the Board called and held for such purpose, finding that Executive has committed an act or omission set forth below in this Section 6(ii). Nothing herein shall limit Executive's right or Executive's beneficiaries' right to contest the validity or propriety of any such determination, in accordance with Section 23 of this Agreement. For purposes of this Agreement, "Cause" shall mean: (A) an act of fraud, embezzlement, or theft by Executive in connection with Executive's duties or in the course of Executive's employment with the Corporation or an Affiliate; (B) Executive's intentional

wrongful damage to the property of the Corporation or its Affiliates; (C) Executive's intentional breach of Section 12 hereof while Executive remains in the employ of the Corporation or an Affiliate; (D) an act of Gross Misconduct (as defined below); (E) Executive's material violation of the Corporation's Code of Conduct, as amended from time to time; or (F) Executive's conviction of a misdemeanor involving moral turpitude or a felony; and, in each case, the reasonable, good faith determination by the Board as hereafter provided that any such act or omission shall have been materially harmful to the Corporation or an Affiliate financially, reputationally or otherwise. For purposes of this Agreement, "Gross Misconduct" shall mean a willful or grossly negligent act or omission that has or will have a material and adverse impact on the business or reputation of the Corporation or its Affiliates, or on the business of the customers or suppliers of the Corporation or its Affiliates as such relate to the Corporation. For purposes of this Agreement, no act or failure to act on Executive's part shall be considered "willful" unless it is done, or omitted to be done, by Executive in bad faith or without reasonable belief that Executive's action or omission was in the best interests of the Corporation or an Affiliate. Any act or failure to act based upon authority given pursuant to a resolution duly adopted by the Board or based upon the advice of counsel for the Corporation or an Affiliate shall be conclusively presumed to be done, or omitted to be done, in good faith and in the best interests of the Corporation or an Affiliate. In addition, Executive's employment shall be deemed to have terminated for Cause if, based on facts and circumstances discovered after Executive's employment has terminated, the Board determines in reasonable good faith, within one year after Executive's employment terminated, and after appropriate investigation and an opportunity for Executive to be interviewed (with or without counsel as Executive may determine) by the Board or a subcommittee of the independent Board members or its representative, that Executive committed an act during the Term that would have justified a termination for Cause.

7. Termination by Executive. Executive may terminate Executive's employment during the Term by giving the Corporation sixty (60) calendar days' prior written notice; provided that, if Executive purports to terminate Executive's employment during the Term for Good Reason (as defined below), Executive also must give the Corporation written notice of Executive's intent to terminate for Good Reason within sixty (60) calendar days of the occurrence of the event that allegedly constitutes Good Reason. The Corporation shall have a right to cure the event alleged to constitute Good Reason for a period of thirty (30) calendar days after notice from Executive of Executive's intention to terminate for Good Reason. In the event of termination by notice under the first sentence of this Section 7, the Corporation in its discretion may elect a termination date that is earlier than the conclusion of the sixty (60) calendar day notice period, but the termination shall still be deemed a voluntary termination by Executive with Good Reason under this Section. "Good Reason" means the occurrence of any of the following events without Executive's express written consent:

- (i) The material reduction of Executive's authorities, duties, or responsibilities with the Corporation as of the Effective Date;
- (ii) A material reduction by the Corporation of Executive's Base Salary, other than a reduction approved by the Board that similarly applies to all executive officers of

the Corporation, provided that such a reduction in Base Salary shall not exceed more than twenty percent (20%) of Executive's then Base Salary;

(iii) A relocation of the offices of Executive to a place greater than (A) fifty (50) miles in distance from the current executive offices of the Corporation in Oxford, MA, and (B) the current distance of Executive's commute from Executive's home residence to the current executive offices of the Corporation; or

(iv) Any action or inaction that constitutes a material breach by the Corporation of this Agreement.

The Corporation shall have no obligations to Executive after Executive's last day of employment following termination of employment under this Section, except as specifically set forth in this Agreement or under any applicable employee pension or health and welfare benefit plans, programs or arrangements of the Corporation including, without limitation, the Corporation's Certificate of Incorporation or By-Laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, and the indemnification agreement described in Section 14.

8. Automatic Termination. Notwithstanding the provisions of Section 2, Executive's employment shall automatically terminate upon Executive's death or Disability (as defined below). Executive shall be deemed to have a "Disability" for purposes of this Agreement if Executive is unable to perform substantially, by reason of physical or mental incapacity, Executive's duties or obligations under this Agreement, with or without reasonable accommodation as defined in the Americans with Disabilities Act and implementing regulations, for a period of one hundred and eighty (180) consecutive calendar days in any 360-calendar-day period. The Board shall determine, in the good faith exercise of its reasonable discretion, according to the facts then available, whether and when the Disability of Executive has occurred.

9. Term of Agreement. Any termination of Executive's employment shall also end the Term. For purposes of this Agreement, Executive's employment with the Corporation and its Affiliates shall be deemed to be terminated when Executive has a "separation from service" within the meaning of Code Section 409A, and references in this Agreement to termination of employment or employment termination shall be deemed to refer to such a separation from service. Upon Executive's separation from service for any reason, Executive shall be deemed to have resigned as of the date of Executive's separation from service from all offices, directorships, and fiduciary positions with the Corporation, its Affiliates, and employee benefit plans of the Corporation unless Executive is affirmatively re-appointed or re-elected to such position as of the date of Executive's separation from service.

10. Certain Obligations of the Corporation Following Termination of Executive's Employment. Following termination of Executive's employment during the Term under the circumstances described below, the Corporation will pay to Executive the following compensation and provide the following benefits in addition to any benefits to which Executive may be entitled by law in full satisfaction and final settlement of any and all claims and demands that Executive or the Corporation may have against the other under this Agreement:

(i) Termination of Employment for Any Reason. In the event of Executive's termination of employment for any reason, the Corporation shall pay or provide Executive (a) any unpaid Base Salary through the date of termination and (b) any pension or health and welfare benefits (including, without limitation, any unused vacation accrued in accordance with Section 4(ii)) accrued, earned or vested, and any unreimbursed expenses incurred, up to and including the effective date of such termination, to which Executive may be entitled under the terms of any applicable arrangement, pension or health and welfare benefit plan or program (collectively, the "Accrued Amounts").

(ii) Termination Without Cause by the Corporation or for Good Reason by Executive. If, during the Term, the Corporation terminates Executive's employment without Cause under Section 6(i) hereof or Executive terminates Executive's employment for Good Reason under Section 7 hereof, Executive shall be entitled to the following payments and benefits, subject to Section 13:

(a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;

(b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture;

(c) A pro rata portion of the amount of Bonus, if any, Executive would have received pursuant to Section 3(ii) for the year in which Executive's employment terminated. The Corporation shall determine what annual Bonus, if any, Executive would have earned had Executive been employed through the end of the applicable period (the "Base Incentive Amount"), in accordance with the methods used to calculate the annual Bonus for the Corporation's other similarly situated executives; provided that, with respect to any personal performance evaluation element of the annual Bonus calculation, if all financial metric components meet or exceed the "target" level of performance, Executive shall be deemed awarded one hundred percent (100%) of the potential personal performance evaluation bonus; if no financial metric bonus is awarded, no personal performance evaluation bonus will be deemed awarded, and amounts in between the threshold, target and maximum levels of performance will be determined by linear interpolation. The pro rata portion to be paid pursuant to this paragraph shall be determined by multiplying the Base Incentive Amount by a fraction, the numerator of which is the number of calendar days from the beginning of the applicable annual period in which the termination occurred through the date of termination, and the denominator of which is 365. Any payment due under this paragraph shall be paid at the time payment is made to other similarly situated executives of the Corporation, but in no event later than

two and a half (2½) months after the close of the calendar year in which Executive would have become vested in such Bonus;

(d) Continuing payments of Base Salary, payable in accordance with regular payroll practices of the Corporation, for thirty-six (36) months following the date of termination; and

(e) Cash reimbursement of Executive's COBRA premiums (or an amount equal to Executive's COBRA premiums) (sufficient to cover full family health care) for a period of thirty-six (36) months following the termination of Executive's employment, if Executive elects such COBRA coverage; provided, however, that any payments or reimbursements for such COBRA premiums that are subject to Code Section 409A will be made in accordance with Treasury Regulation § 1.409A-3(i)(1)(iv) (or any similar or successor provisions). The foregoing notwithstanding, the Corporation's obligation to reimburse described in the preceding sentence shall cease on the date Executive becomes eligible for coverage under another group health plan offered by a new employer of Executive or covered under a group health plan of the employer of Executive's spouse, in either case, which does not impose pre-existing condition limitations on Executive's coverage. Nothing herein shall be construed to extend the period of time over which COBRA continuation coverage shall be provided to Executive or Executive's dependents beyond that mandated by law.

If, during the Term, the Corporation terminates Executive's employment without Cause under Section 6(i) hereof or Executive terminates Executive's employment for Good Reason under Section 7 hereof, for purposes of determining the vested portions of Executive's stock options and any other equity compensation awards then outstanding, Executive shall be deemed to have terminated employment twelve (12) months following the date of Executive's actual termination of employment.

(iii) Termination by Executive Without Good Reason or by the Corporation for Cause. If, during the Term, Executive terminates employment under Section 7(i) hereof without Good Reason or the Corporation terminates Executive's employment under Section 6(ii) hereof for Cause, Executive shall be entitled to no further compensation or other benefits under this Agreement except for the Accrued Amounts, payable in a single lump sum as soon as practicable following the date of termination.

(iv) Death; Disability. If Executive's employment is terminated during the Term by reason of Executive's death or for Disability, Executive or Executive's estate, as the case may be, shall be entitled to the following payments, subject to Section 13:

(a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;

(b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly situated executives of the Corporation, but in no event later than

two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture; and

(c) The amount payable, if any, as determined pursuant to Section 10(ii)(c), payable at the time payment is made to other similarly situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture.

If Executive's employment is terminated during the Term by reason of Executive's death or for Disability, the treatment of any equity compensation awards held by Executive shall be governed by the terms of the plan or agreement under which such awards were granted.

(v) Termination on or After a Change in Control. If, within twenty-four (24) months following a Change in Control (as defined in the Equity Plan), the Corporation terminates Executive's employment without Cause under Section 6(i) hereof or Executive terminates Executive's employment for Good Reason under Section 7 hereof, Executive shall be entitled to the following payments, subject to Section 13:

(a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;

(b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture;

(c) The amount payable, if any, as determined pursuant to Section 10(ii)(c), payable at the time payment is made to other similarly situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive would have become vested in such Bonus;

(d) Continuing payments of Base Salary, payable in accordance with regular payroll practices of the Corporation, for thirty-six (36) months following the date of termination;

(e) Cash reimbursement of Executive's COBRA premiums (or an amount equal to Executive's COBRA premiums) (sufficient to cover full family health care) for a period of thirty-six (36) months following the termination of Executive's employment if Executive elects such COBRA coverage; provided, however, that any payments or reimbursements for such COBRA premiums that are subject to Code Section 409A will be made in accordance with Treasury

Regulation § 1.409A-3(i)(1)(iv) (or any similar or successor provisions). The foregoing notwithstanding, the Corporation's obligation to reimburse described in the preceding sentence shall cease on the date Executive becomes eligible for coverage under another group health plan offered by a new employer of Executive or covered under a group health plan of the employer of Executive's spouse, in either case, which does not impose pre-existing condition limitations on Executive's coverage. Nothing herein shall be construed to extend the period of time over which COBRA continuation coverage shall be provided to Executive or Executive's dependents beyond that mandated by law;

(f) A lump sum cash amount equal to three (3) times Executive's average annual Bonus over the three (3) completed years immediately preceding the date of the Change in Control, payable as soon as reasonably practicable after the date of termination; and

(g) All equity (including options, RSUs and other stock) awards outstanding as of the Change in Control and held by Executive on the date of termination shall immediately vest and become non-forfeitable.

(h) If a Change in Control occurs and payments are made under this Section 10(v), and a final determination is made by legislation, regulation, or ruling directed to Executive or the Corporation, by court decision, or by independent tax counsel, that the aggregate amount of any payments made to Executive under this Agreement and any other agreement, plan, program or policy of the Corporation in connection with, on account of, or as a result of, such Change in Control ("Total Payments") will be subject to an excise tax under the provisions of Code Section 4999, or any successor section thereof ("Excise Tax"), the Total Payments shall be reduced (beginning with those that are exempt from Code Section 409A) so that the maximum amount of the Total Payments (after reduction) shall be one dollar (\$1.00) less than the amount that would cause the Total Payments to be subject to the Excise Tax; provided, however, that the Total Payments shall only be reduced to the extent that the after-tax value of amounts received by Executive after application of the above reduction would exceed the after-tax value of the Total Payments received without application of such reduction. For this purpose, the after-tax value of an amount shall be determined taking into account all federal, state, and local income, employment, and excise taxes applicable to such amount. In making any determination as to whether the Total Payments would be subject to an Excise Tax, consideration shall be given to whether any portion of the Total Payments could reasonably be considered, based on the relevant facts and circumstances, to be reasonable compensation for services rendered (whether before or after the consummation of the applicable Change in Control). To the extent Total Payments must be reduced pursuant to this Section, the Corporation, without consulting Executive, will reduce the Total Payments to achieve the best economic benefit, and to the extent economically equivalent, on a pro-rata basis.

(1) In the event that upon any audit by the Internal Revenue Service, or by a state or local taxing authority, of the Total Payments, a change is determined to be required in the amount of taxes paid by, or Total Payments made to, Executive, appropriate adjustments will be made under this Agreement such that the net amount that is payable to Executive after taking into account the provisions of Code Section 4999 will reflect the intent of the Parties as expressed in this Section 10(v)(h). Executive shall notify the Corporation in writing of any claim by the Internal Revenue Service that, if successful, would require payment of an Excise Tax or an additional Excise Tax on the Total Payments (a "Claim"). Such notification shall be given as soon as practicable but no later than ten (10) business days after Executive is informed in writing of such Claim and shall apprise the Corporation of the nature of such Claim and the date on which such Claim is requested to be paid. Executive shall not pay such Claim prior to the expiration of the thirty (30) calendar day period following the date on which Executive gives such notice to the Corporation (or such shorter period ending on the date that any payment of taxes with respect to such Claim is due). If the Corporation notifies Executive in writing prior to the expiration of such period that it desires to contest such Claim, Executive shall: (A) give the Corporation any information reasonably requested by the Corporation relating to such Claim, (B) take such action in connection with contesting such Claim as the Corporation shall reasonably request in writing from time to time, including, without limitation, accepting legal representation with respect to such Claim by an attorney reasonably selected by the Corporation, (C) cooperate with the Corporation in good faith in order to contest effectively such Claim, and (D) permit the Corporation to participate in any proceedings relating to such Claim; provided, however, that the Corporation shall bear and pay directly all costs and expenses (including additional interest and penalties) incurred in connection with such contest and shall indemnify and hold Executive harmless for any Excise Tax, additional Excise Tax, or income tax (including interest and penalties with respect thereto) imposed as a result of such representation and payment of costs and expenses. Without limitation on the foregoing provisions of this subparagraph (h)(1), the Corporation, at its sole option, may pursue or forgo any and all administrative appeals, proceedings, hearings and conferences with the taxing authority in respect of such Claim and may, at its sole option, either direct Executive to pay the tax claimed and sue for a refund or contest the Claim in any permissible manner, and Executive agrees to prosecute such contest to a determination before any administrative tribunal, in a court of initial jurisdiction and in one (1) or more appellate courts, as the Corporation shall determine, provided, however, that if the Corporation directs Executive to pay such Claim and sue for a refund, the Corporation shall advance the amount of such payment to Executive on an interest-free basis or, if such an advance is not

permissible thereunder, pay the amount of such payment to Executive as additional compensation, and shall indemnify and hold Executive harmless from any Excise Tax, additional Excise Tax, or income tax (including interest or penalties with respect thereto) imposed with respect to such advance or additional compensation; and further provided that any extension of the statute of limitations relating to payment of taxes for the taxable year of Executive with respect to which such contested amount is claimed to be due is limited solely to such contested amount. The Corporation shall reimburse any fees and expenses provided for under this Section 10(v)(h) on or before the last day of Executive's taxable year following the taxable year in which the fee or expense was incurred, and in accordance with the other requirements of Code Section 409A and Treasury Regulation § 1.409A-3(i)(1)(v) (or any similar or successor provisions).

