## TRADEMARK ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE BY SECURED PARTY

## **CONVEYING PARTY DATA**

Name	Formerly	Execution Date	Entity Type
The Bank of New York Mellon Trust Company, N.A.		110/19/2011	National Association: UNITED STATES

## **RECEIVING PARTY DATA**

Name:	GSI GROUP INC.	
Street Address:	125 Middlesex Turnpike	
City:	Bedford	
State/Country:	MASSACHUSETTS	
Postal Code:	01730	
Entity Type:	CORPORATION: CANADA	

Name:	GSI GROUP CORPORATION	
Street Address:	125 Middlesex Turnpike	
City:	Bedford	
State/Country:	MASSACHUSETTS	
Postal Code:	01730	
Entity Type:	CORPORATION: MICHIGAN	

Name:	MES INTERNATIONAL INC.	
Street Address:	125 Middlesex Turnpike	
City:	Bedford	
State/Country:	MASSACHUSETTS	
Postal Code:	01730	
Entity Type:	CORPORATION: DELAWARE	

Name:	EXCEL TECHNOLOGY, INC.	
Street Address:	125 Middlesex Turnpike	
City:	Bedford	
State/Country:	MASSACHUSETTS	

Postal Code:	01730		
Entity Type:	CORPORATION: DELAWARE		
<u></u>	\[ \( \)		
Name:	CAMBRIDGE TECHNOLOGY, INC.		
Street Address:	125 Middlesex Turnpike		
City:	Bedford		
State/Country:	MASSACHUSETTS		
Postal Code:	01730		
Entity Type:	CORPORATION: MASSACHUSETTS		
	Vegetativi vide et e e e e e e e e e e e e e e e e e		
Name:	CONTINUUM ELECTRO-OPTICS, INC.		
Street Address:	125 Middlesex Turnpike		
City:	Bedford		
State/Country:	MASSACHUSETTS		
Postal Code:	01730		
Entity Type:	CORPORATION: DELAWARE		
Name:	CONTROL LASER CORPORATION (D/B/A Baublys Contol Laser)		
Street Address:	125 Middlesex Turnpike		
City:	Bedford		
State/Country:	MASSACHUSETTS		
Postal Code:	01730		
Entity Type:	CORPORATION: FLORIDA		
Name:	THE OPTICAL CORPORATION		
Street Address:	125 Middlesex Turnpike		
City:	Bedford		
State/Country:	MASSACHUSETTS		
Postal Code:	01730		
Entity Type:	CORPORATION: CALIFORNIA		
Name:	PHOTO RESEARCH, INC.		
Street Address:	125 Middlesex Turnpike		
City:	Bedford		
State/Country:	MASSACHUSETTS		
Postal Code:	01730		
Entity Type:	CORPORATION: DELAWARE		
Name:	QUANTRONIX CORPORATION		
Street Address:	125 Middlesex Turnpike		

City:	Bedford	
State/Country:	MASSACHUSETTS	
Postal Code:	01730	
Entity Type:	CORPORATION: DELAWARE	

Name:	SYNRAD, INC.	
Street Address:	125 Middlesex Turnpike	
City:	Bedford	
State/Country:	MASSACHUSETTS	
Postal Code:	01730	
Entity Type:	CORPORATION: WASHINGTON	

Name:	MICROE SYSTEMS CORP.	
Street Address:	125 Middlesex Turnpike	
City:	Bedford	
State/Country:	MASSACHUSETTS	
Postal Code:	01730	
Entity Type:	CORPORATION: DELAWARE	

## PROPERTY NUMBERS Total: 53

Property Type	Number	Word Mark
Registration Number:	3007832	CHIPTRIM
Registration Number:	2760758	DRILLSTAR
Serial Number:	78731644	ENABLING TECHNOLOGY
Registration Number:	3902150	GSI
Registration Number:	3902151	GSI
Serial Number:	78731624	GSI GROUP
Registration Number:	2958968	GSI LUMONICS
Registration Number:	2921938	GSI LUMONICS
Registration Number:	2744378	НВ
Registration Number:	2906383	LASERVIEW
Registration Number:	1241652	LIGHTWRITER
Registration Number:	1649349	LIGHTWRITER
Registration Number:	3017266	LIGHTWRITER
Registration Number:	1667518	PC-MARK
Registration Number:	2883125	SCRIBESMART
Registration Number:	2259707	SIGMACLEAN
		TRADEMARK