(2) If, after the receipt by Executive of an amount advanced or paid by the Corporation pursuant to paragraph (h)(1) above, Executive becomes entitled to receive any refund with respect to such Claim, Executive shall (subject to the Corporation's complying with the requirements of subparagraph (h)(1)) promptly pay to the Corporation the amount of such refund (together with any interest paid or credited thereon after taxes applicable thereto). If, after the receipt by Executive of an amount advanced by the Corporation pursuant to paragraph (h)(1), a determination is made that Executive shall not be entitled to any refund with respect to such Claim and the Corporation does not notify Executive in writing of its intent to contest such denial of refund prior to the expiration of sixty (60) calendar days after such determination, then such advance shall be forgiven and shall not be required to be repaid.

(vi) Expiration. If the Term of this Agreement expires due to either the Corporation or Executive electing not to renew the Term in accordance with Section 2, and the Corporation does not offer Executive continued employment in the same or a substantially similar position as, or in a higher position than, Executive's position on the date of the expiration of the Term, and at a compensation level that is the same or substantially similar to that in effect on the date of the expiration of the Term, Executive shall be entitled to resign from employment with the Corporation and receive the following payments, subject to Section 13:

(a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;

(b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which

Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture;

(c) The amount payable, if any, as determined pursuant to Section 10(ii)(c), payable at the time payment is made to other similarly situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive would have become vested in such Bonus;

(d) Continuing payments of Base Salary, payable in accordance with regular payroll practices of the Corporation, for twenty-four (24) months following the date of termination; and

(e) Cash reimbursement of Executive's COBRA premiums (or an amount equal to Executive's COBRA premiums) (sufficient to cover full family health care) for a period of twenty-four (24) months following the termination of Executive's employment if Executive elects such COBRA coverage; provided, however, that any payments or reimbursements for such COBRA premiums that are subject to Code Section 409A will be made in accordance with Treasury Regulation § 1.409A-3(i)(1)(iv) (or any similar or successor provisions). The foregoing notwithstanding, the Corporation's obligation to reimburse described in the preceding sentence shall cease on the date Executive becomes eligible for coverage under another group health plan offered by a new employer of Executive or covered under a group health plan of the employer of Executive's spouse, in either case, which does not impose pre-existing condition limitations on Executive's coverage. Nothing herein shall be construed to extend the period of time over which COBRA continuation coverage shall be provided to Executive or Executive's dependents beyond that mandated by law.

Except as provided in Section 10(i), Executive shall not be entitled to payment of the amounts described in this subsection (vi) if the Corporation offers Executive continued employment in the same or a substantially similar position as, or in a higher position than, Executive's position on the date of expiration of the Term, and at a compensation level that is the same or a substantially similar to that in effect on the date of the expiration of the Term, and Executive declines the offer.

(vii) **No Duplication of Benefits.** Executive shall only be eligible for termination payments and benefits, if any, under one of the provisions of this Section 10. For example, if Executive receives payments and benefits under Section 10(ii) of this Agreement, Executive shall not be eligible to receive payments or benefits under Sections 10(iv), 10(v), or 10(vi). Any termination payments made and benefits provided to Executive under this Agreement shall be in lieu of any other severance payments or benefits for which Executive may be eligible under the IPG Photonics Corporation Executive Severance Plan, as amended, or any similar or successor plan or under the Worker Adjustment Retraining Notification Act of 1988 or any similar state statute or regulation.

(viii) No Mitigation or Offset. In the event of any termination of Executive's employment under this Section 10, Executive shall be under no obligation to seek other employment or otherwise mitigate Executive's damages, and there shall be no offset against amounts due to Executive under this Agreement on account of any remuneration or benefit attributable to any subsequent employment obtained by Executive, except as provided in Sections 10(ii)(e), 10(v)(e), and 10(vi)(e).

(ix) Compensation Recovery Policy. Notwithstanding any provision in this Agreement to the contrary, payments under this Agreement will be subject to any Compensation Recovery Policy established by the Corporation and amended from time to time.

11. Nature of Payments. Upon termination of employment pursuant to Sections 6, 7, 8, or 9, Executive will be released from any duties and obligations to the Corporation set forth in this Agreement (except the duties and obligations under the Restrictive Covenants and as set forth in Section 12 hereof and the obligation under Sections 13 and 23) and the obligations of the Corporation to Executive under this Agreement will be as set forth in Section 10.

12. Restrictive Covenants. Executive has executed and delivered a Confidentiality, Non-Competition and Confirmatory Assignment Agreement prior to or contemporaneous with the date of this Agreement (together with any similar or successor agreements, referred to herein as the "Restrictive Covenants"), and Executive agrees that, as part of this Agreement, Executive shall comply with the terms of the Restrictive Covenants. Notwithstanding Section 10(iii) of this Agreement, if (a) Executive terminates employment other than for Good Reason and, thus, is not entitled to the payments and benefits under Section 10(ii) of this Agreement, and (b)(i) Executive receives a written offer of employment during the Non-Competition Period set forth in Section 2(a) of the Restrictive Covenant, or (ii) Executive is not able to find suitable employment in Executive's field in relation to Executive's skills, position and base salary, which employment would not contravene Section 2(a) of the Restrictive Covenant, after a good faith effort by Executive to search for such employment, and (iii) the Corporation notifies Executive that it intends to enforce the non-compete provisions of such Section 2(a) against Executive, then the Corporation shall pay to Executive an amount equal to the semi-monthly amount of Executive's Base Salary for each semi-monthly payroll period beginning (A) on the effective date of the written offer of employment referred to above or (B) during the period in which Executive is not able to find suitable employment, and ending on the earliest to occur of (I) the end of the Non-Competition Period set forth in such Section 2(a), or (II) the date as of which Executive begins new employment with an employer, which employment would not contravene Section 2(a) of the Restrictive Covenant. For the avoidance of doubt, the non-competition and other provisions of the Restrictive Covenants in all events shall continue to apply until the end of the Non-Competition Period set forth in Section 2(a) of the Restrictive Covenant, regardless of Executive's new employment with an employer that would not contravene Section 2(a) of the Restrictive Covenant, the subsequent termination of such employment, or any other event.

13. Release. Any and all amounts payable and benefits or additional rights provided pursuant to this Agreement beyond Accrued Amounts shall only be payable if Executive delivers to the Corporation an original, signed release of claims of Executive occurring up to the release

date, in a form substantially the same as attached hereto as Exhibit A (the "Release"). The Corporation shall deliver the Release to Executive within ten (10) calendar days of the date Executive's employment terminates and Executive must deliver to the Corporation and not revoke an executed and enforceable Release no later than sixty (60) calendar days after the date Executive's employment terminates (the "Release Deadline"). Payment of the amounts described in Section 10 shall commence no earlier than the date on which Executive delivers to the Corporation and does not revoke an executed and enforceable release as described herein. Payment of any severance or benefits that are not exempt from Code Section 409A shall be delayed until the Release Deadline, irrespective of when Executive executes the Release; provided, however, that where Executive's termination of employment and the Release Deadline occur within the same calendar year, the payment may be made up to thirty (30) calendar days prior to the Release Deadline, and provided further that where Executive's termination of employment and the Release Deadline occur in two separate calendar years, payment may not be made before the later of January 1 of the second year or the date that is thirty (30) calendar days prior to the Release Deadline. As part of the Release, Executive shall affirm that Executive (i) has advised the Corporation in writing, of any facts that Executive is aware of that constitute or might constitute a violation of any ethical, legal, or contractual standards or obligations of the Corporation or any Affiliate, and (ii) is not aware of any existing or threatened claims, charges, or lawsuits that Executive has not disclosed to the Corporation.

14. Indemnification. The Corporation shall maintain a directors' and officers' liability insurance policy covering Executive on the same basis as in effect for other senior executive employees, and shall provide indemnity to Executive by a separate, written indemnification agreement.

15. Notices. Any and all notices, requests, demands, and other communications provided for herein shall be sufficient if in writing and shall be deemed to have been duly given if delivered by hand, if sent by registered or certified mail, return receipt requested, sent by a nationally recognized overnight courier for delivery, or sent by other electronic means generating a receipt confirming delivery of the notice. Notice shall be deemed to have been given when notice is received by the Party on whom the notice was served. Notice to the Corporation shall be addressed to the Corporation at its principal office, with attention to the General Counsel, and notice to Executive shall be addressed to Executive at Executive's last address as shown on the records of the Corporation.

16. Governing Law. This Agreement shall be governed by, construed and enforced in accordance with the substantive laws of the Commonwealth of Massachusetts, without regard to its internal conflicts of law provisions.

17. Severability. In the event that any provision of this Agreement shall be determined to be invalid, illegal, or otherwise unenforceable or contrary to law or public policy, the enforceability of the other provisions in this Agreement shall not be affected thereby.

18. Assignment; Successors. Executive recognizes that this is an agreement for personal services and that Executive may not assign this Agreement. The Agreement shall inure to the benefit of and be binding upon the Corporation's successors and assigns.

19. Entire Agreement/Amendment. This Agreement and the Confidentiality, Non-Competition and Confirmatory Assignment Agreement referred to in Section 12 constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede any and all other agreements, either oral or in writing (including the Prior Agreement), among the Parties hereto with respect to the subject matter hereof. This Agreement may not be amended except by written agreement signed by both Parties. Executive hereby acknowledges and agrees that, during the Term, Executive shall have no rights or benefits under the IPG Photonics Corporation Executive Severance Plan, as amended, or any similar or successor plan.

20. Execution in Counterparts. This Agreement may be executed in one or more counterparts, and by the different Parties in separate counterparts, each of which shall be deemed to be an original but all of which taken together shall constitute one and the same agreement (and all signatures need not appear on any one counterpart), and this Agreement shall become effective when one or more counterparts has been signed by each of the Parties hereto and delivered to each of the other Parties hereto. A copy of this Agreement that is executed by a Party and transmitted by that Party to the other Party by facsimile or as an attachment (e.g., in ".tif" or ".pdf" format) to an email shall be binding upon the signatory to the same extent as a copy hereof containing that Party's original signature.

21. Waiver. The failure of either of the Parties to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way affect the validity of this Agreement or any provision hereof or the right of either of the Parties to enforce each and every provision of this Agreement. No waiver of any breach of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the Party against whom or which enforcement of such waiver is sought, and no waiver of any such breach shall be construed or deemed to be a waiver of any other or subsequent breach.

22. Capacity. Executive and the Corporation hereby represent and warrant to the other that: (i) Executive or the Corporation has full power, authority and capacity to execute and deliver this Agreement, and to perform Executive's or the Corporation's obligations hereunder; (ii) such execution, delivery and performance will not (and with the giving of notice or lapse of time or both would not) result in the breach of any agreements or other obligations to which Executive or the Corporation is a party or Executive or the Corporation is otherwise bound; and (iii) this Agreement is Executive's or the Corporation's valid and binding obligation in accordance with its terms.

23. Arbitration. Any controversy or claim arising out of or relating to this Agreement or the breach thereof or otherwise arising out of Executive's employment or the termination of that employment (including, without limitation, any claims of unlawful employment discrimination whether based on age or otherwise) shall, to the fullest extent permitted by law, be settled by arbitration by a single arbitrator in any forum and form agreed upon by the Parties or, in the absence of such an agreement, under the auspices of the American Arbitration Association ("AAA") in Worcester, Massachusetts, by a single arbitrator, in accordance with the Employment Dispute Resolution Rules of the AAA, including, but not limited to, the rules and procedures applicable to the selection of arbitrators. In the event that any person or entity other

than Executive or the Corporation may be a Party with regard to any such controversy or claim, such controversy or claim shall be submitted to arbitration subject to such other person or entity's agreement. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. This Section 23 shall be specifically enforceable. Neither Executive, the Corporation, nor the arbitrator shall disclose the existence, content, or results of any arbitration hereunder without the prior written consent of all Parties. Notwithstanding the foregoing, this Section 23 shall not preclude either Party from pursuing a court action for the sole purpose of obtaining a temporary restraining order or a preliminary injunction in circumstances in which such relief is appropriate; provided that any other relief shall be pursued through an arbitration proceeding pursuant to this Section 23. Punitive and consequential damages shall not be permitted as an award and each Party shall bear the fees and expenses of its own counsel and expert witnesses.

24. Consent to Jurisdiction. To the extent that any court action is permitted consistent with or to enforce Section 23 of this Agreement, the Parties hereby consent to the jurisdiction of the Superior Court of the Commonwealth of Massachusetts and the United States District Court for the District of Massachusetts, Worcester Division. Accordingly, with respect to any such court action, Executive (a) submits to the personal jurisdiction of such courts; (b) consents to service of process; and (c) waives any other requirement (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction or service of process.

25. Survival. All Sections of this Agreement survive beyond the Term, except Sections 1 through 5, and as otherwise specifically stated.

26. Code Section 409A. This Agreement is intended to comply with Code Section 409A and the interpretative guidance thereunder, including the exceptions for short-term deferrals, separation pay arrangements, reimbursements, and in-kind distributions, and shall be administered accordingly. This Agreement shall be construed and interpreted with such intent. Each payment under Section 10 of this Agreement or any Corporation benefit plan is intended to be treated as one of a series of separate payments for purposes of Code Section 409A and Treasury Regulation § 1.409A-2(b)(2)(iii). Any payment under Section 10 that is subject to Code Section 409A will not be made before the date that is six (6) months after the date of termination or, if earlier, the date of Executive's death (the "Six-Month Delay Rule") if Executive is a Specified Employee (as defined below) as of Executive's termination of employment. Payments to which Executive otherwise would be entitled during the first six months following Executive's termination of employment (the "Six-Month Delay") will be accumulated and paid on the first day of the seventh month following Executive's termination of employment. Notwithstanding the Six-Month Delay Rule, to the maximum extent permitted under Code Section 409A and Treasury Regulation § 1.409A-1(b)(9)(iii) (or any similar or successor provisions), during the Six-Month Delay and as soon as practicable after satisfaction of Section 13 of this Agreement, the Corporation will pay Executive an amount equal to the lesser of (A) the total severance scheduled to be provided under Section 10 above, or (B) two times the lesser of (1) the maximum amount that may be taken into account under a qualified plan pursuant to Code Section 401(a)(17) for the year in which Executive's termination of employment occurs, and (2) the sum of Executive's annualized compensation based upon the annual rate of pay for services provided to the Corporation for the taxable year of Executive preceding the taxable year.

of Executive in which Executive’s termination of employment occurs; provided that amounts paid under this sentence will count toward, and will not be in addition to, the total payment amount required to be made to Executive by the Corporation under Section 10 above. For purposes of this Agreement, the term “Specified Employee” has the meaning given to that term in Code Section 409A and Treasury Regulation § 1.409A-1(i) (or other similar or successor provisions). The Corporation’s “specified employee identification date” (as described in Treasury Regulation § 1.409A-1(i)(3) or any similar or successor provisions) will be December 31 of each year, and the Corporation’s “specified employee effective date” (as described in Treasury Regulation § 1.409A-1(i)(4) or any similar or successor provisions) will be April 1 of each succeeding year.

IN WITNESS WHEREOF, this Employment Agreement has been duly executed:

IPG PHOTONICS CORPORATION

By: /s/ Gregory P. Dougherty /s/ Valentin P. Gapontsev
Gregory P. Dougherty, on behalf of the Valentin P. Gapontsev
Compensation Committee

EXHIBIT A
RELEASE AND WAIVER AGREEMENT

This Release and Waiver Agreement ("Agreement") is entered into this ____ day of _____, 202__ by and between IPG Photonics Corporation, a Delaware corporation (the "Corporation") and _____ (hereinafter "Executive").