**REEL: 004651 FRAME: 0863** 

Registration Number:	1375595	SOFTMARK
Registration Number:	1717813	SUPER SOFTMARK
Registration Number:	2770073	TRIMSMART
Registration Number:	3187870	VERSITRIM
Registration Number:	1200245	WAFERMARK
Registration Number:	2772375	
Registration Number:	2333705	POSITIONPRO
Registration Number:	2457724	MICROMAX
Registration Number:	2565632	PANTHER
Registration Number:	1695210	CONTINUUM
Registration Number:	1205975	INSTAMARK
Registration Number:	3125680	MICROE SYSTEMS
Registration Number:	2886781	MICROE SYSTEMS
Registration Number:	0945229	PRITCHARD
Registration Number:	0987821	SPECTRA
Registration Number:	1188492	LITEMATE
Registration Number:	1253696	PHOTO RESEARCH
Registration Number:	1262271	PR
Registration Number:	1262871	SPECTRASCAN
Registration Number:	1298453	SPOTMETER
Registration Number:	1475474	THE LIGHT MEASUREMENT PEOPLE
Registration Number:	2219258	SPECTRAWIN
Registration Number:	2247912	VIDEO-WIN
Registration Number:	2747719	PHOTOWIN
Registration Number:	3223033	SPECTRADUO
Registration Number:	2427055	Q-MARK
Registration Number:	2355214	LASER COMMANDER
Registration Number:	1097990	QUANTRONIX
Registration Number:	0907880	QUANTRONIX
Serial Number:	77917319	KATANA
Registration Number:	1890922	SYNRAD
Registration Number:	1848154	POWER WIZARD
Registration Number:	2396260	FENIX
Registration Number:	2497086	FIRESTAR
Registration Number:	1620992	DUO-LASE
		TRADEMARK

	2718303	EVOLUTION
Registration Number:	2229564	WINMARK PRO

### **CORRESPONDENCE DATA**

Fax Number: (617)248-4000

Email: tmadmin@choate.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: Elizabeth A. Walker
Address Line 1: Two International Place
Address Line 2: Choate, Hall & Stewart LLP

Address Line 4: Boston, MASSACHUSETTS 02110

ATTORNEY DOCKET NUMBER:	2005936-0012				
NAME OF SUBMITTER:	Elizabeth A. Walker				
Signature:	/Elizabeth A. Walker/				
Date:	10/31/2011				

#### Total Attachments: 38

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# RELEASE OF SECURITY INTEREST IN TRADEMARKS, PATENTS AND COPYRIGHTS

This RELEASE OF SECURITY INTEREST IN TRADEMARKS, PATENTS AND COPYRIGHTS (this "Release") is made as of October 19, 2011, by THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., in its capacity as collateral agent (the "Agent") to each of the Noteholders (as defined in the Security Agreement referred to below), to GSI Group Inc., GSI Group Corporation, MES International Inc., Excel Technology, Inc., Cambridge Technology, Inc., Continuum Electro-Optics, Inc., Control Laser Corporation (D/B/A Baublys Control Laser), The Optical Corporation, Photo Research, Inc., Quantronix Corporation, Synrad, Inc., MicroE Systems Corp., (each, a "Grantor" and collectively, the "Grantors").

WHEREAS, the Grantors entered into a Security Agreement, dated as of July 23, 2010 (as amended, restated or otherwise modified from time to time the "Security Agreement"), in favor of the Agent;

WHEREAS, pursuant to the Security Agreement, the Grantors executed and delivered to the Agent that certain Grant of Security Interest Trademarks, Patents and Copyrights, dated July 23, 2010 (as amended, restated, supplemented, or otherwise modified from time to time, the "<u>IP Security Agreement</u>") for recordation in the United States Patent and Trademark Office and the United States Copyright Office;

WHEREAS, pursuant to the Security Agreement, the Grantors executed and delivered to the Agent that certain Grant of Security Interest Trademarks, Patents and Copyrights, dated July 23, 2010 (as amended, restated, supplemented, or otherwise modified from time to time, the "Supplemental IP Security Agreement") for recordation in the United States Patent and Trademark Office and the United States Copyright Office that supplements the IP Security Agreement;

WHEREAS, pursuant to the Security Agreement and the IP Security Agreement and the Supplemental IP Security Agreement, the Grantors granted to the Agent for the benefit of the Secured Parties (as defined in the Security Agreement) a continuing security interest in all right, title and interest of the Grantors in, to and under (i) the trademarks and service marks listed on the annexed Schedule A, which trademarks and service marks are registered or applied for in the United States Patent and Trademark Office, together with, among other things, the goodwill of the business symbolized thereby, (ii) the letter patents, design patents and utility patents listed on the annexed Schedule B, which patents are issued or applied for in the United States Patent and Trademark Office, and (iii) the copyrights listed on the annexed Schedule C, which copyrights are registered in the United States Copyright Office, and, in each case, the applications and registrations thereof, and all proceeds thereof, including, without limitation, any and all causes of action which may exist by reason of infringement thereof and any and all damages arising from past, present and future violations thereof (collectively, the "Collateral"), to secure the payment, performance and observance of the Obligations (as defined in the Security Agreement);

WHEREAS, the IP Security Agreement was recorded with the United States Patent and Trademark Office at Reel 4249, Frame 0491 on July 28, 2010 and at Reel 024755 Frame 0537 on July 29, 2010 and with the United States Copyright Office at Volume 3592, Document 926 on

August 6, 2010; and the Supplemental IP Security Agreement was recorded with the United States Patent and Trademark office at Reel 4589, Frame 0157, on July 22, 2011 and at Reel 026637, Frame 0752 on July 22, 2011;

WHEREAS, all of the indebtedness and other obligations secured by the Collateral have been repaid in their entirety, and the Agent is therefore obligated to release the entirety of its security interest in the Collateral.