WHEREAS, Executive's employment with the Corporation is terminated effective _____, 20__ ("Termination Date") and the Corporation and Executive have voluntarily agreed to the terms of this Agreement in exchange for severance benefits under the Employment Agreement between the parties effective **[DATE]**, 2021, as it may be amended ("Employment Agreement"), to which Executive otherwise would not be entitled;

WHEREAS, accordingly the Corporation has determined that Executive will receive severance pay if Executive executes and complies with the terms of this Agreement; and

WHEREAS, Executive acknowledges that the consideration received by Executive under the terms of this Agreement and the Employment Agreement for the release and waiver contained herein is in addition to any consideration the Corporation is otherwise required to provide Executive.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements set forth below, the parties hereby acknowledge and agree as follows:

1. **Severance.** In consideration for Executive's agreements contained herein and Executive's compliance with Executive's continuing obligations under the Employment Agreement, including Executive's obligations under Section 12, the Corporation will pay Executive the applicable severance provided in Section 10 of the Employment Agreement. Except as specifically provided in this Agreement, the Employment Agreement, and any applicable plans, programs or arrangements of the Corporation including, without limitation, the Corporation's Certificate of Incorporation or By-laws, as either may be amended from time to time, the IPG Photonics Corporation 2006 Incentive Compensation Plan, as amended or any successor thereto (the "Equity Plan") and any agreements thereunder, and the indemnification agreement dated _____ between the Corporation and Executive (the "Indemnification Agreement"), Executive shall not be entitled to any other payment, benefits, or other consideration from the Corporation.

2. **Waiver and Release.** In consideration for the payments and benefits to be provided to Executive as set forth herein and the Employment Agreement, Executive, himself and for any person or entity that may claim by him or through him, including Executive's heirs, executors, administrators, successors, and assigns, hereby knowingly, irrevocably, unconditionally, and voluntarily waives, releases, and forever discharges the Corporation and each of its individual or collective past, present and future parent, subsidiaries, divisions and affiliates, its and their joint ventures and its and their respective directors, officers, associates, employees, representatives, partners, consultants, insurers, attorneys, administrators, accountants, executors, heirs, successors, and agents, and each of its and their respective predecessors,

successors, and assigns and all persons acting by, through, or in concert with any of them (hereinafter collectively referred to as "Releasees"), from any and all claims, causes of action, or liabilities relating to Executive's employment with the Corporation or the termination thereof, known or unknown, suspected or unsuspected, arising from any omissions, acts or facts that have occurred up until and including the date Executive executes this Agreement which have been or could be asserted against the Releasees, including but not limited to:

(a) causes of action or liabilities relating to Executive's employment with the Corporation or the termination thereof arising under Title VII of the Civil Rights Act, the Age Discrimination in Employment Act (the "ADEA"), the Employee Retirement Income Security Act, the Worker Adjustment and Retraining Notification Act, the Americans with Disabilities Act, the Equal Pay Act, the Family and Medical Leave Act, and the Delaware General Corporations Act as such Acts have been amended, and/or any other foreign, federal, state, municipal, or local employment discrimination statutes (including, but not limited to, claims based on age, sex, attainment of benefit plan rights, race, color, religion, national origin, marital status, sexual orientation, pregnancy, gender identity, transgender status, genetic carrier status, ancestry, harassment, parental status, handicap, disability, retaliation, veteran status, any military service or application for military service, or any other category protected under federal or state law); and/or

(b) causes of action or liabilities related to Executive's employment with the Corporation or the termination thereof arising under any other federal, state, municipal, or local statute, law, ordinance, or regulation; and/or

(c) causes of action or liabilities relating to rights to or claims for pension, profit-sharing, wages, bonuses, or other compensation or benefits; and/or

(d) any other cause of action relating to Executive's employment with the Corporation or the termination thereof including, but not limited to, actions seeking severance pay, except as provided herein, actions based upon breach of contract, wrongful termination, defamation, intentional infliction of emotional distress, tort, personal injury, invasion of privacy, defamation, discrimination, retaliation, promissory estoppel, fraud, violation of public policy, negligence and/or any other common law, or other cause of action whatsoever arising out of or relating to employment with and/or separation from employment with the Corporation and/or any of the other Releasees.

Executive not only releases and discharges the Releasees from any and all claims as stated above that Executive could make on Executive's own behalf or on behalf of others, but also those claims that might be made by any other person or organization on Executive's behalf, and Executive specifically waives any right to recover any damage awards as a member of any class in a case in which any claim(s) against the Releasees are made involving any matters.

Without in any way limiting the Release herein, Executive also specifically releases, remises, discharges, indemnifies and holds harmless the Releasees from any claims for back wages, salary, vacation pay, draws, incentive pay, bonuses, stock and stock options, commissions, and any and all other forms of compensation, attorneys' fees,

or other costs or sums that arise or may arise under the Massachusetts Wage Act, including without limitation, M.G.L. c. 149, §§ 105A, 148 and 150, and M.G.L. c. 151.

This Release does not apply to claims for workers' compensation benefits, unemployment insurance benefits or any other claim that cannot lawfully be waived by this Agreement.

This Release does not apply to any claims arising solely after the execution of this Agreement or to any claims arising from a breach of this Agreement.

Notwithstanding the foregoing, nothing in this Agreement shall bar or prohibit Executive from contacting, filing a charge or complaint with, seeking assistance from or participating in any proceeding before any federal or state administrative agency to the extent permitted by applicable federal, state and/or local law. However, Executive nevertheless will be prohibited to the fullest extent authorized by law from obtaining monetary damages or other personal relief in any agency proceeding in which Executive does so participate.

Nothing herein shall constitute a waiver or release of any of Executive's rights under this Agreement, any other applicable plans, programs, or arrangements of the Corporation including, without limitation, the Corporation's Certificate of Incorporation or By-laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, or under the Indemnification Agreement.

Executive expressly waives the benefits of any statute or rule of law that, if applied to this Agreement, would otherwise exclude from its binding effect any claims against the Corporation not now known by Executive to exist.

3. Nondisparagement. Executive agrees that, except as to statements required by law, compelled through valid legal process, or to any local, state or federal agency, Executive will not directly or indirectly, individually or in concert with others, engage in any conduct or make any statement (whether oral or written) calculated or likely to have the effect of undermining, disparaging, or otherwise reflecting poorly upon the Corporation or its good will, products or business opportunities, or in any manner detrimental to the Corporation. In addition, Executive agrees not to make any disparaging remarks regarding any related, affiliated, or subsidiary organizations of the Corporation. The Corporation agrees to use its reasonable best efforts to cause its officers and directors not to, directly or indirectly, individually or in concert with others, except as to statements required by law, compelled through valid legal process, or to any local, state or federal agency, engage in any conduct or make any statement (whether oral or written) calculated or likely to have the effect of undermining, disparaging, or otherwise reflecting poorly upon Executive or in any manner detrimental to Executive.

4. Cause of Action. As used in this Agreement, the phrase "cause of action" includes all claims, covenants, warranties, promises, agreements, undertakings, actions, suits, counterclaims, causes of action, complaints, charges, obligations, duties, demands, debts, accounts, judgments, costs, expenses, losses, damages, and liabilities, of whatsoever kind or nature, in law, equity, or otherwise.

5. No Assignment of Causes of Action. Executive represents and warrants that Executive has not filed or caused to be filed against the Releasees any claims, actions, or lawsuits. Executive further represents and warrants that Executive has not sold, assigned, transferred, conveyed, or otherwise disposed of to any third party, by operation of law or otherwise, any claim of any nature whatsoever relating to any matter covered by this Agreement.

6. Representations of the Corporation. The Corporation represents that it is not presently aware of any cause of action that it or any of the other Releasees have against Executive as of the date hereof. The Corporation acknowledges that the release granted by Executive in Paragraph 2 above will be null and void in the event the Corporation subsequently seeks to treat Executive's termination of employment as "for Cause" under the last sentence of Section 6(ii) of the Employment Agreement.

7. Representations of Executive. Executive represents that Executive has been given an adequate opportunity to advise the Corporation's human resources, legal, or other relevant management division, and has so advised such division in writing, of any facts that Executive is aware of that constitute or might constitute a violation of any ethical, legal, or contractual standards or obligations of the Corporation or any Affiliate. Executive further represents that Executive is not aware of any existing or threatened claims, charges, or lawsuits that he/she has not disclosed to the Corporation.

8. Notice to Seek Counsel, Consideration Period, Revocation Period. Executive acknowledges that Executive has been advised in writing hereby to consult with an attorney before signing this document and that Executive has had at least twenty-one (21) calendar days after receipt of this document to consider whether to accept or reject this Agreement. Executive understands that Executive may sign this Agreement prior to the end of such twenty-one (21) calendar day period, but is not required to do so. Under ADEA, Executive has seven (7) calendar days after Executive signs this Agreement to revoke it. Such revocation must be in writing and delivered either by hand or mailed and postmarked within the seven (7) calendar day period. If sent by mail, it is requested that it be sent by certified mail, return receipt requested to the Corporation's General Counsel Office at 50 Old Webster Road, Oxford, MA 01540. If Executive revokes this Agreement as provided herein, it shall be null and void and Executive shall not be entitled to receive the payments as described in the first sentence of Paragraph 1 herein. If Executive does not revoke this Agreement within seven (7) calendar days of signing it, this Agreement shall become enforceable and effective on the seventh (7th) day after Executive signs this Agreement ("Effective Date").

9. Governing Law; Disputes. Except as provided in Section 23 of the Employment Agreement, or as provided below, jurisdiction and venue over disputes with regard to this Agreement shall be exclusively in the courts of the State of Massachusetts or the United States District Court for the District of Massachusetts. This Agreement shall be construed and interpreted in accordance with and governed by the laws of the State of Massachusetts, without regard to the choice of laws provisions of such laws. The parties agree that any action brought by a party to enforce or interpret this Agreement shall be brought in a State or Federal Court sitting in Boston, Massachusetts; except that an action by the Corporation to enforce its rights under Section 12 of the Employment Agreement may also be brought in Executive's state of

residency or any other forum in which Executive is subject to personal jurisdiction. In addition, Executive and the Corporation specifically consent to personal jurisdiction in the State of Massachusetts for purposes of this Agreement.

10. Amendment; Waiver. No provision of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing signed by Executive and the Corporation. This Agreement shall be enforced in accordance with its terms and shall not be construed against either party.

11. Severability. The parties agree that if any provision, section, subsection or other portion of this Agreement shall be determined by any court of competent jurisdiction to be invalid, illegal, or unenforceable in whole or in part and such determination shall become final, such provision or portion shall be deemed to be severed or limited, but only to the extent required to render the remaining provisions and portion of this Agreement enforceable. This Agreement as thus amended will remain in full force and effect and will be binding on the parties and will be enforced so as to give effect to the intention of the parties insofar as that is possible. In addition, the parties hereby expressly empower a court of competent jurisdiction to modify any term or provision of this Agreement to the extent necessary to comply with existing law and to enforce this Agreement as modified.

12. Enforcement. This Agreement may be pleaded as a full and complete defense and may be used as the basis for an injunction against any action at law or proceeding at equity, or any private or public judicial or non-judicial proceeding instituted, prosecuted, maintained or continued in breach hereof.

13. No Enlargement of Employee Rights. Executive acknowledges that, except as expressly provided in this Agreement, any employment or contractual relationship between him and the Corporation is terminated, and that Executive has no future employment or contractual relationship with the Corporation other than the contractual relationship created by this Agreement, the Employment Agreement, any other applicable plans, programs or arrangements of the Corporation, including, without limitation, the Corporation's Certificate of Incorporation or By-laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, and the Indemnification Agreement. The Corporation has no obligation, contractual or otherwise, to employ or reemploy, hire or rehire, or recall or reinstate Executive in the future with the Corporation.

14. No Representations. Executive represents that Executive has carefully read and understands the scope and effect of the provisions of this Agreement. Executive has not relied upon any representations or statements made by the Corporation that are not specifically set forth in this Agreement.

15. Counterparts. This Agreement may be executed in two counterparts, each of which shall be deemed to be an original but both of which together will constitute one and the same instrument.

16. Withholding. The Corporation shall withhold from any payments otherwise due or payable hereunder any amounts required to be withheld in order to comply with any federal,

state, local or other income or other tax laws requiring withholding with respect to compensation and benefits provided to Executive pursuant to this Agreement.

17. Successors and Assigns. This Agreement binds and inures to the benefit of Executive’s heirs, administrators, representatives, executors, successors and assigns, and the Corporation’s successors and assigns.
18. Entire Agreement; Termination of Prior Agreements. This Agreement contains the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes any previous oral and written agreements or representations relating to the subject matters herein, except for the Employment Agreement, any other applicable plans, programs or arrangements of the Corporation including, without limitation, the Corporation’s Certificate of Incorporation or By-laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, and the Indemnification Agreement.
- The undersigned hereby acknowledge and agree that Executive has carefully read and fully understands all the provisions of this Agreement, has had an opportunity to seek counsel regarding it, and have voluntarily entered into this Agreement by signing below as of the date(s) set forth above.**

IN WITNESS WHEREOF, the parties have executed this Agreement on the date indicated above.

IPG PHOTONICS CORPORATION	EXECUTIVE
By: _____	
Its: _____	_____

SECONDMENT AGREEMENT

This Secondment Agreement (“**Agreement**”), executed on this 4th day of May, 2021 (the “**Effective Date**”), by and between IPG Photonics Corporation, a Delaware corporation (“**Photonics**”), IPG Laser GmbH, a German limited liability company (“**Laser**”), and Evgeny Scherbakov, (“**Executive**”). Photonics, Laser and Executive are referred to jointly below as the “**Parties**.”

WHEREAS, Laser employs Executive in accordance with the terms of a service agreement most recently amended and restated effective May 30, 2019 (the “**2019 Employment Agreement**”);

WHEREAS, Laser intends to second Executive to Photonics in order to serve as Chief Executive Officer of Photonics, which is the parent company of Laser; and

WHEREAS, in consideration of the new role and responsibilities of Executive, the 2019 Employment Agreement will be revised effective May 4, 2021 to modify his compensation and other provisions (as amended, the “**Laser Employment Agreement**”).

NOW, THEREFORE, in consideration of the employment of Executive, the mutual terms and conditions set forth below, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **Service.** Executive will be seconded and employed by Photonics in the position of Chief Executive Officer. Executive will report to the Board of Directors of Photonics (the “**Board**”). Executive will have such powers and duties commensurate with the position of Chief Executive Officer of a company of the size and nature of Photonics and such other duties as shall be assigned from time to time by the Board, subject to applicable laws and ethical duties. Executive will continue to serve as Geschäftsführer of Laser during the Term.

2. **Term.** Laser shall second the Executive to Photonics on for the initial duration of the secondment (the “**Initial Secondment Term**”) to provide the services in accordance with the terms of this Agreement. The Initial Secondment Term shall commence on the effective date of this Agreement and shall continue until the later of: (i) December 31, 2022; or (ii) the date the Agreement is terminated by a Party giving not less than one hundred eighty (180) calendar days prior written notice, subject to Section 8 and Section 9 of this Agreement. The term of secondment shall be renewed automatically for successive periods of one (1) year each (a “**Renewal Term**”) after the expiration of the Initial Secondment Term, unless one of the Parties provides the other two Parties with written notice to the contrary at least one hundred eighty (180) calendar days prior to the end of the Initial Secondment Term or any Renewal Term. The Initial Secondment Term and any Renewal Terms are collectively referred to herein as the “**Term**.” If any of the Parties elect not to renew the Term of this Agreement in accordance with this Section 2, this Agreement shall terminate upon expiration of the then-current Term and the Executive shall return to full-time employment with Laser subject to the terms of the Laser Employment Agreement.

3. **Executive’s Employment.** The Laser Employment Agreement shall remain in force during the Term. Laser shall make any necessary changes to the terms of the Laser Employment Agreement to require the Executive comply with the procedures and policies of Photonics, so that Laser can second the Executive to Photonics to provide services in accordance with the terms of this Agreement (“**Services**”). The Executive shall comply with the terms of the Laser Employment Agreement during the Term and Photonics shall not, and shall not require the Executive, to do

anything that shall breach the Laser Employment Agreement. Laser shall notify Photonics of any change in the Laser Employment Agreement during the Term.