NOW, THEREFORE, for valuable consideration and pursuant to the terms and conditions set forth in the Security Agreement, the Agent hereby agrees as follows:

The Agent hereby terminates, releases and discharges its security interest in the Collateral, and any right, title or interest of the Agent in or to the Collateral shall hereby cease and become void.

The Agent shall execute and deliver to the Grantors all further releases and other documents (including without limitation Uniform Commercial Code termination statements), and take all other actions necessary or reasonably desirable for the release of the Agent's security interest in the Collateral.

The Agent authorizes the recordation of this Release with the United States Patent and Trademark Office, the United States Copyright Office and any other applicable registry.

This Release shall be governed by, and shall be construed and enforced in accordance with, the laws of the State of New York without regard to conflict of laws principles thereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has caused this Release to be executed by its duly authorized officer as of the date set forth above.

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Collateral Agent

Name: Leslie Lockhart

Title: Relationship Manager

[Signature Page to Release of Security Interest in Trademarks, Patents and Copyrights]

**SCHEDULE A** 

# Trademark and Service Mark Registrations and Applications

Grantor	Trademark	Application/ Registration No.	Filing Date	Registration Date	Record Owner
GSI Group Corporation	Chiptrim	3,007,832	8/8/2003	10/18/2005	GSI Group Corporation
GSI Group Inc.	Drillstar	2,760,758	5/9/2001	9/9/2003	GSI Group Inc.
GSI Group Corporation	Enabling Technology	78/731644	10/12/2005	Not Applicable	GSI Group Corporation
GSI Group Corporation	GSI (Word Only - Black)	3,902,150	10/12/2005	1/4/2011	GSI Group Corporation
GSI Group Corporation	GSI (Word Only - Blue)	3,902,151	10/12/2005	1/4/2011	GSI Group Corporation
GSI Group Corporation	GSI Group (Name Only)	78/731624	10/12/2005	Not Applicable	GSI Group Corporation
GSI Group Corporation	GSI Lumonics (Block)	2,958,968	5/24/2002	6/7/2005	GSI Group Corporation
GSI Group Corporation	GSI Lumonics - Stylized	2,921,938	5/24/2002	2/1/2005	GSI Group Corporation
GSI Group Corporation	HB - Design (Hummingbird)	2,744,378	1/16/2002	7/29/2003	GSI Group Corporation
GSI Group Corporation	Laserview	2,906,383	6/12/2003	11/30/2004	GSI Group Corporation
GSI Group Corporation	Lightwriter	1,241,652	2/8/1982	6/7/1983	Lumonics Marking Corp.
GSI Group Corporation	Lightwriter	1,649,349	6/4/1990	7/2/1991	GSI Group Corporation
GSI Group Corporation	Lightwriter	3,017,266	9/3/2003	11/22/2005	GSI Group Corporation

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Grantor	<u>Trademark</u>	Application/ Registration No.	Filing Date	Registration Date	Record Owner
GSI Group Corporation	PC-Mark	1,667,518	2/25/1991	12/10/1991	General Scanning, Inc.
GSI Group Corporation	Scribesmart	2,883,125	1/16/2003	9/7/2004	GSI Group Corporation
GSI Group Corporation	Sigmaclean	2,259,707	10/16/1995	7/6/1999	GSI Group Corporation
GSI Group Inc.	Softmark	1,375,595	12/20/1984	12/17/1985	GSI Group Inc.
GSI Group Corporation	Super Softmark	1,717,813	1/9/1992	9/22/1992	GSI Group Corporation
GSI Group Corporation	Trimsmart (Block)	2,770,073	3/15/2002	9/30/2003	GSI Group Inc.
GSI Group Corporation	Versitrim	3,187,870	8/8/2003	12/19/2006	GSI Group Corporation
GSI Group Corporation	Wafermark	1,200,245	5/9/1980	7/6/1982	GSI Group Corporation
GSI Group Corporation	Hummingbird (Design Only)	2,772,375	1/16/2002	10/7/2003	GSI Group Corporation
Cambridge Technology, Inc.	Positionpro	2,333,705	1/26/1998	3/21/2000	Cambridge Technology, Inc.
Cambridge Technology, Inc.	Micromax	2,457,724	4/29/1998	6/5/2001	Cambridge Technology, Inc.
Continuum Electro-Optics, Inc.	Panther	2,565,632	4/16/1999	4/30/2002	Continuum Electro- Optics, Inc.
Continuum Electro-Optics, Inc.	Continuum	1,695,210	11/17/1989	6/16/1992	Continuum Electro- Optics, Inc.
Control Laser Corporation	Instamark	1,205,975	3/10/1981	8/24/1982	Control Laser Corporation
MicroE Systems Corp	MicroE Systems	3,125,680	6/7/2004	8/8/2006	MicroE Systems Corp