4. **Compensation.**

(a) Laser shall continue to pay the Executive's entire salary, annual incentive and any allowances under the Laser Employment Agreement, provide any benefits due to the Executive or his dependents, make any payments to third parties in relation to the Executive and make any deductions that Laser is required to make from the Executive's salary and other payments, including those required by law in Photonics' country of operation, unless the parties otherwise agree.

(b) Not less than once each quarter, the Executive shall provide Photonics and Laser with the number of days that Executive was in the United States, Germany and other countries. Based upon such location report, Photonics and Laser shall calculate the amount of Executive's income is attributable to Photonics and Laser, and Photonics shall pay Laser a sum equivalent to the allocation of time that the Executive spent in the United States, less applicable federal and state income, employment and other taxes that Photonics is required to withhold from Executive, which Photonics shall remit to the appropriate federal and state agencies. Laser shall not withhold German taxes on the Executive's compensation allocated to the United States.

(c) Laser shall send Photonics an invoice documenting the amount due on a quarterly or monthly basis, as the Parties may agree. Such invoices shall be payable by Photonics within ten (10) business days of receipt of the invoice.

5. **Benefits.** Photonics shall reimburse the Executive directly (on a tax-free basis) for all reasonable travel, accommodation and other expenses wholly, exclusively and necessarily incurred by the Executive during the Term in or in connection with the provision of Services in the United States, if such expenses are evidence in such manner as Photonics may specify from time to time. These reimbursable expenses include rental housing in Massachusetts, a car lease, moving costs, and business class air and other transportation costs for the Executive and his wife. Photonics also shall provide Executive with and cover the costs (on a tax-free basis) for health and disability insurance coverage in the United States and tax preparation services for taxes due to the United States and Germany. While on secondment to Photonics, the Executive will be responsible for his global tax liability, with the exception of the tax allocable to his U.S. assignment-related allowances. All taxes due on the U.S. assignment-related allowance will be borne by Photonics.

6. **Management During the Secondment.**

(a) Notwithstanding anything to the contrary in the Laser Employment Agreement, Photonics or the Board shall handle all matters under the Laser Employment Agreement requiring action, investigation and/or decisions by Laser or Photonics, including in particular (by way of illustration only and without limitation) periods of annual, sick or other leave; absence of the Executive for any other reason; any complaint about the Executive (whether or not that would be dealt with under Laser's appropriate disciplinary procedure, if applicable) and any complaint, issue, or grievance raised by the Executive (collectively, "**Management Issues**"). Laser shall refer any Management Issues concerning the Executive that come to its attention to Photonics as soon as reasonably practicable. Laser shall provide any information, documentation, access to its premises and employees and assistance (including but not limited to giving witness evidence) to Photonics to deal with any Management Issues concerning the

Executive whether under Laser's internal procedures or before any regulatory authority, governmental or quasi-governmental organization, court, or tribunal.

(b) Photonics shall have management over day-to-day organization of the Executive's activities and shall handle all matters arising under this Agreement requiring action which are not Management Issues addressed in the Laser Employment Agreement.

(c) Both Laser and Photonics shall inform the other as soon as reasonably practicable of any other significant matter that may arise during the Term relating to the Executive or the Executive's employment.

7. **Other Activities.** The secondment of the Executive together with the continuing services to Laser shall be on a full-time basis, but the Executive may be an investor or otherwise have an interest in or serve on the board of directors or advisory board to other businesses, partnerships, and entities so long as: (i) the other activities of the Executive do not (1) materially interfere with the performance of Executive's duties to Photonics, (2) violate the other provisions of this Agreement, the Laser Employment Agreement, or Photonics' Code of Conduct, or (3) causes Executive to violate the Restrictive Covenants defined and incorporated herein in Section 11 of this Agreement; and (ii) Executive discloses all such activities to the Chair of the Board's Compensation Committee in writing, provided that, Executive may not serve on the board of directors of a private or publicly traded company (other than Photonics or a not-for-profit organization) without the Board's Compensation Committee's written consent and Executive may not serve as chairman of another publicly traded company without the Board's written consent. Nothing in this provision or this Agreement limits or restricts Executive's duties and obligations, including the duty of loyalty, that arise under the law.

8. **Termination by Photonics.** Photonics may terminate this Agreement with immediate effect without notice: (i) upon the termination of the Laser Employment Agreement; (ii) if Laser is guilty of any serious or repeated breach of the terms of this Agreement; or (iii) if permitted by law, if Laser becomes bankrupt or makes any arrangement or composition with or for the benefit of its creditors.

9. **Termination by Laser.** Laser may terminate this Agreement with immediate effect without notice: (i) upon termination of the Laser Employment Agreement; (ii) if Photonics is guilty of any serious or repeated breach of the terms of this Agreement; or (iii) if permitted by law, if the Photonics becomes bankrupt or makes any arrangement or composition with or for the benefit of its creditors.

10. **Data Protection.** Executive and Laser confirm that the Executive hereby consents to Photonics processing data relating to the Executive for legal, personnel, administrative and management purposes and in particular to the processing of any sensitive personal data (as defined in any applicable legislation) relating to the Executive including, as appropriate and to the extent permitted by local laws: (i) information about the Executive's physical or mental health or condition in order to monitor sick leave and make decisions as to the Executive's fitness for work; (ii) the Executive's racial or ethnic origins or religious or similar beliefs in order to monitor compliance with the equal opportunities legislation; (iii) information relating to any criminal proceedings in which the Executive has, or is alleged to have, been involved for insurance purposes and to comply with legal requirements and obligations to third parties; and (iv) any other sensitive personal data as necessary in connection with the performance of Services under this Agreement. Executive and Laser confirm that the Executive hereby consents to Photonics transferring such information to Photonics' business contacts in any jurisdiction to further Photonics' business and making such information available to

those who provide products or services to Photonics, regulatory authorities, governmental or quasi-governmental organizations, and potential purchasers of Photonics or any part of Photonics' business.

11. **Restrictive Covenants.** In consideration of the substantial increase in compensation that Executive receives from the change in his role and responsibilities to Chief Executive Officer of Photonics, Executive has executed and delivered to Photonics a Confidentiality, Non-Competition and Confirmatory Assignment Agreement contemporaneous with the date of this Agreement (together with any similar or successor agreements, referred to herein as the "**Restrictive Covenant Agreement**"), and Executive agrees that, as part of this Agreement, Executive shall comply with the terms of the Restrictive Covenants. Notwithstanding Section 10(iii) of the Laser Service Agreement, if (a) Executive terminates service other than for Good Reason and, thus, is not entitled to the payments and benefits under Section 10(ii) of the Laser Employment Agreement, and (b) (i) Executive receives a written offer of employment during the Non-Competition Period set forth in Section 2(a) of the Restrictive Covenant Agreement, or (ii) Executive is not able to find suitable employment in his field in relation to his skills, position and base salary, which employment would not contravene Section 2(a) of the Restrictive Covenant Agreement, after a good faith effort by Executive to search for such employment, and (iii) Photonics notifies Executive that it intends to enforce the non-compete provisions of such Section 2(a) of the Restrictive Covenant Agreement against Executive, then Photonics shall pay to Executive an amount equal to the semi-monthly amount of Executive's Base Salary for each semi-monthly payroll period beginning (A) on the effective date of the written offer of employment referred to above or (B) during the period in which Executive is not able to find suitable employment, and ending on the earliest to occur of (I) the end of the Non-Competition Period set forth in such Section 2(a), or (II) the date as of which Executive begins new employment with an employer, which employment would not contravene Section 2(a) of the Restrictive Covenant. For the avoidance of doubt, the non-competition and other provisions of the Restrictive Covenant Agreement in all events shall continue to apply until the end of the Non-Competition Period set forth in Section 2(a) of the Restrictive Covenant Agreement, regardless of Executive's new employment with an employer that would not contravene Section 2(a) of the Restrictive Covenant Agreement, the subsequent termination of such employment, or any other event.

12. **Indemnification.** Photonics shall maintain a directors' and officers' liability insurance policy covering the Executive on the same basis as in effect for its other senior executive employees and shall provide indemnity to the Executive by a separate, written indemnification agreement.

13. **Governing Law.** This Agreement shall be governed by, construed and enforced in accordance with the substantive laws of the Commonwealth of Massachusetts, without regard to any jurisdiction's conflicts of law provisions.

14. **Severability.** In the event that any provision of this Agreement shall be determined to be invalid, illegal, or otherwise unenforceable or contrary to law or public policy, the enforceability of the other provisions in this Agreement shall not be affected thereby.

15. **Assignment; Successors.** Executive recognizes that this is an agreement for personal services and that the Executive may not assign this Agreement. The Agreement shall inure to the benefit of and be binding upon Photonics successors and assigns.

16. **Entire Agreement/Amendment.** This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes any and all other

agreements, either oral or in writing, among the Parties hereto with respect to the subject matter hereof. This Agreement may not be amended except by written agreement by all Parties.

17. **Execution in Counterparts.** This Agreement may be executed in one or more counterparts, and by the different Parties in separate counterparts, each of which shall be deemed to be an original but all of which taken together shall constitute one and the same agreement (and all signatures need not appear on any one counterpart), and this Agreement shall become effective when one or more counterparts have been signed by each of the Parties hereto and delivered to each of the other Parties hereto. A copy of this Agreement that is executed by a Party and transmitted by that Party to the other Parties by facsimile or as an attachment (e.g., in “.tif” or “.pdf” format) to an email shall be binding upon the signatory to the same extent as a copy hereof containing that Party’s original signature.

18. **Waiver.** The failure of any Parties to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way affect the validity of this Agreement or any provision hereof or the right of any of the Parties to enforce each and every provision of this Agreement. No waiver of any breach of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the Party against whom or which enforcement of such waiver is sought, and no waiver of any such breach shall be construed or deemed to be a waiver of any other or subsequent breach.

19. **Arbitration.** Any controversy or claim arising out of or relating to this Agreement or the breach thereof or otherwise arising out of the Executive’s secondment or the termination of that secondment (including, without limitation, any claims of unlawful employment discrimination whether based on age or otherwise) shall, to the fullest extent permitted by law, be settled by arbitration by a single arbitrator in any forum and form agreed upon by the Parties or, in the absence of such an agreement, under the auspices of the American Arbitration Association (“*AAA*”) in Worcester, Massachusetts, by a single arbitrator, in accordance with the Employment Dispute Resolution Rules of the AAA, including, but not limited to, the rules and procedures applicable to the selection of arbitrators. In the event that any person or entity other than the Parties may be a party with regard to any such controversy or claim, such controversy or claim shall be submitted to arbitration subject to such other person or entity’s agreement. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. This Section 18 shall be specifically enforceable. Neither the Parties nor the arbitrator shall disclose the existence, content, or results of any arbitration hereunder without the prior written consent of all Parties. Notwithstanding the foregoing, this Section 19 shall not preclude any Party from pursuing a court action for the sole purpose of obtaining a temporary restraining order or a preliminary injunction in circumstances in which such relief is appropriate; provided that any other relief shall be pursued through an arbitration proceeding pursuant to this Section 19. Punitive and consequential damages shall not be permitted as an award and every Party shall bear the fees and expenses of its own counsel and expert witnesses.

20. **Consent to Jurisdiction.** To the extent that any court action is permitted consistent with or to enforce Section 19 of this Agreement, the Parties hereby consent to the jurisdiction of the Superior Court of the Commonwealth of Massachusetts and the United States District Court for the District of Massachusetts, Worcester Division. Accordingly, with respect to any such court action, Laser and Executive (i) submit to the personal jurisdiction of such courts; (b) consent to service of

process; and (c) waive any other requirement (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction or service of process.

21. **Survival.** All Sections of this Agreement survive beyond the Term, except Sections 1 through 7, and as otherwise specifically stated.

IN WITNESS WHEREOF, this Secondment Agreement has been duly executed:

IPG PHOTONICS CORPORATION IPG LASER GmbH

By: /s/ Valentin P. Gapontsev By: /s/ Valentin Fomin

Title: Executive Chairman Title: Geschäftsführer

/s/ Evgeny Scherbakov

Evgeny Scherbakov

SERVICE AGREEMENT

This Service Agreement (“**Agreement**”), executed on this 4th day of May, 2021 (the “**Effective Date**”), by and between IPG Laser GmbH, a German limited liability company having an office at Siemensstrasse 7, D-57299 Burbach, Germany (the “**Company**”), and Evgeny Scherbakov (“**Executive**”). The Company and Executive are referred to jointly below as the “**Parties**.”

WHEREAS, the Company and Executive previously entered into a restated service agreement dated May 30, 2019 (the “**Prior Agreement**”);

WHEREAS, the Company and Executive desire to amend and restate the Prior Agreement; and

WHEREAS, the Company desires to continue to retain Executive and Executive desires to continue his services on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the services to be provided by Executive, the mutual terms and conditions set forth below, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **Service.** Executive will provide service to the Company in the position of Geschäftsführer and, pursuant to that Secondment Agreement dated 4 May, 2021 will provide service as Chief Executive Officer of IPG Photonics Corporation (“**Parent**”). Executive will report to the Company’s sole shareholder and to Parent’s Board of Directors (the “**Board**”). Executive’s primary responsibility will be managing the general business and affairs of the Company and performing related administrative duties, and executing Chief Executive Officer management responsibilities for Parent. Executive will carry such duties as shall be assigned from time to time by the Company’s sole shareholder and Parent’s Board, subject to applicable laws, and ethical duties. During the Term (as defined below), Executive shall devote Executive’s reasonable best efforts, energies and abilities and Executive’s full business time, skill and attention to the business and affairs of Parent and its Affiliates (as defined below), and shall act at all times according to the highest professional standards, for the purpose of advancing the business of Parent and its Affiliates. For purposes of this Agreement, an “Affiliate” shall mean a corporation that, for purposes of Section 422 of the Internal Revenue Code of 1986, as amended (the “**Code**”), is a Parent or Subsidiary of the Company within the meaning of Code Sections 424(e) and 424(f).

2. **Term.** This Agreement shall commence on the Effective Date and shall expire on 12:00 pm E.S.T. on December 31, 2022 (the “**Initial Term**”), unless terminated earlier pursuant to the provisions of Sections 6, 7, 8, or 9 hereof. The term of service shall be renewed automatically for successive periods of one (1) year each (a “**Renewal Term**”) after the expiration of the Initial Term, unless the Company provides Executive, or Executive provides the Company, with written notice to the contrary at least one hundred eighty (180) days prior to the end of the Initial Term or any Renewal Term. The Initial Term and any Renewal Terms are collectively referred to herein as the “**Term**.” If either the Company or Executive elect not to

renew the Term of this Agreement in accordance with this Section 2 and Executive thereafter continues to provide services to the Company or its Affiliates, Executive shall be retained on an at-will basis and the terms of such service and any subsequent termination of service shall be subject solely to the Company's general practices and policies. In the event of a "**Change in Control**" of the Company (as such term is defined in the IPG Photonics Corporation 2006 Incentive Compensation Plan, as amended (the "**Equity Plan**")) during the Term, the Term automatically will be extended until the later of (i) the second anniversary of the Change in Control, or (ii) the scheduled expiration of the then-current Term.

3. Compensation.

(i) **Salary.** The Company shall pay to Executive a salary at a monthly rate of €51,779 on the basis of a 14-month year for a gross annual base salary ("**Base Salary**") of Five Hundred, Fifty Thousand, Nine Hundred Euros (€724,900) effective as of the Effective Date. The Company will pay Executive's Base Salary in equal installments in accordance with the Company's standard payroll policies and schedule, subject to tax and elective withholding and deductions. Thereafter, the Board, or such committee of the Board as is responsible for setting the compensation of senior executive officers, shall review Executive's performance and Base Salary annually in January of each year, in light of competitive data, the Company's performance, and Executive's performance, and such other factors as the Board deems appropriate, and determine whether to adjust Executive's Base Salary, retroactive to January 1 of the year. The first review shall be in February 2022. Such adjusted annual salary then shall become Executive's Base Salary for purposes of this Agreement.

(ii) **Annual Bonus.** Executive will be eligible for an annual cash bonus (the "**Bonus**"), based on performance, and calculated as a percentage of Executive's Base Salary. The Bonus will be paid at the time payment is made to other similarly-situated executives of the Company, but in no event later than two and a half of the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture.

(iii) **Equity Compensation.** Executive will be eligible to participate in any long-term incentive plans, and/or equity-based compensation plans established or maintained by the Company's shareholder for its senior executive officers or employees, including, but not limited to, the Equity Plan.

4. Benefits.

(i) Executive shall be entitled to the extent eligible to participate in any benefit plans as may be adopted and modified by the Company from time to time, including without limitation health, dental and medical plans, life and disability insurance, paid vacation, holiday, and retirement plans. The benefits available to Executive shall be no less favorable than those available to other executives at similar levels within the organization or to the employees of the Company at the location where Executive works. Benefits provided under this Agreement shall be subject to the terms and conditions of any applicable benefit plan, including any eligibility and vesting

requirements, as such plans may be in effect from time to time, and to Parent's and its affiliates' ability to amend, modify, or terminate such plan(s) at any time and from time to time.

(ii) Executive shall be entitled to five weeks of paid vacation each year. The maximum number of accrued vacation hours that Executive can have at any point in time is equal to the total vacation hours earned in the last twelve (12) months, plus one week of vacation carried over from the prior twelve (12) months of service.

(iii) Executive shall have the right to a luxury class car which may be also used for personal purposes.

5. **Other Activities.** The retention of Executive shall be on a full-time basis, but Executive may be an investor or otherwise have an interest in or serve on the board of directors or advisory board to other businesses, partnerships and entities so long as the other activities of Executive (a) do not materially interfere with the performance of Executive's duties to the Company, (b) violate the other provisions of either this agreement or the Company's Code of Conduct, or (c) cause Executive to violate the Restrictive Covenant Agreement defined and incorporated herein in Section 12 of this Agreement and Executive discloses all such activities to the Chair of Parent's Compensation Committee of the Board in writing, provided that, Executive may not serve on the board of directors of a private or publicly traded company (other than Parent or a not-for-profit organization) without the Compensation Committee's written consent and Executive may not serve as chairman of another publicly traded company without the Board's written consent. Nothing in this provision or this Agreement limits or restricts Executive's duties and obligations, including the duty of loyalty, that arise under the law.

6. **Termination by the Company.** The Company may terminate Executive's service during the Term:

(i) without Cause (as defined below) by giving Executive thirty (30) calendar days' prior written notice, or

(ii) for Cause (as defined below) by delivering to Executive a copy of a resolution duly adopted by the affirmative vote of a majority of the independent directors of the Board then in office at a meeting of the Board called and held for such purpose, finding that, Executive has committed an act or omission set forth below in this Section 6. Nothing herein shall limit Executive's right or Executive's beneficiaries' right to contest the validity or propriety of any such determination, in accordance with Section 23 of this Agreement. For purposes of this Agreement, "**Cause**" shall mean: (A) an act of fraud, embezzlement or theft by Executive in connection with Executive's duties or in the course of Executive's service to the Company or an Affiliate; (B) Executive's intentional wrongful damage to the property of the Company or its Affiliates; (C) Executive's intentional breach of Section 12 hereof while Executive remains in the employ of the Company or an Affiliate; (D) an act of Gross Misconduct (as defined below); (E) Executive's material violation of Parent's Code of Conduct, as amended from time to time; or (F) Executive's conviction of a misdemeanor involving moral turpitude or a felony; and, in each case, the reasonable, good faith determination by the Board as

hereafter provided that any such act or omission shall have been materially harmful to Parent or an Affiliate financially, reputationally or otherwise. For purposes of this Agreement, “**Gross Misconduct**” shall mean a willful or grossly negligent act or omission that has or will have a material and adverse impact on the business or reputation of Parent or its Affiliates, or on the business of the customers or suppliers of Parent or its Affiliates as such relate to Parent. For purposes of this Agreement, no act or failure to act on Executive’s part shall be considered willful unless it is done, or omitted to be done, by Executive in bad faith or without reasonable belief that Executive’s action or omission was in the best interests of Parent or an Affiliate. Any act or failure to act based upon authority given pursuant to a resolution duly adopted by the Board or based upon the advice of counsel for Parent or an Affiliate shall be conclusively presumed to be done, or omitted to be done, in good faith and in the best interests of Parent or an Affiliate. In addition, Executive’s service shall be deemed to have terminated for Cause if, based on facts and circumstances discovered after Executive’s service has terminated, the Board of Parent determines in reasonable good faith, within one year after Executive’s service terminated, and after appropriate investigation and an opportunity for Executive to be interviewed (with or without counsel as Executive may determine) by a subcommittee of the independent Board members or its representative, that Executive committed an act during the Term that would have justified a termination for Cause.

7. **Termination by Executive.** Executive may terminate his service during the Term by giving the Company sixty (60) calendar days’ prior written notice; provided that, if Executive purports to terminate his service during the Term for Good Reason (as defined below), Executive must give the Company written notice of Executive’s intent to terminate for Good Reason within sixty (60) days of the occurrence of the event that allegedly constitutes Good Reason. The Company shall have a right to cure the event alleged to constitute Good Reason for a period of thirty (30) calendar days after notice from Executive of intention to terminate for Good Reason. In the event of termination by notice under the first sentence of this Section 7, the Company in its discretion may elect a termination date that is earlier than the conclusion of the sixty (60) calendar day notice period, but the termination shall still be deemed a voluntary termination by Executive with Good Reason under this Section. “**Good Reason**” means the occurrence of any of the following events without Executive’s express written consent:

- (i) The material reduction of Executive’s authorities, duties, or responsibilities with the Company;
- (ii) A material reduction by the Company of Executive’s Base Salary, other than a reduction approved by the Board that similarly applies to all executive officers of the Company, provided that such a reduction in Base Salary shall not exceed more than twenty percent (20%) of Executive’s then Base Salary;
- (iii) A relocation of the offices of Executive to a place greater than (A) fifty (50) miles in distance from the current executive offices of the Company in Oxford, MA, and (B) the current distance of Executive’s commute from Executive’s home residence to the current executive offices of the Company in Burbach, Germany; or

(iv) Any action or inaction that constitutes a material breach by the Company of this Agreement.

The Company shall have no obligations to Executive after Executive's last day of service following termination of service under this Section, except as specifically set forth in this Agreement or under any applicable plans, programs or arrangements of the Company including, without limitation, its Articles of Association or similar organizational documents, or Parent's Certificate of Incorporation or By-Laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, and the indemnification agreement described in Section 14.

8. **Automatic Termination.** Notwithstanding the provisions of Section 2, Executive's service shall automatically terminate upon Executive's death or Disability (as defined below). Executive shall be deemed to have a "**Disability**" for purposes of this Agreement if Executive is unable to perform substantially, by reason of physical or mental incapacity, Executive's duties or obligations under this Agreement, with or without reasonable accommodation as defined in the Americans with Disabilities Act and implementing regulations, for a period of one hundred and eighty (180) consecutive calendar days in any 360-calendar day period. The Board shall determine, in the good faith exercise of its reasonable discretion, according to the facts then available, whether and when the Disability of Executive has occurred.

9. **Term of Agreement.** Any termination of Executive's service shall also end the Term. For purposes of this Agreement, Executive's service with the Company and its Affiliates shall be deemed to be terminated when Executive has a "separation from service" within the meaning of Code Section 409A, and references in this Agreement to termination of service shall be deemed to refer to such a separation from service. Upon Executive's separation from service for any reason, Executive shall be deemed to have resigned as of the date of Executive's separation from service from all offices, directorships and fiduciary positions with the Company, its Affiliates, and employee benefit plans of the Company and its Affiliates unless Executive is affirmatively re-appointed or re-elected to such position as of the date of Executive's separation from service.

10. **Certain Obligations of the Company Following Termination of Executive's Service.** Following termination of Executive's service during the Term under the circumstances described below, the Company will pay to Executive the following compensation and provide the following benefits in addition to any benefits to which Executive may be entitled by law in full satisfaction and final settlement of any and all claims and demands that Executive or the Company may have against the other under this Agreement:

- (i) **Termination of Service for Any Reason.** In the event of Executive's termination of service for any reason, the Company shall pay or provide Executive (a) any unpaid Base Salary through the date of termination and (b) any benefits (including, without limitation, any unused vacation accrued in accordance with Section 4(ii)) accrued, earned or vested, and any unreimbursed expenses incurred, up to and including the effective date of such termination to which Executive may be entitled under the terms of any applicable arrangement, plan or program (collectively, the "**Accrued Amounts**").

(ii) **Without Cause by the Company or for Good Reason by Executive.** If, during the Term, the Company terminates Executive's service without Cause under Section 6(i) hereof or Executive terminates his service for Good Reason under Section 7 hereof, Executive shall be entitled to the following payments and benefits, subject to Section 13:

- (a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;
- (b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly-situated executives of Company or its Affiliates, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture;
- (c) A pro rata portion of the amount of Bonus, if any, Executive would have received pursuant to Section 3(ii) for the year in which Executive's service terminated. The Company shall determine what annual Bonus, if any, Executive would have earned had he been providing services through the end of the applicable period (the "**Base Incentive Amount**"), in accordance with the methods used to calculate the annual Bonus for the Company's other similarly-situated executives; provided that, with respect to the personal performance evaluation element of the annual Bonus calculation, if all financial metric components meet or exceed the "target" level of performance, Executive shall be deemed awarded one hundred percent (100%) of the potential personal performance evaluation bonus; if no financial metric bonus is awarded, no personal performance evaluation bonus will be deemed awarded, and amounts in between the threshold, target and maximum levels of performance will be determined by linear interpolation. The pro rata portion to be paid pursuant to this paragraph shall be determined by multiplying the Base Incentive Amount by a fraction, the numerator of which is the number of calendar days from the beginning of the applicable annual period in which the termination occurred through the date of termination and the denominator of which is 365. Any payment due under this paragraph shall be paid at the time payment is made to other similarly-situated executives of the Company, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive would have become vested in such Bonus;
- (d) Continuing payments of Base Salary, payable in accordance with regular payroll practices of the Company, for eighteen (18) months following the date of termination; and
- (e) Cash reimbursement of amounts paid by Executive (sufficient to cover full family health care premiums) for a period of eighteen (18) months following the termination of Executive's service if Executive elects continuation

of coverage. The foregoing notwithstanding, the Company's obligation to reimburse described in the preceding sentence shall cease on the date Executive becomes eligible for coverage under another group health plan offered by a new employer of Executive or covered under a group health plan of the employer of Executive's spouse, in either case, which does not impose pre-existing condition limitations on Executive's coverage. Nothing herein shall be construed to extend the period of time over which health care premium continuation coverage shall be provided to Executive or his dependents beyond that mandated by law.

If, during the Term, the Company terminates Executive's service without Cause under Section 6(i) hereof or Executive terminates his service for Good Reason under Section 7 hereof, for purposes of determining the vested portions of Executive's stock options and any other equity compensation awards then outstanding, Executive shall be deemed to have terminated service twelve (12) months following the date of Executive's actual termination of service.

(iii) **Termination by Executive Without Good Reason or by the Company for Cause.** If, during the Term, Executive terminates his service under Section 7(i) hereof without Good Reason or the Company terminates Executive's service under Section 6(ii) hereof for Cause, Executive shall be entitled to no further compensation or other benefits under this Agreement except for the Accrued Amounts, payable in a single lump sum as soon as practicable following the date of termination.

(iv) **Death; Disability.** If Executive's service is terminated during the Term by reason of Executive's death or for Disability, Executive or Executive's estate, as the case may be, shall be entitled to the following payments:

- (a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;
- (b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly-situated executives of the Company or its Affiliates, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive becomes vested in such Bonus; and
- (c) The amount payable, if any, as determined pursuant to Section 10(ii)(c), payable at the time payment is made to other similarly-situated executives of the Company or its Affiliates, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture, Executive becomes vested in such Bonus.

If Executive's service is terminated during the Term by reason of Executive's death or for Disability, the treatment of any equity compensation awards held by Executive shall be governed by the terms of the plan or agreement under which such awards were granted.

(v) **Termination on or After a Change in Control.** If, within twenty-four (24) months following a Change in Control (as defined in the Equity Plan), the Company terminates Executive's service without Cause under Section 6(i) hereof or Executive terminates his service for Good Reason under Section 7 hereof, Executive shall be entitled to the following payments, subject to Section 13:

- (a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;
- (b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly-situated executives of the Company or its Affiliates, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture;
- (c) The amount payable, if any, as determined pursuant to Section 10(ii)(c), payable at the time payment is made to other similarly-situated executives of the Company or its Affiliates, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive would have become vested in such Bonus;
- (d) Continuing payments of Base Salary, payable in accordance with regular payroll practices of the Company, for twenty-four (24) months following the date of termination;
- (e) Cash reimbursement of amounts paid by Executive (sufficient to cover full family health care premiums) for a period of twenty-four (24) months following the termination of Executive's service if Executive elects continuation of coverage. The foregoing notwithstanding, the Company's obligation to reimburse described in the preceding sentence shall cease on the date Executive becomes eligible for coverage under another group health plan offered by a new employer of Executive or covered under a group health plan of the employer of Executive's spouse, in either case, which does not impose pre-existing condition limitations on Executive's coverage. Nothing herein shall be construed to extend the period of time over which health care premium continuation coverage shall be provided to Executive or his dependents beyond that mandated by law;
- (f) A lump sum cash amount equal to two (2) times Executive's average annual Bonus over the three (3) completed years immediately preceding the date of the Change in Control, payable as soon as reasonably practicable after the date of termination; and
- (g) All equity (including options, RSUs and other stock) awards outstanding as of the Change in Control and held by Executive on the date of termination shall immediately vest and become non-forfeitable.

(vi) **Expiration.** If the Term of this Agreement expires due to either the Company or Executive electing not to renew the Term in accordance with Section 2, and the Company does not offer Executive continued service in the same or a substantially similar position as, or in a higher position than, his position on the date of the expiration of the Term, and at a compensation level that is the same or substantially similar to that in effect on the date of the expiration of the Term, Executive shall be entitled to resign from service with the Company and receive the following payments:

- (a) The Accrued Amounts, as soon as reasonably practicable following the date of termination;
- (b) Any Bonus that has been actually earned as of or prior to the termination date, but has not been paid, payable at the time payment is made to other similarly-situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive's right to the Bonus is no longer subject to a substantial risk of forfeiture;
- (c) The amount payable, if any, as determined pursuant to Section 10(ii)(c), payable at the time payment is made to other similarly-situated executives of the Corporation, but in no event later than two and a half (2½) months after the close of the calendar year in which Executive would have become vested in such Bonus;
- (d) Continuing payments of Base Salary, payable in accordance with regular payroll practices of the Company, for twelve (12) months following the date of termination; and
- (e) Cash reimbursement of amounts paid by Executive (sufficient to cover full family health care premiums) for a period of eighteen (18) months following the termination of Executive's service if Executive elects continuation of coverage. The foregoing notwithstanding, the Company's obligation to reimburse described in the preceding sentence shall cease on the date Executive becomes eligible for coverage under another group health plan offered by a new employer of Executive or covered under a group health plan of the employer of Executive's spouse, in either case, which does not impose pre-existing condition limitations on Executive's coverage. Nothing herein shall be construed to extend the period of time over which health care premium continuation coverage shall be provided to Executive or his dependents beyond that mandated by law. The foregoing notwithstanding, the Company's obligation to such health care premiums described in the preceding sentence shall cease on the date Executive becomes eligible for coverage under another group health plan offered by a new employer of Executive or covered under a group health plan of the employer of Executive's spouse, in either case, which does not impose pre-existing condition limitations on Executive's coverage. Nothing herein shall be construed to extend

the period of time over which health care premium continuation coverage shall be provided to Executive or Executive's dependents beyond that mandated by law.