<u>Grantor</u>	<u>Trademark</u>	Application/ Registration No.	Filing Date	Registration Date	Record Owner
MicroE Systems Corp	MicroE Systems	2,886,781	10/20/1999	9/21/2004	MicroE Systems Corp
Photo Research, Inc.	Pritchard	0945,229	6/14/1971	10/17/1972	Photo Research, Inc.
Photo Research, Inc.	Spectra	0987,821	10/6/1972	7/9/1974	Photo Research, Inc.
Photo Research, Inc.	Light Mate	1,188,492	9/19/1980	2/2/1982	Photo Research, Inc.
Photo Research, Inc.	Photo Research	1,253,696	7/9/1982	10/11/1983	Photo Research, Inc.
Photo Research, Inc.	PR	1,262,271	7/9/1982	12/27/1983	Photo Research, Inc.
Photo Research, Inc.	Spectrascan	1,262,871	7/8/1982	1/3/1984	Photo Research, Inc.
Photo Research, Inc.	Spotmeter	1,298,453	7/9/1982	10/2/1984	Photo Research, Inc.
Photo Research, Inc.	The Light Measurement People	1,475,474	5/26/1987	2/2/1988	Photo Research, Inc.
Photo Research, Inc.	Spectrawin	2,219,258	4/15/1996	1/19/1999	Photo Research, Inc.
Photo Research, Inc.	Videowin	2,247,912	8/15/1995	5/25/1999	Photo Research, Inc.
Photo Research, Inc.	Photowin	2,747,719	3/16/2000	8/5/2003	Photo Research, Inc.
Photo Research, Inc.	SpectraAduo	3,223,033	6/8/2006	3/27/2007	Photo Research, Inc.
Quantronix Corporation	Q-Mark	2,427,055	3/16/2000	2/6/2001	Quantronix Corporation
Quantronix Corporation	Laser Commander	2,355,214	7/22/1999	6/6/2000	Quantronix Corporation

<u>Grantor</u>	<u>Trademark</u>	Application/ Registration No.	Filing Date	Registration Date	Record Owner
Quantronix Corporation	Quantronix	1,097,990	3/23/1977	8/1/1978	Quantronix Corporation
Quantronix Corporation	Quantronix	0907,880	1/23/1969	2/16/1971	Quantronix Corporation
Quantronix Corporation	Katana	77,917,319	1/21/2010	N/A	Quantronix Corporation
Synrad, Inc.	Synrad	1,890,922	3/31/1994	4/25/1995	Synrad, Inc.
Synrad, Inc.	Power Wizard	1,848,154	4/30/1993	8/2/1994	Synrad, Inc.
Synrad, Inc.	Fenix	2,396,260	4/28/1998	10/17/2000	Synrad, Inc.
Synrad, Inc.	Firestar	2,497,086	12/29/1999	10/9/2001	Synrad, Inc.
Synrad, Inc.	Duo-Lase	1,620,992	1/2/1990	11/6/1990	Synrad, Inc.
Synrad, Inc.	Evolution	2,718,303	8/25/1998	5/27/2003	Synrad, Inc.
Synrad, Inc.	Winmark Pro	2,229,564	5/7/1997	3/2/1999	Synrad, Inc.

# SCHEDULE B

# **Patents and Patent Applications**

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	A Digital Resolver With Asynchronous Multiple Count Generation.	5,079,549	8/24/1990	1/07/1992	GSI Group Corporation
GSI Group Inc.	A Method For Laser Drilling.	6,657,159	6/6/2002	12/2/2003	GSI Lumonics Inc.
GSI Group Inc.	A Method And Apparatus For Shaping A Laser-Beam Intensity Profile By Dithering.	6,341,029	4/27/1999	1/22/2002	GSI Lumonics Inc.
GSI Group Inc.	A Method And Apparatus To Shape A Laser Beam Intensity Profile By Dithering An Anamorphic Spot.	6,496,292	10/22/2001	12/17/2002	GSI Lumonics Inc.
GSI Group Inc.	A System And Method For Material Processing Using Multiple Laser Beams.	6,462,306	4/26/2000	10/8/2002	GSI Lumonics Inc.
GSI Group Corporation	Apparatus And Method For Controlling The Light Intensity Of A Laser Diode.	5,123,024	8/6/1991	6/16/1992	GSI Lumonics Corporation
GSI Group Corporation	Apparatus For Severing Integrated- Circuit Connection Paths By Means Of A Phase-Plate Adjusted Laser Beam.	5,300,756	10/22/1991	4/5/1994	GSI Lumonics Corporation
GSI Group Corporation	Automated Trim Processing System.	6,875,950	3/22/2002	4/5/2005	GSI Lumonics Inc.