Except as provided in Section 10(i), Executive shall not be entitled to payment of the amounts described in this subsection (vi) if the Company offers Executive continued service in the same or a substantially similar position as, or in a higher position than, his position on the date of expiration of the Term, and at a compensation level that is the same or a substantially similar to that in effect on the date of the expiration of the Term, and Executive declines the offer.

(vii) **No Duplication of Benefits.** Executive shall only be eligible for termination payments and benefits, if any, under one of the provisions of this Section 10. For example, if Executive receives payments and benefits under Section 10(ii) of this Agreement, Executive shall not be eligible to receive payments or benefits under Sections 10(iv), 10(v), or 10(vi). Any termination payments made and benefits provided to Executive under this Agreement shall be in lieu of any other severance payments or benefits for which Executive may be eligible under the IPG Photonics Corporation Executive Severance Plan, as amended, or any similar or successor plan or under the Worker Adjustment Retraining Notification Act of 1988 or any similar state statute or regulation.

(viii) **No Mitigation or Offset.** In the event of any termination of Executive's service under this Section 10, Executive shall be under no obligation to seek other employment or assignments or otherwise mitigate his damages, and there shall be no offset against amounts due to Executive under this Agreement on account of any remuneration or benefit attributable to any subsequent employment or assignment obtained by Executive, except as provided in Sections 10(ii)(e), 10(v)(e) and 10(vi)(e).

(viii) **Compensation Recovery Policy.** Notwithstanding any provision in this Agreement to the contrary, payments under this Agreement will be subject to any Compensation Recovery Policy established by the Company and amended from time to time.

11. **Nature of Payments.** Upon termination of service pursuant to Sections 6, 7, 8 or 9, Executive will be released from any duties and obligations to the Company set forth in this Agreement (except the duties and obligations under the Restrictive Covenant Agreement and as set forth in Section 12 hereof and the obligation under Sections 13 and 23) and the obligations of the Company to Executive under this Agreement will be as set forth in Section 10.

12. **Restrictive Covenant Agreement.** Executive has executed and delivered a Confidentiality, Non-Competition and Confirmatory Assignment Agreement prior to or contemporaneous with the date of this Agreement (together with any similar or successor agreements, referred to herein as the "**Restrictive Covenant Agreement**"), and Executive agrees that, as part of this Agreement, Executive shall comply with the terms of the Restrictive Covenant Agreement. Notwithstanding Section 10(iii) of this Agreement, if (a) Executive terminates service other than for Good Reason and, thus, is not entitled to the payments and benefits under Section 10(ii) of this Agreement, and (b) (i) Executive receives a written offer of

employment during the Non-Competition Period set forth in Section 2(a) of the Restrictive Covenant, or (ii) Executive is not able to find suitable employment in his field in relation to his skills, position and base salary, which employment would not contravene Section 2(a) of the Restrictive Covenant, after a good faith effort by Executive to search for such employment, and (iii) the Company notifies Executive that it intends to enforce the non-compete provisions of such Section 2(a) against Executive, then the Company shall pay to Executive an amount equal to the semi-monthly amount of Executive's Base Salary for each semi-monthly payroll period beginning (A) on the effective date of the written offer of employment referred to above or (B) during the period in which Executive is not able to find suitable employment, and ending on the earliest to occur of (I) the end of the Non-Competition Period set forth in such Section 2(a), or (II) the date as of which Executive begins new employment with an employer, which employment would not contravene Section 2(a) of the Restrictive Covenant. For the avoidance of doubt, the non-competition and other provisions of the Restrictive Covenant Agreement in all events shall continue to apply until the end of the Non-Competition Period set forth in Section 2(a) of the Restrictive Covenant, regardless of Executive's new employment with an employer that would not contravene Section 2(a) of the Restrictive Covenant, the subsequent termination of such employment or any other event.

13. **Release.** Any and all amounts payable and benefits or additional rights provided pursuant to this Agreement beyond Accrued Amounts shall only be payable if Executive delivers to the Company an original, signed release of claims of Executive occurring up to the release date, in a form substantially the same as attached hereto as Exhibit A (the "**Release**"). The Company shall deliver the Release to Executive within ten (10) calendar days of the date Executive's service terminates and Executive must deliver to the Company and not revoke an executed and enforceable Release no later than sixty (60) calendar days after the date Executive's service terminates (the "**Release Deadline**"). Payment of the amounts described in Section 10 shall commence no earlier than the date on which Executive delivers to the Corporation and does not revoke an executed and enforceable release as described herein. As part of the Release, Executive shall affirm that Executive (i) has advised the Company in writing, of any facts that Executive is aware of that constitute or might constitute a violation of any ethical, legal or contractual standards or obligations of the Company or any Affiliate, and (ii) is not aware of any existing or threatened claims, charges, or lawsuits that Executive has not disclosed to the Company.

14. **Indemnification.** IPG Photonics Corporation shall maintain a directors' and officers' liability insurance policy covering Executive on the same basis as in effect for other senior executive employees, and shall provide indemnity to Executive by a separate, written indemnification agreement.

15. **Notices.** Any and all notices, requests, demands, and other communications provided for herein shall be sufficient if in writing and shall be deemed to have been duly given if delivered by hand or if sent by registered or certified mail, return receipt requested, sent by a nationally recognized overnight courier for delivery, or sent by other electronic means generating a receipt confirming delivery of the notice. Notice shall be deemed to have been given when notice is received by the party on whom the notice was served. Notice to the Company shall be addressed to the Company at its principal office, with attention to the General Counsel, and

notice to Executive shall be addressed to Executive at Executive's last address as shown on the records of the Company.

16. **Governing Law.** This Agreement shall be governed by, construed and enforced in accordance with the substantive laws of the Commonwealth of Massachusetts except that the social security insurance and mandatory statutory provisions set forth under company law shall be governed by the laws of the Federal Republic of Germany, without regard to its internal conflicts of law provisions.

17. **Severability.** In the event that any provision of this Agreement shall be determined to be invalid, illegal or otherwise unenforceable or contrary to law or public policy, the enforceability of the other provisions in this Agreement shall not be affected thereby.

18. **Assignment; Successors.** Executive recognizes that this is an agreement for personal services and that Executive may not assign this Agreement. The Agreement shall inure to the benefit of and be binding upon the Company's successors and assigns.

19. **Entire Agreement/Amendment.** This Agreement and the Confidentiality, Non-Competition and Confirmatory Assignment Agreement referred to in Section 12 constitute the entire agreement between the Parties with respect to the subject matter hereof and supersedes any and all other agreements, either oral or in writing (including the Prior Agreement), among the Parties hereto with respect to the subject matter hereof. This Agreement may not be amended except by written agreement signed by both Parties. Executive hereby acknowledges and agrees that, during the Term, Executive shall have no rights or benefits under the IPG Photonics Corporation Executive Severance Plan, as amended, or any similar or successor plan.

20. **Execution in Counterparts.** This Agreement may be executed in one or more counterparts, and by the different Parties in separate counterparts, each of which shall be deemed to be an original but all of which taken together shall constitute one and the same agreement (and all signatures need not appear on any one counterpart), and this Agreement shall become effective when one or more counterparts has been signed by each of the Parties hereto and delivered to each of the other Parties hereto. A copy of this Agreement that is executed by a Party and transmitted by that Party to the other Party by facsimile or as an attachment (*e.g.*, in ".tif" or ".pdf" format) to an email shall be binding upon the signatory to the same extent as a copy hereof containing that Party's original signature.

21. **Waiver.** The failure of either of the Parties to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way affect the validity of this Agreement or any provision hereof or the right of either of the Parties to enforce each and every provision of this Agreement. No waiver of any breach of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the party against whom or which enforcement of such waiver is sought, and no waiver of any such breach shall be construed or deemed to be a waiver of any other or subsequent breach.

22. **Capacity.** Executive and the Company hereby represent and warrant to the other that: (i) Executive or the Company has full power, authority and capacity to execute and deliver

this Agreement, and to perform Executive's or the Company's obligations hereunder; (ii) such execution, delivery and performance will not (and with the giving of notice or lapse of time or both would not) result in the breach of any agreements or other obligations to which Executive or the Company is a party or Executive or the Company is otherwise bound; and (iii) this Agreement is Executive's or the Company's valid and binding obligation in accordance with its terms.

23. **Arbitration.** Any controversy or claim arising out of or relating to this Agreement or the breach thereof or otherwise arising out of Executive's service or the termination of that service (including, without limitation, any claims of unlawful service discrimination whether based on age or otherwise) shall, to the fullest extent permitted by law, be settled by a single arbitrator in any forum and form agreed upon by the parties or, in the absence of such an agreement, under the auspices of the International Arbitration Association ("**IAA**") in Frankfurt/Main, Germany in accordance with the rules of the IAA governing dispute resolution of personal services, including, but not limited to, the rules and procedures applicable to the selection of arbitrators. In the event that any person or entity other than Executive or the Company may be a party with regard to any such controversy or claim, such controversy or claim shall be submitted to arbitration subject to such other person or entity's agreement. Judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. This Section 23 shall be specifically enforceable. Neither Executive, the Corporation, nor the arbitrator shall disclose the existence, content, or results of any arbitration hereunder without the prior written consent of all Parties. Notwithstanding the foregoing, this Section 23 shall not preclude either party from pursuing a court action for the sole purpose of obtaining a temporary restraining order or a preliminary injunction in circumstances in which such relief is appropriate; provided that any other relief shall be pursued through an arbitration proceeding pursuant to this Section 23. Punitive and consequential damages shall not be permitted as an award and each party shall bear the fees and expenses of its own counsel and expert witnesses.

24. **Consent to Jurisdiction.** To the extent that any court action is permitted consistent with or to enforce Section 23 of this Agreement, the parties hereby consent to the jurisdiction of the Superior Court of the Commonwealth of Massachusetts and the United States District Court for the District of Massachusetts, Worcester Division. Accordingly, with respect to any such court action, Executive (a) submits to the personal jurisdiction of such courts; (b) consents to service of process; and (c) waives any other requirement (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction or service of process.

25. **Survival.** All Sections of this Agreement survive beyond the Term, except those in Section 1 through 5, and as otherwise specifically stated.

26. **German Civil Code.** Executive shall be exempt from the restrictions of §181 of the German Civil Code, provided that Executive shall first obtain the prior written consent of IPG Photonics Corporation with respect to the transaction.

IN WITNESS WHEREOF, this Service Agreement has been duly executed:

IPG Photonics Corporation EXECUTIVE

/s/ Gregory P. Dougherty /s/ Evgeny Scherbakov
Shareholder of Evgeny Scherbakov
IPG Laser GmbH

EXHIBIT A
RELEASE AND WAIVER AGREEMENT

This Release and Waiver Agreement ("**Agreement**") is entered into this _____ day of _____, _____ by and between IPG Laser GmbH, a German limited liability company having an office at Siemensstrasse 7, D-57299 Burbach, Germany (the "**Company**"), and Eugene Scherbakov (hereinafter "Executive").

WHEREAS, Executive's service with the Company is terminated effective _____, 20__ ("**Termination Date**") and the Company and Executive have voluntarily agreed to the terms of this Agreement in exchange for severance benefits under the Service Agreement between the parties effective [**DATE**], 20__ ("**Service Agreement**"), to which Executive otherwise would not be entitled;

WHEREAS, accordingly the Company has determined that Executive will receive severance pay if Executive executes and complies with the terms of this Agreement; and

WHEREAS, Executive acknowledges that the consideration received by Executive under the terms of this Agreement and the Service Agreement for the release and waiver contained herein is in addition to any consideration the Company is otherwise required to provide Executive.

NOW, THEREFORE, in consideration of the promises and the mutual covenants and agreements set forth below, the parties hereby acknowledge and agree as follows:

1. **Severance.** In consideration for Executive's agreements contained herein and Executive's compliance with Executive's continuing obligations under the Service Agreement, including his obligations under Section 12, the Company will pay Executive the applicable severance provided in Section 10 of the Service Agreement. Except as specifically provided in this Agreement, the Service Agreement and any applicable plans, programs or arrangements of the Company or its Affiliates including, without limitation, IPG Photonics Corporation's (the "**Corporation**") Certificate of Incorporation or By-laws, as either may be amended from time to time, the IPG Photonics Corporation its 2006 Incentive Compensation Plan, as amended or any successor thereto (the "**Equity Plan**") and any agreements thereunder, and the indemnification agreement dated _____ between the Corporation and Executive (the "**Indemnification Agreement**"), Executive shall not be entitled to any other payment, benefits or other consideration from the Company or its Affiliates.

2. **Waiver and Release.** In consideration for the payments and benefits to be provided to Executive as set forth herein and the Service Agreement, Executive, himself and for any person or entity that may claim by him or through him, including Executive's heirs, executors, administrators, successors and assigns, hereby knowingly, irrevocably, unconditionally and voluntarily waives, releases and forever discharges the Company and each of its individual or collective past, present and future parent, subsidiaries, divisions and affiliates, its and their joint ventures and its and their respective directors, officers, associates, employees, representatives, partners, consultants insurers, attorneys, administrators, accountants, executors,

heirs, successors, and agents, and each of its and their respective predecessors, successors and assigns and all persons acting by, through or in concert with any of them (hereinafter collectively referred to as “**Releasees**”), from any and all claims, causes of action or liabilities relating to Executive’s service to the Company or the termination thereof, known or unknown, suspected or unsuspected, arising from any omissions, acts or facts that have occurred up until and including the date Executive executes this Agreement which have been or could be asserted against the Releasees, including but not limited to:

(a) causes of action or liabilities relating to Executive’s service to the Company or the termination thereof arising under Title VII of the Civil Rights Act, the Age Discrimination in Employment Act (the “**ADEA**”), the Employee Retirement Income Security Act, the Worker Adjustment and Retraining Notification Act, the American with Disabilities Act, the Equal Pay Act, the Family and Medical Leave Act, and the Delaware General Corporation Act as such Acts have been amended, and/or any other foreign, federal, state, municipal, or local employment discrimination statutes (including, but not limited to, claims based on age, sex, attainment of benefit plan rights, race, color, religion, national origin, marital status, sexual orientation, pregnancy, gender identity, transgender status, genetic carrier status, ancestry, harassment, parental status, handicap, disability, retaliation, and veteran status, any military service or application for military service, or any other category protected under federal or state law); and/or

(b) causes of action or liabilities related to Executive’s service with the Company or the termination thereof arising under any other federal, state, municipal, or local statute, law, ordinance or regulation; and/or

(c) causes of action or liabilities relating to rights to or claims for pension, profit-sharing, wages, bonuses or other compensation or benefits; and/or

(d) any other cause of action relating to Executive’s service to the Company or the termination thereof including, but not limited to, actions seeking severance pay, except as provided herein, actions based upon breach of contract, wrongful termination, defamation, intentional infliction of emotional distress, tort, personal injury, invasion of privacy, defamation, discrimination, retaliation, promissory estoppel, fraud, violation of public policy, negligence and/or any other common law, or other cause of action whatsoever arising out of or relating to service to and/or separation from service to the Company and/or any of the other Releasees.

Nothing herein shall limit or impede Executive’s right to file or pursue an administrative charge with, or participate in, any investigation before the Equal Employment Opportunity Commission of the U.S., or any other local, state or federal agency, and/or any causes of action which by law Executive may not legally waive. Executive agrees, however, that if Executive or anyone acting on Executive’s behalf, brings any action concerning or related to any cause of action or liability released in this Agreement, Executive waives any right to, and will not accept, any payments, monies, damages, or other relief, awarded in connection therewith.

Executive not only releases and discharges the Releasees from any and all claims as stated above that Executive could make on Executive's own behalf or on behalf of others, but also those claims that might be made by any other person or organization on Executive's behalf, and Executive specifically waives any right to recover any damage awards as a member of any class in a case in which any claim(s) against the Releasees are made involving any matters.