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<u>Grantor</u>	Title	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Automatic Control Of Laser Beam Tool Positioning.	5,340,962	8/14/1992	8/23/1994	Lumonics Corp.
GSI Group Inc.	Control Of A Pumping Diode Laser.	5,400,351	5/9/1994	3/21/1995	GSI Lumonics Inc.
GSI Group Corporation	Controlling Laser Polarization.	6,181,728	7/2/1998	1/30/2001	GSI Lumonics Corporation
GSI Group Corporation	Controlling Laser Polarization.	6,987,786	12/13/2001	1/17/2006	GSI Lumonics Corporation
GSI Group Corporation	Controlling Laser Polarization.	6,381,259	1/29/2001	4/30/2002	GSI Lumonics Corporation
GSI Group Corporation	Energy Efficient Method And System For Processing Target Material Using An Amplified, Wavelength-Shifted Pulse Train.	6,703,582	1/22/2002	3/9/2004	GSI Lumonics Corporation
GSI Group Corporation	Energy-Efficient, Laser-Based Method And System For Processing Target Material.	2008-0035614 7,750,268	8/22/2007	7/6/2010	GSI Group Inc.
GSI Group Corporation	Energy-Efficient, Laser-Based Method And System For Processing Target Material.	2008-0099453 7,679,030	1/4/2008	3/16/2010	GSI Group Inc.
GSI Group Corporation	Energy-Efficient, Laser-Based Method And System For Processing Target Material.	2008-0105664	1/4/2008	Not Applicable	GSI Group Inc.

		Application/Publication,			
<u>Grantor</u>	<u>Title</u>	Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Energy Efficient Method And System For Processing Target Material Using An Amplified, Wavelength-Shifted Pulse Train.	6,340,806	6/1/2000	1/22/2002	GSI Lumonics Corporation
GSI Group Corporation	Energy-Efficient, Laser-Based Method And System For Processing Target Material.	2004-0188399	4/6/2004	Not Applicable	GSI Lumonics Inc.
GSI Group Inc.	Energy-Efficient, Laser-Based Method And System For Processing Target Material.	6,727,458	8/28/2001	4/27/2004	GSI Lumonics Inc.
GSI Group Inc.	Energy-Efficient, Laser-Based Method And System For Processing Target Material.	6,281,471	12/28/1999	8/28/2001	GSI Lumonics Inc.
GSI Group Corporation	Flexible Scan Field.	7,238,913	10/18/2004	7/3/2007	GSI Group Corporation
GSI Group Corporation	Flexible Scan Field.	7,402,774	4/3/2007	7/22/2008	GSI Group Corporation
GSI Group Corporation	Focused Laser Beam Measurement/Location.	5,521,374	9/7/1994	5/28/1996	Lumonics Corp.
GSI Group Inc.	Stabilization Of The Output Energy Of A Pulsed Solid State Laser.	5,812,569	3/21/1997	9/22/1998	GSI Lumonics Inc.
GSI Group Corporation	Grid Array Inspection System And Method.	5,812,268	5/5/1997	9/22/1998	GSI Group Corporation
GSI Group Corporation	Grid Array Inspection System And Method.	5,652,658	10/19/1993	7/29/1997	GSI Lumonics Corporation

Grantor	Title	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	High Speed Precision Positioning Apparatus.	6,744,228	7/11/2000	6/1/2004	GSI Group Corporation
GSI Group Corporation	High Speed Precision Positioning Apparatus.	6,949,844	12/29/2003	9/27/2005	GSI Lumonics Corporation
GSI Group Corporation	High Speed, Laser-Based Marking Method And System For Producing Machine Readable Marks On Workpieces And Semiconductor Devices With Reduced Subsurface Damage Produced Thereby.	7,067,763	5/15/2003	6/27/2006	GSI Lumonics Corporation
GSI Group Corporation	Method And Apparatus For Laser Marking By Ablation.	7,148,447	1/16/2006	12/12/2006	GSI Group Corporation
GSI Group Corporation	High-Speed Precision, Laser-Based Method And System For Processing Material On One More Targets Within A Field.	6,989,508	7/30/2004	1/24/2006	GSI Group Corporation
GSI Group Corporation	Improved Laser Marking Of Semiconductor Wafers- Hard Marks.	2006-0189091	11/9/2005	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method And Apparatus For Laser Marking By Ablation.	7,407,861	5/18/2005	8/5/2008	GSI Group Corporation
GSI Group Corporation	Laser Beam Distributor And Compute Program For Contolling The Same.	5,948,291	4/29/1997	9/7/1999	GSI Lumonics Inc.

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Inc.	Laser Calibration Apparatus And Method.	6,501,061	4/26/2000	12/31/2002	GSI Lumonics Inc.
GSI Group Inc.	Laser Clamping Assembly & Method.	6,385,220	4/21/1999	5/7/2002	GSI Lumonics Inc.
GSI Group Inc.	Laser Cooling.	5,696,783	9/7/1995	12/9/1997	GSI Lumonics Inc.
GSI Group Inc.	Laser Machining Of A Workpiece.	5,854,805	3/21/1997	12/29/1998	GSI Lumonics Inc.
GSI Group Corporation	Laser-Based Method And System For Processing Targeted Surface Material and Article Produced Thereby.	7,469,831	10/27/2006	12/30/2008	GSI Group Corporation
GSI Group Inc.	Laser Optical Fibre Tuning & Control.	5,463,710	9/9/1992	10/31/1995	Lumonics Inc.
GSI Group Corporation	Laser Processing.	6,878,899	7/27/2004	4/12/2005	GSI Lumonics Corporation
GSI Group Corporation	Laser Processing.	6,337,462	11/16/1999	1/8/2002	GSI Lumonics Corporation
GSI Group Corporation	Laser Processing.	6,791,059	1/7/2002	9/14/2004	GSI Lumonics Corporation
GSI Group Corporation	Laser Processing.	5,998,759	12/24/1996	12/7/1999	GSI Lumonics Corporation
GSI Group Corporation	Laser Processing.	6,300,590	12/16/1998	10/9/2001	GSI Lumonics Corporation
GSI Group Corporation	Laser Processing.	6,559,412	10/2/2001	5/6/2003	GSI Lumonics Corporation
GSI Group Corporation	Laser System And Method For Material Processing With Ultra Fast Lasers.	6,979,798	2/26/2004	12/27/2005	GSI Lumonics Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Laser System For Controlling Emitted Pulse Energy.	5,339,323	4/30/1993	8/16/1994	Lumonics Corp.
GSI Group Corporation	Laser System For Simultaneously Marking Multiple Parts.	5,521,628	8/30/1993	5/28/1996	Lumonics Corp.
GSI Group Corporation	Laser-Based Method And System For Removing One or More Target Link Structures.	2007-0199927 7,838,794	1/31/2007	11/23/2010	GSI Group Corporation
GSI Group Corporation	Laser-Based Method And System For Memory Link Processing With Picosecond Lasers.	2004-0134896	10/10/2003	Not Applicable	GSI Lumonics Corporation
GSI Group Corporation	Energy Efficient, Laser-Based Method And System For Processing Target Material.	7,582,848	12/19/2005	9/01/2009	GSI Group Inc.
GSI Group Corporation	Light Beam Distance Encoder.	5,430,537	9/3/1993	7/04/1995	GSI Group Corporation
GSI Group Corporation	Linear Position Detecting System.	6,297,750	9/13/2000	10/02/2001	GSI Group Corporation
GSI Group Corporation	Magnetic Encoder For Sensing Position And Direction Via A Time And Space Modulated Magnetic Field.	5,939,879	6/2/1997	8/17/1999	GSI Lumonics Corporation
GSI Group Inc.	Marking A Workpiece By Light Energy.	5,463,200	2/11/1993	10/31/1995	Lumonics Inc.

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Method & System For Generating A Trajectory To Be Followed By A Motor- Driven Stage When Processing Microstructures At Laser-Processing Site.	6,495,791	5/16/2001	12/17/2002	GSI Lumonics Corporation
GSI Group Inc.	Method & System For Inspecting Electronic Components Mounted On Printed Circuit Boards.	7,181,058	12/11/2000	2/20/2007	GSI Lumonics Inc.
GSI Group Corporation	Method & System For Precisely Positioning A Waist Of A Material- Processing Laser Beam To Process Microstructures Within A Laser-Processing Site.	6,483,071	5/16/2000	11/19/2002	GSI Lumonics Corporation
GSI Group Corporation	Method & System For Precisely Positioning A Waist Of A Material- Processing Laser Beam To Process Microstructures Within A Laser-Processing Site.	7,176,407	4/26/2005	2/13/2007	GSI Group Corporation
GSI Group Corporation	Method & System For Precisely Positioning A Waist Of A Material- Processing Laser Beam To Process Microstructures Within A Laser-Processing Site.	6,573,473	11/2/2001	6/3/2003	GSI Lumonics Corporation
GSI Group Corporation	Method And Apparatus For Orienting A Disk Via Edge Contact.	5,990,650	11/25/1998	11/23/1999	Lumonics Corp.