Without in any way limiting the Release herein, Executive also specifically releases, remises, discharges, indemnifies and holds harmless the Releasees from any claims for back wages, salary, vacation pay, draws, incentive pay, bonuses, stock and stock options, commissions, and any and all other forms of compensation, attorneys' fees, or other costs or sums that arise or may arise under the Massachusetts Wage Act, including without limitation, M.G.L. c. 149, §§ 105A, 148 and 150, and M.G.L. c. 151.

This Release does not apply to claims for workers' compensation benefits, unemployment insurance benefits or any other claim that cannot lawfully be waived by this Agreement.

This Release does not apply to any claims arising solely after the execution of this Agreement or to any claims arising from a breach of this Agreement.

Notwithstanding the foregoing, nothing in this Agreement shall bar or prohibit Executive from contacting, filing a charge or complaint with, seeking assistance from or participating in any proceeding before any federal or state administrative agency to the extent permitted by applicable federal, state and/or local law. However, Executive nevertheless will be prohibited to the fullest extent authorized by law from obtaining monetary damages or other personal relief in any agency proceeding in which Executive does so participate.

Nothing herein shall constitute a waiver or release of any of Executive's rights under this Agreement, any other applicable plans, programs or arrangements of IPG Photonics Corporation or its Affiliates including, without limitation, its Certificate of Incorporation or By-laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, or under the Indemnification Agreement.

Executive expressly waives the benefits of any statute or rule of law that, if applied to this Agreement, would otherwise exclude from its binding effect any claims against the Company not now known by Executive to exist.

3. **Nondisparagement.** Executive agrees that, except as to statements required by law, compelled through valid legal process, or to any local, state or federal agency, Executive will not directly or indirectly, individually or in concert with others, engage in any conduct or make any statement (whether oral or written) calculated or likely to have the effect of undermining, disparaging or otherwise reflecting poorly upon the Company or its good will, products or business opportunities, or in any manner detrimental to the Company. In addition, Executive agrees not to make any disparaging remarks regarding any related, affiliated or subsidiary organizations of the Company. The Company agrees to use its reasonable best efforts

to cause its officers and directors not to, directly or indirectly, individually or in concert with others, except as to statements required by law, compelled through valid legal process, or to any local, state or federal agency, engage in any conduct or make any statement (whether oral or written) calculated or likely to have the effect of undermining, disparaging or otherwise reflecting poorly upon Executive or in any manner detrimental to Executive.

4. **Cause of Action.** As used in this Agreement, the phrase “cause of action” includes all claims, covenants, warranties, promises, agreements, undertakings, actions, suits, counterclaims, causes of action, complaints, charges, obligations, duties, demands, debts, accounts, judgments, costs, expenses, losses, damages and liabilities, of whatsoever kind or nature, in law, equity or otherwise.

5. **No Assignment of Causes of Action.** Executive represents and warrants that he has not filed or caused to be filed against the Releasees any claims, actions or lawsuits. Executive further represents and warrants that he has not sold, assigned, transferred, conveyed or otherwise disposed of to any third party, by operation of law or otherwise, any claim of any nature whatsoever relating to any matter covered by this Agreement.

6. **Representations of the Company.** The Company represents that it is not presently aware of any cause of action that it or any of the other Releasees have against Executive as of the date hereof. The Company acknowledges that the release granted by Executive in Paragraph 2 above will be null and void in the event the Company subsequently seeks to treat Executive’s termination of service as “for Cause” under the last sentence of section 6(ii) of the Service Agreement.

7. **Representations of Executive.** Executive represents that Executive has been given an adequate opportunity to advise the Company’s human resources, legal, or other relevant management division, and has so advised such division in writing, of any facts that Executive is aware of that constitute or might constitute a violation of any ethical, legal or contractual standards or obligations of the Company or any Affiliate. Executive further represents that Executive is not aware of any existing or threatened claims, charges, or lawsuits that he/she has not disclosed to the Company.

8. **Notice to Seek Counsel, Consideration Period, Revocation Period.** Executive acknowledges that Executive has been advised in writing hereby to consult with an attorney before signing this document and that Executive has had at least twenty-one (21) calendar days after receipt of this document to consider whether to accept or reject this Agreement. Executive understands that Executive may sign this Agreement prior to the end of such twenty-one (21) calendar day period, but is not required to do so. Under ADEA, Executive has seven (7) calendar days after Executive signs this Agreement to revoke it. Such revocation must be in writing and delivered either by hand or mailed and postmarked within the seven (7) calendar day period. If sent by mail, it is requested that it be sent by certified mail, return receipt requested to the Corporation’s General Counsel Office at 50 Old Webster Road, Oxford, MA 01540. If Executive revokes this Agreement as provided herein, it shall be null and void and Executive shall not be entitled to receive the payments as described in the first sentence of Paragraph 1 herein. If Executive does not revoke this Agreement within seven (7) calendar days of signing it, this

Agreement shall become enforceable and effective on the seventh (7th) day after Executive signs this Agreement ("**Effective Date**").

9. **Governing Law; Disputes.** Except as provided in Section 23 of the Service Agreement, or as provided below, jurisdiction and venue over disputes with regard to this Agreement shall be exclusively in the courts of the State of Massachusetts or the United States District Court for the District of Massachusetts. This Agreement shall be construed and interpreted in accordance with and governed by the laws of the State of Massachusetts, without regard to the choice of laws provisions of such laws. The parties agree that any action brought by a party to enforce or interpret this Agreement shall be brought in a State or Federal Court sitting in Boston, Massachusetts; except that an action by the Company to enforce its rights under Section 12 the Service Agreement may also be brought in Executive's state of residency or any other forum in which Executive is subject to personal jurisdiction. In addition, Executive and the Company specifically consent to personal jurisdiction in the State of Massachusetts for purposes of this Agreement.

10. **Amendment; Waiver.** No provision of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing signed by Executive and the Company. This Agreement shall be enforced in accordance with its terms and shall not be construed against either party.

11. **Severability.** The parties agree that if any provision, section, subsection or other portion of this Agreement shall be determined by any court of competent jurisdiction to be invalid, illegal or unenforceable in whole or in part and such determination shall become final, such provision or portion shall be deemed to be severed or limited, but only to the extent required to render the remaining provisions and portion of this Agreement enforceable. This Agreement as thus amended will remain in full force and effect and will be binding on the parties and will be enforced so as to give effect to the intention of the parties insofar as that is possible. In addition, the parties hereby expressly empower a court of competent jurisdiction to modify any term or provision of this Agreement to the extent necessary to comply with existing law and to enforce this Agreement as modified.

12. **Enforcement.** This Agreement may be pleaded as a full and complete defense and may be used as the basis for an injunction against any action at law or proceeding at equity, or any private or public judicial or non-judicial proceeding instituted, prosecuted, maintained or continued in breach hereof.

13. **No Enlargement of Rights.** Executive acknowledges that, except as expressly provided in this Agreement, any employment or contractual relationship between him and the Company is terminated, and that he has no future employment or contractual relationship with the Company other than the contractual relationship created by this Agreement, the Service Agreement, any other applicable plans, programs or arrangements of the Company including, without limitation, the Corporation's Certificate of Incorporation or By-laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, and the Indemnification Agreement. The Company has no obligation, contractual or otherwise, to

employ or reemploy, hire or rehire, or recall or reinstate Executive in the future with the Company.

14. **No Representations.** Executive represents that he has carefully read and understands the scope and effect of the provisions of this Agreement. Executive has not relied upon any representations or statements made by the Company that are not specifically set forth in this Agreement.

15. **Counterparts.** This Agreement may be executed in two counterparts, each of which shall be deemed to be an original but both of which together will constitute one and the same instrument.

16. **Withholding.** The Company shall withhold from any payments otherwise due or payable hereunder any amounts required to be withheld in order to comply with any federal, state, local or other income or other tax laws requiring withholding with respect to compensation and benefits provided to Executive pursuant to this Agreement.

17. **Successors and Assigns.** This Agreement binds and inures to the benefit of Executive's heirs, administrators, representatives, executors, successors and assigns, and the Company's successors and assigns.

18. **Entire Agreement - Termination of Prior Agreements.** This Agreement contains the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes any previous oral and written agreements or representations relating to the subject matters herein, except for the Service Agreement, any other applicable plans, programs or arrangements of the Company including, without limitation, the Corporation's Certificate of Incorporation or By-laws, as either may be amended from time to time, the Equity Plan and any agreements thereunder, and the Indemnification Agreement.

The undersigned hereby acknowledge and agree that Executive has carefully read and fully understands all the provisions of this Agreement, has had an opportunity to seek counsel regarding it and have voluntarily entered into this Agreement by signing below as of the date(s) set forth above.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date indicated above.

IPG Photonics Corporation EXECUTIVE

Shareholder of Evgeny Scherbakov
IPG Laser GmbH

IPG Photonics Corporation
50 Old Webster Road
Oxford, MA 01540

STATEMENT REGARDING CONFIDENTIALITY, NON-COMPETITION
AND CONFIRMATORY ASSIGNMENT AGREEMENT

Attached to this statement is your Confidentiality, Non-Competition and Confirmatory Assignment Agreement (the "Agreement") with IPG Photonics Corporation, including its subsidiaries (the "Company").

Please take the time to review the Agreement carefully. It contains material restrictions on your right to disclose or use, during or after your employment, certain information and technology learned or developed by you during your employment, as well as limits on your post-employment activities. The Company considers this Agreement to be very important to the protection of its business.

If you have any questions concerning the Agreement, you may wish to consult an attorney. Managers, legal counsel and others in the Company are not authorized to give you legal advice concerning the Agreement.

If you have read and understand the Agreement, and if you agree to its terms and conditions, please return a fully executed copy of it to the Company, retaining one copy for yourself.

Reviewed and Understood:

Date: May 4, 2021 Eugene Scherbakov
Employee Name

/s/ Eugene Scherbakov
Employee Signature

IPG Photonics Corporation
50 Old Webster Road
Oxford, MA 01540

**CONFIDENTIALITY, NON-COMPETITION
AND CONFIRMATORY ASSIGNMENT AGREEMENT**

WHEREAS, IPG Photonics Corporation, including its subsidiaries (the "Company") engages in the competitive business of the development, fabrication, and sale of photonics technology, devices, and systems, including but not limited to fiber lasers, fiber amplifiers, applications thereof and related systems and components; and

WHEREAS, the Company's business is conducted throughout the world and the reputation and goodwill of the Company are an integral part of its business success.

NOW, THEREFORE, in consideration and as a condition of any employment (or continued employment) by the Company, Employee intending to be legally bound agrees as follows:

Section 1. Confidentiality. Employee represents, warrants and covenants that he or she has not revealed and will not at any time, whether during or after the termination of my employment, reveal to anyone outside the Company any of the trade secrets or confidential information of the Company, its customers or suppliers, or any information received in confidence from third parties by the Company. Confidential information of the Company is any information or material (a) generated or collected by or used in the operation of the Company that relates to the actual or anticipated business, marketing and sales, strategic planning, products, services, research and development, or production and/or manufacturing processes, of the Company or its customers or suppliers, including its and their organization, personnel, customers and finances; or (b) suggested by or resulting from any task assigned to Employee or work performed by Employee for or on behalf of the Company. Employee will deliver to the Company copies of all confidential information upon the earlier of (a) a request by the Company, or (b) termination of Employee's employment. Upon termination of Employee's employment, Employee will not retain any such materials or copies.

Confidential Information shall not include (i) any information that is in the public domain at time of disclosure or thereafter comes into the public domain (other than by breach of this Agreement by Employee); or (ii) any information which is disclosed to Employee in good faith by a third party unaffiliated with the Company with the legal right to make such disclosure; or (iii) any information which an Officer of the Company authorizes its unrestricted use in writing.

Employee represents warrants and covenants that as to Confidential Information received pursuant to a prior employment or agency relationship, he or she will respect any contractual obligations of confidentiality that he or she may have and understand that it is not in the interests of the Company to mingle such Confidential Information with Company Confidential Information and as such represents, warrants and covenants that no such mingling has or will occur.

Further, Employee represents, warrants and covenants that during my employment he or she did not and will not take, use or permit to be used any notes, memoranda, reports, lists, records, drawings, sketches, specifications, software programs, data, documentation or other materials of any nature relating to any matter within the scope of the business of the Company or concerning any of its dealings or affairs otherwise than for the benefit of the Company. Employee further agrees that he or she has not used or permitted to be used and shall not, after the termination of my employment, use or permit to be used any such notes, memoranda, reports, lists, records, drawings, sketches, specifications, software programs, data, documentation or other materials, it being agreed that all of the foregoing shall be and remain the sole and exclusive property of the Company and that immediately upon the termination of Employee's employment he or she shall deliver all of the foregoing, and all copies thereof, to the Company, at its main office.

Employee understands that the Company has received and will receive from third parties information that is confidential or proprietary ("Third-Party Information") and that is subject to restrictions on the Company regarding its use and disclosure. Employee, both during and after termination of my employment will hold Third-Party Information in the strictest confidence and will not disclose or use Third-Party Information except as permitted by the agreement between the Company and the relevant third party, unless expressly authorized to act otherwise by the Company.

Employee agrees to report known or suspected unauthorized disclosures of confidential or proprietary information of the Company by any other person immediately to an Officer of the Company.

Employee hereby represents and warrants that from the time of my first contact or communication with the Company, Employee has held in strict confidence and in trust for the sole benefit of the Company all Confidential Information and have not disclosed any Confidential Information, directly or indirectly, to anyone outside the Company, or used, copied, published, or summarized any Confidential Information, except to the extent permitted by this Section 1. Except as disclosed on Schedule A to this Agreement, I do not know anything about the Company's business or Confidential Information, other than information I have learned from the Company in the course of being hired or during my employment by the Company.

Nothing herein shall limit or impede Employee's right to file or pursue an administrative charge with, or participate in, any investigation before a governmental agency.

By this Agreement, the Company has provided me with written notice that the Defend Trade Secrets Act provides an immunity for the disclosure of a Trade Secret to report suspected violations of law and/or in an anti-retaliation lawsuit, as set forth in Attachment A to this Agreement.

Section 2. Non-Competition; Non-Solicitation In view of the fact that any activity of the Employee in violation of the terms hereof would adversely affect the Company and its subsidiaries (as defined below), and to preserve the goodwill associated with the Company's business, the Employee hereby agrees to the following restrictions on my activities:

(a) **Non-Competition** The Employee hereby agrees that for one (1) year after the date on which the Employee's employment with the Company and its subsidiaries terminates for any reason (the "Non-Competition Period"), Employee will not, without the express written consent of the Company, directly or indirectly, anywhere in the United States, Europe or Asia, engage in any activity which is, or participate or invest in, or provide or facilitate the provision of financing to, or assist (whether as owner, part-owner, shareholder, member, partner, director, officer, trustee, employee, agent or consultant, or in any other capacity) any business, organization or person other than the Company (or any subsidiary of the Company), whose business, activities, products or services are competitive with the products/technologies/services of the Company. The Employee hereby acknowledges that, because of the global-based nature of the Company's business, the geographic scope as set forth above is reasonable and fair. Notwithstanding anything herein to the contrary, the Employee may make passive investments in any enterprise the shares of which are publicly traded if such investment constitutes less than three percent of the equity of such enterprise.

(b) **Non-Solicitation** The Employee hereby agrees that during the period commencing on the date hereof and ending on the date which is eighteen months after the date on which the Employee's employment with the Company and its subsidiaries terminates for any reason, he will not, without the express written consent of an Officer of the Company, (i) hire or engage or attempt to hire or engage for or on behalf of himself or herself or any such competitor any officer or employee of the Company or any of its subsidiaries, or any former employee of the Company and any of its subsidiaries who was employed during the one year period immediately preceding the date on which the Employee's employment or service relationship with the Company or any of its subsidiaries was terminated for any reason, (ii) encourage for or on behalf of himself or any such competitor any such officer or employee to terminate my relationship or employment with the Company or any of its subsidiaries, (iii) solicit for or on behalf of himself or any such competitor any current or prospective client or

supplier of the Company or any of its subsidiaries with whom Employee had contact during employment by the Company or (iv) divert to any person (as hereinafter defined) any current or prospective client with whom Employee had contact during employment by the Company or business opportunity of the Company or any of any of its subsidiaries.