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
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GSI Group Corporation	Method And Subsystem For Determining A Sequence In Which Microstructures Are To Be Processed At A Laser-Processing Site.	6,662,063	5/16/2001	12/9/2003	GSI Lumonics Corporation
GSI Group Corporation	Method And System For Adaptively Controlling A Laser- Based Material Processing Process And Method And System For Qualifying Same.	2007-0106416	11/30/2006	Not Applicable	GSI Group Corporation
GSI Group Inc.	Method And System For Automatically Generating Reference Height Data For Use In A 3-Dimensional Inspection System.	6,496,270	2/17/2000	12/17/2002	GSI Lumonics Inc.
GSI Group Corporation	Method And System For Automatically Visually Inspecting An Article.	4,928,313	5/19/1989	5/22/1990	GSI Lumonics Corporation
GSI Group Corporation	Method And System For Calibrating A Laser Processing System And Laser Marking System Utilizing Same.	7,015,418	5/15/2003	3/21/2006	GSI Lumonics Inc.
GSI Group Corporation	Method And System For High Speed Measuring Of Microscopic Targets.	6,249,347	10/19/1999	6/19/2001	GSI Lumonics Corporation
GSI Group Corporation	Method And System For High Speed Measuring Of Microscopic Targets.	6,177,998	10/20/1999	1/23/2001	GSI Lumonics Corporation

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Method And System For High Speed Measuring Of Microscopic Targets.	6,181,425	10/18/1999	1/30/2001	GSI Lumonics Corporation
GSI Group Corporation	Method And System For High-Speed Measuring Of Microscopic Targets.	6,750,974	9/16/2002	6/15/2004	GSI Lumonics Corporation
GSI Group Corporation	Method And System For High-Speed Measuring Of Microscopic Targets.	7,199,882	4/8/2005	4/3/2007	GSI Group Corporation
GSI Group Corporation	Method And System For High-Speed Measuring Of Microscopic Targets.	6,452,686	4/2/2002	9/17/2002	GSI Lumonics Corporation
GSI Group Corporation	Method And System For High-Speed Measuring Of Microscopic Targets.	6,366,357	3/5/1998	4/2/2002	GSI Lumonics Corporation
GSI Group Corporation	Method And System For High-Speed Precise Laser Trimming, Scan Lens System For Use Therein.	7,563,695	1/25/2007	7/21/2009	GSI Group Corporation
GSI Group Corporation	Method And System For High-Speed Precise Laser Trimming, Scan Lens System For Use Therein And Electrical Device Produced Thereby.	7,358,157	10/6/2005	4/15/2008	GSI Group Corporation
GSI Group Corporation	Method And System For High-Speed, High- Resolution, 3-D Imaging Of An Object At A Vision Station.	5,024,529	1/29/1988	6/18/1991	GSI Lumonics Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Method And System For High-Speed, High- Resolution, 3-D Imaging Of An Object At A Vision Station.	RE36560	6/17/1993	2/8/2000	GSI Lumonics Corporation
GSI Group Corporation	Method And System For High-Speed, Precise Micromaching An Array Of Devices.	6,951,995	3/26/2003	10/4/2005	GSI Lumonics Corporation
GSI Group Corporation	Method And System For High-Speed, Precise Micromaching An Array Of Devices.	2006-0205121 7,666,759	5/2/2006	2/23/2010	GSI Lumonics Corporation
GSI Group Corporation	Method And System For Iteratively, Selectively Tuning A Parameter Of A Doped Workpiece Using A Pulsed Laser.	2007-0117227	10/24/2006	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method And System For Laser Processing Targets Of Different Types On A Workpiece.	2008-0067155 7,732,731	9/13/2007	6/8/2010	GSI Group Corporation
GSI Group Corporation	Method And System For Laser Soft Marking.	2006-0108337 7,705,268	11/9/2005	4/27/2010	GSI Group Corporation
GSI Group Corporation	Method And System For Machine Vision- Based Feature Detection And Mark Verification In A Workpiece Or Wafer Marking System.	7,119,351	5/15/2003	10/10/2006	GSI Lumonics Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Method And System For Machine Vision- Based Feature Detection And Mark Verification In A Workpiece Or Wafer Marking System.	2008-0316504	10/9/2006	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method And System For Machine Vision- Based Feature Detection And Mark Verification In A Workpiece Or Wafer Marking System.	RE41924	11/30/2007	11/16/2010	GSI Group Corporation
GSI Group Corporation	Method And System For Processing One Or More Microstructures Of A Multi-Material Device.	6,639,177	3/27/2002	10/28/2003	GSI Lumonics Corporation
GSI Group Corporation	Method And System For Suppressing Unwanted Reflections In An Optical System.	6,028,671	1/31/1996	2/22/2000	GSI Lumonics Corporation
GSI Group Corporation	Method And System For Triangulation- Based, 3-D Imaging Utilizing An Angled Scanning Beam Of Radiant Energy.	5,815,275	3/27/1997	9/29/1998	GSI Group Corporation
GSI Group Corporation	Methods And Apparatus For Utilizing An Optical Reference.	7,538,564	10/18/2006	5/26/2009	GSI Group Corporation