Neither the Employee nor any business entity controlled by the Employee is a party to any contract, commitment, arrangement or agreement which could, following the date hereof, restrain or restrict the Company or any subsidiary of the Company from carrying on its business or restrain or restrict the Employee from performing my employment obligations, and as of the date of this Agreement the Employee has no business interests whatsoever in or relating to the industries in which the Company and its subsidiaries currently engage other than Employee's interest in the Company and other than interests in public companies of less than three percent.

For purposes of this Agreement, (x) any reference to the "subsidiaries" of the Company shall be deemed to include all entities directly or indirectly controlled by it through an ownership of more than fifty percent (50%) of the voting interests, (y) the term "person" shall mean an individual, a corporation, an association, a partnership, a limited liability company, an estate, a trust, and any other entity or organization and (z) the term "Officer" shall only include individuals with the following job titles: a Vice President or Chief Executive Officer of IPG Photonics Corporation, and shall exclude the Employee if Employee is or becomes an Officer.

Section 3. Scope of Agreement. The parties acknowledge that the time, scope, geographic area and other provisions of this Agreement have been specifically negotiated by sophisticated parties and agree that (a) all such provisions are reasonable and fair to the parties hereto under the circumstances of the transactions contemplated hereby, and (b) are given as an integral and essential part of the transactions contemplated hereby. The Employee has had the opportunity to independently consult with legal counsel of Employee's choice concerning the reasonableness and fairness of the covenants contained herein, with specific regard to the business to be conducted by Company and its subsidiaries, and Employee agrees that the Agreement is intended to be, and shall be, fully enforceable and effective in accordance with its terms.

Section 4. Assignment of Inventions: Work for Hire. Employee hereby confirms, acknowledges and agrees that all inventions, modifications, discoveries, designs, writings, compilations, software, formulas, developments, improvements, processes, know-how, technology, ideas or intellectual property rights whatsoever (collectively, "Developments") that Employee (either alone or with others) has conceived, made or reduced to practice at any time or times while employed by the Company or any of its subsidiaries, are the sole and absolute property of the Company, its successors and assigns and Employee hereby assigns such Developments to the Company. Employee acknowledges that all Developments were made as a "work for hire" and all proprietary rights which the Employee may have acquired in such Developments were assigned to the Company. To the degree any Developments are not considered to be "works for hire" under the law, Employee hereby assigns such Developments to the Company. Employee hereby confirms, acknowledges and agrees that Employee has received mutually-agreed upon compensation from the Company in consideration for the Company's ownership rights to the Developments set forth in this Section 4 and that such consideration is fair and reasonable and that no further consideration shall be owed to Employee.

Employee will make and maintain adequate and current records of and communicate to the Company (or any persons designated by it) promptly and fully each Development without publishing the same. Further, Employee will, both during and after the period of my employment by the Company, execute all appropriate documents and give the Company all assistance it reasonably requires to perfect, protect and use its rights to the Developments. In the event the Company is unable, after reasonable effort, to secure Employee's signature on any letter patent, copyright or other analogous protection relating to a Development, Employee hereby irrevocably appoints the Company and its duly authorized officers and agents as Employee's agent and attorney-in-fact, to execute and file any such application or applications and to do all other lawfully permitted acts to further the prosecution, issuance, sale, transfer, license and assignment of letters patent, copyright or other protection with the same legal force and effect as if signed by Employee.

Employee has attached hereto, as Schedule A, a list describing all Inventions which were made by Employee prior to my employment by the Company ("Prior Inventions"), which belong to Employee and which relate in any way to the Company's business, products, services, research or development, and which are not assigned to the Company. If no such list is attached or if the list is not completed, Employee represents that there are no such Prior Inventions. If in the course of employment by the Company, Employee incorporates into a Company product or process a Prior Invention, the Company is hereby granted and shall have a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, use and sell such Prior Invention as part of or in connection with such product or process.

Section 5. Use of Voice, Image and Likeness; Publication of Statements. Employee gives the Company permission to use Employee's voice, image or likeness, with or without using Employee's name, for the purposes of advertising and promoting the Company, except to the extent expressly prohibited by law. To ensure that the Company delivers a consistent message about its products, services and operations to the public, and further in recognition that even positive statements may have a detrimental effect on the Company in certain securities transactions and other contexts, Employee agrees that any statement about the Company which he or she creates, publishes or posts during Employee's period of employment and for months thereafter, on any media accessible by the public, including but not limited to electronic bulletin boards and Web-based chat rooms, shall first be reviewed and approved by an officer of the Company before it is released in the public domain.

Section 6. Termination; At-Will Employment. Employee hereby acknowledges and agrees that all personal property, including, without limitation, all source code listings, notebooks, books, manuals, records, models, drawings, reports, notes, contracts, lists blueprints, and other documents or materials or copies thereof, all equipment furnished to or prepared by Employee in the course of or incident to my employment, and all Confidential Information belong to the Company and will be promptly returned to the Company upon termination of my employment with the Company. Following any termination of employment, Employee will not retain any written or tangible material containing any Confidential Information or information pertaining to any Development. Employee understands that Employee's obligations contained herein will survive the termination of Employee's employment and that Employee will continue to make all disclosures required of Employee under Section 4. In the event of the termination of employment, Employee agrees, if requested by the Company, to sign and deliver the Termination Certificate attached as Schedule B. Employee further agrees that after the termination of Employee's employment with the Company, Employee will not enter into any agreement that conflicts with Employee's obligations under this Agreement and Employee will inform any subsequent employers of my obligations under this Agreement. EMPLOYEE RECOGNIZES THAT NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED TO IMPLY THAT THE TERM OF MY EMPLOYMENT IS OF ANY DEFINITE DURATION. This Agreement should not be construed as a contract for continued employment. Unless otherwise agreed to in a writing signed by an Officer of the Company, Employee's employment with the Company is at-will, and Employee or the Company can terminate Employee's employment at any time, with or without cause or notice.

Section 7. No Conflicting Agreements. Employee agrees not to disclose to the Company or its subsidiaries, or use in Employee's work for the Company, any confidential information and/or trade secrets belonging to others, including without limitation, Employee's prior employers, or any prior inventions made by Employee and which the Company or its subsidiaries is not otherwise legally entitled to learn of or use. Employee represents and warrants that (a) Employee returned all properly and confidential information belonging to all prior employers, if any and (b) performance of the terms of this Agreement will not breach any of Employee's agreements to keep in confidence proprietary information acquired by Employee in confidence or in trust prior to employment by the Company. Employee certifies that Employee is not subject to any oral or written covenants and/or obligations that would prevent Employee from fully performing Employee's duties for the Company or conflict with this Agreement. Employee also agrees that the Company may contact any employer or prospective employer of Employee to inform them of my obligations under this Agreement and that, for a period of five years after termination of employment with the Company for any reason, Employee shall affirmatively provide this Agreement to all subsequent employers.

Section 8. Certain Remedies; Severability. It is specifically understood and agreed that any breach of the provisions of this agreement by the Employee will result in irreparable injury to the Company and its

subsidiaries, that the remedy at law alone will be an inadequate remedy for such breach and that, in addition to any other remedy it may have, the Company its subsidiaries shall be entitled to enforce the specific performance of this agreement by the Employee through both temporary and permanent injunctive relief without the necessity of proving actual damages, but without limitation of their right to damages and any and all other remedies available to them, it being understood that injunctive relief is in addition to, and not in lieu of, such other remedies.

In the event that any covenant contained in this Agreement shall be determined by any court of competent jurisdiction to be unenforceable by reason of its extending for too great a period of time or over too great a geographical area or by reason of its being too extensive in any other respect, it shall be interpreted to extend only over the maximum period of time for which it may be enforceable and/or over the maximum geographical area as to which it may be enforceable and/or to the maximum extent in all other respects as to which it may be enforceable, all as determined by such court in such action. The existence of any claim or cause of action which the Employee may have against the Company or any of its subsidiaries shall not constitute a defense or bar to the enforcement of any of the provisions of this Agreement. Employee agrees that Employee will not assert, and it should not be considered, that any provision contained in this Agreement prevents him or her from earning a living or is otherwise void, voidable, or unenforceable or should be voided or held to be unenforceable.

Section 9. Jurisdiction. The parties hereby consent to the jurisdiction of the Superior Court of the Commonwealth of Massachusetts and the United States District Court for the District of Massachusetts. Accordingly, with respect to any such court action, Employee (a) submits to the personal jurisdiction of such courts; (b) consents to service of process; and (c) waives any other requirement or objection (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction, service of process or venue. In the event that the courts of any state shall hold such covenants unenforceable (in whole or in part) by reason of the breadth of such scope or otherwise, it is the intention of the parties hereto that such determination shall not bar or in any way affect the right of the Company to the relief provided for herein in the courts of any other state within the geographic scope of such covenants, as to breaches of such covenants in such other respective states, the above covenants as they relate to each state being, for this purpose, severable into diverse and independent covenants.

Section 10. Notices. Any notice or demand which is required or provided to be given under this Agreement shall be deemed to have been sufficiently given and received for all purposes when delivered by hand, telecopy, telex or other method of facsimile, or five days after being sent by certified or registered mail, postage and charges prepaid, return receipt requested, or two days after being sent by overnight delivery providing receipt of delivery, to the following addresses: if to the Company, 50 Old Webster Road, Oxford, MA 01540, Facsimile: 508-373-1134, Attn: General Counsel, or at any other address designated by the Company to the Employee in writing, and if to the Employee, to the home address of Employee as designated in the current personnel files maintained by the Company, or at any other address designated by the Employee to the Company in writing.

Section 11. Miscellaneous. This Agreement shall be governed by and construed under the laws of The Commonwealth of Massachusetts (without regard to its conflict of laws principles) and shall not be modified or discharged in whole or in part except by an agreement in writing signed by the Company and the Employee. The failure of any of the parties to require the performance of a term or obligation or to exercise any right under this Agreement or the waiver of any breach hereunder shall not prevent subsequent enforcement of such term or obligation or exercise of such right or the enforcement at any time of any other right hereunder or be deemed a waiver of any subsequent breach of the provision so breached, or of any other breach hereunder. Employee's obligations under this Agreement shall survive the termination of Employee's employment regardless of the manner of such termination and shall be binding upon Employee's heirs, executors, administrators and legal representatives. The Company shall have the right to assign this Agreement without the Employee's prior notice or approval to its affiliates, successors and assigns but this Agreement may not be assigned by the Employee. This Agreement supersedes all prior understandings and agreements between the parties relating to the subject matter hereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

I ACKNOWLEDGE THAT I HAVE READ THIS AGREEMENT IN ITS ENTIRETY CAREFULLY AND UNDERSTAND ALL OF ITS TERMS AND CONDITIONS. IF I HAD ANY QUESTIONS REGARDING THIS AGREEMENT, THEY HAVE BEEN ANSWERED BY THE COMPANY OR A GROUP MEMBER TO MY SATISFACTION. I HAVE COMPLETELY NOTED ON SCHEDULE A TO THIS AGREEMENT ANY CONFIDENTIAL INFORMATION, IDEAS, PROCESSES, INVENTIONS, TECHNOLOGY, WRITINGS, PROGRAMS, DESIGNS, FORMULAS, DISCOVERIES, PATENTS, COPYRIGHTS, OR TRADEMARKS, OR IMPROVEMENTS, RIGHTS, OR CLAIMS RELATING TO THE FOREGOING, THAT I DESIRE TO EXCLUDE FROM THIS AGREEMENT.

Date: May 4, 2021 Eugene Scherbakov
Employee Name

/s/ Eugene Scherbakov
Employee Signature

IPG Photonics Corporation
50 Old Webster Road
Oxford, MA 01540

SCHEDULE A

**EMPLOYEE'S DISCLOSURE
CONFIDENTIALITY, NON-COMPETITION
AND CONFIRMATORY ASSIGNMENT AGREEMENT**

1. Confidential Information. Except as set forth below, I acknowledge that at this time I know nothing about the business or Confidential Information of the Company, other than information I have learned from the Company in the course of being hired:

2. Prior Inventions. Except as set forth below, there are no ideas, processes, inventions, technology, writings, programs, designs, formulas, discoveries, patents, copyrights, or trademarks, or any claims, rights, or improvements to the foregoing, that I wish to exclude from the operation of this Agreement:

Date: _____
Employee Name

Employee Signature

IPG Photonics Corporation
50 Old Webster Road
Oxford, MA 01540

SCHEDULE B

**TERMINATION CERTIFICATE CONCERNING
IPG PHOTONICS CORPORATION
CONFIDENTIAL INFORMATION AND DEVELOPMENTS**

This is to certify that I have returned all personal property of IPG Photonics Corporation, including its subsidiaries (the "Company"), including, without limitation, all source code listings, books, manuals, records, models, drawings, reports, notes, contracts, lists, blueprints, and other documents and materials, Confidential Information, and equipment furnished to or prepared by me in the course of or incident to my employment with the Company, and that I did not make or distribute any copies of the foregoing.

I further certify that I have reviewed the Confidentiality, Non-Competition and Confirmatory Assignment Agreement signed by me (the "Agreement") and that I have complied with and will continue to comply with all of its terms, including, without limitation, (i) the reporting of any idea, process, invention, technology, writing, program, design, formula, discovery, patent, copyright, or trademark, or any improvement, rights, or claims related to the foregoing, conceived or developed by me and covered by the Agreement and (ii) the preservation as confidential of all Confidential Information pertaining to the Company. This certificate in no way limits my responsibilities or the Company's rights under the Agreement.

On termination of my employment with the Company, I will be employed by _____ in the _____ division and I will be working in connection with the following projects:

Generally Describe the Projects:

Date: _____
Employee Name

Employee Signature

IPG Photonics Corporation
50 Old Webster Road
Oxford, MA 01540

ATTACHMENT A

NOTICE UNDER THE DEFENDANT TRADE SECRETS ACT

(1) IMMUNITY.—An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that—

(A) is made—

(i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and

(ii) solely for the purpose of reporting or investigating a suspected violation of law; or

(B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

(2) USE OF TRADE SECRET INFORMATION IN ANTI-RETALIATION LAWSUIT.—An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual—

(A) files any document containing the trade secret under seal; and

(B) does not disclose the trade secret, except pursuant to court order.

Certification of Chief Executive Officer

Pursuant to Rule 13a – 14(a) or Rule 15d – 14(a) of the Securities Exchange Act of 1934

I, Eugene A. Scherbakov, certify that:

1. I have reviewed this quarterly report on Form 10-Q of IPG Photonics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be signed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 4, 2021

By:

/s/ Eugene A. Scherbakov

Eugene A. Scherbakov
Chief Executive Officer (Principal Executive Officer)

Certification of Chief Financial Officer

Pursuant to Rule 13a – 14(a) or Rule 15d – 14(a) of the Securities Exchange Act of 1934

I, Timothy P.V. Mammen, certify that:

1. I have reviewed this quarterly report on Form 10-Q of IPG Photonics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 4, 2021

By:

/s/ Timothy P.V. Mammen

Timothy P.V. Mammen

Senior Vice President and Chief Financial Officer (Principal Financial Officer)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2021 (the "Report") by IPG Photonics Corporation (the "Company"), Eugene A. Scherbakov, as the Chief Executive Officer of the Company, and Timothy P.V. Mammen, as the Chief Financial Officer of the Company, each hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

- 1 the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
- 2 the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 4, 2021

/s/ Eugene A. Scherbakov

Eugene A. Scherbakov
Chief Executive Officer

/s/ Timothy P.V. Mammen

Timothy P.V. Mammen
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by 18 U.S.C. Section 1350 has been provided to IPG Photonics Corporation and will be retained by IPG Photonics Corporation and furnished to the Securities and Exchange Commission or its staff upon request.