<u>Grantor</u>	Title	Application/Publication,	Filing Date	Issue Date	Record Owner
		Patent No.	<del></del>		
GSI Group Corporation	Methods And Systems For Precisely Relatively Positioning A Waist Of A Pulsed Laser Beam And Method And System For Controlling Energy Delivered To A Target Structure.	7,027,155	3/27/2002	4/11/2006	GSI Lumonics Corporation
GSI Group Corporation	Methods And Systems For Precisely Relatively Positioning A Waist Of A Pulsed Laser Beam And Method And System For Controlling Energy Delivered To A Target Structure.	2006-0028655	10/11/2005	Not Applicable	GSI Lumonics Corporation
GSI Group Corporation	Methods And Systems For Processing A Device, Methods And Systems For Modeling Same And The Device.	6,972,268	3/27/2002	12/6/2005	GSI Lumonics Corporation
GSI Group Corporation	Methods And Systems For Processing A Device, Methods And Systems For Modeling Same And The Device.	7,192,846	5/9/2005	3/20/2007	GSI Group Corporation
GSI Group Corporation	Methods And Systems For Thermal-Based Laser Processing A Multi-Material Device.	7,382,389	11/7/2006	6/3/2008	GSI Group Corporation
GSI Group Corporation	Methods And Systems For Thermal-Based Laser Processing A Multi-Material Device.	2002-0167581	3/27/2002	Not Applicable	GSI Group Corporation
GSI Group Corporation	Methods And Systems For Thermal-Based Laser Processing A Multi-Material Device.	7,394,476	5/2/2006	7/1/2008	GSI Group Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Methods And Systems For Thermal-Based Laser Processing A Multi-Material Device.	7,955,906	7/1/2008	6/7/2011	GSI Lumonics Corporation
GSI Group Corporation	Multi-Color Laser Projector For Optical Layup Template And The Like.	6,000,801	5/2/1997	12/14/1999	GSI Lumonics Corporation
GSI Group Inc.	Multiple Element, Folded Beam Laser.	5,867,519	8/7/1996	2/2/1999	Lumonics Inc.
GSI Group Inc.	Multiple Element, Folded Beam Laser.	5,867,518	8/7/1996	2/2/1999	Lumonics Inc.
GSI Group Corporation	Optical Metrological Scale And Laser-Based Manufacturing Method Therefor.	2007-0240325 7,903,336	10/11/2006	3/8/2011	GSI Group Corporation
GSI Group Corporation	Optical Scanning Method And System And Method For Correcting Optical Aberrations Introduced Into The System By A Beam Deflector.	7,466,466	4/25/2006	12/16/2008	GSI Lumonics Corporation
GSI Group Corporation	Part Machining Programming/Camera.	5,339,103	8/18/1992	8/16/1994	Lumonics Corp.
GSI Group Inc.	Programmable Illuminator For Vision System.	6,633,338	4/27/1999	10/14/2003	GSI Lumonics Inc.
GSI Group Corporation	Pulse Control In Laser Systems.	6,831,936	8/7/2000	12/14/2004	GSI Lumonics Corporation
GSI Group Corporation	Pulse Control In Laser Systems.	6,339,604	6/12/1998	1/15/2002	GSI Lumonics Corporation

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Pulse Control In Laser Systems.	6,973,104	12/7/2004	12/6/2005	GSI Lumonics Corporation
GSI Group Corporation	Rectification Of A Laser Pointing Device.	5,400,132	10/12/1993	3/21/1995	GSI Lumonics Corporation
GSI Group Corporation	Resonant Scanner Control System.	5,121,138	5/22/1990	6/9/1992	GSI Lumonics Corporation
GSI Group Corporation	Robotically Operated Laser Head.	6,822,187	6/4/2001	11/23/2004	GSI Lumonics Corporation
GSI Group Corporation	Scanned Remote Imaging Method And System And Method Of Determining Optimum Design Characteristics Of A Filter For Use Therein.	5,768,461	4/28/1997	6/16/1998	GSI Group Corporation
GSI Group Corporation	Scanned Remote Imaging Method And System And Method Of Determining Optimum Design Characteristics Of A Filter For Use Therein.	5,822,486	11/2/1995	10/13/1998	GSI Lumonics Corporation
GSI Group Corporation	Scanning Microscope Employing Improved Scanning Mechanism.	5,225,923	7/9/1992	7/6/1993	GSI Lumonics Corporation
GSI Group Corporation	System And Method For Inspecting Wafers In A Laser Marking System.	7,315,361	4/29/2005	1/01/2008	GSI Group Corporation
GSI Group Corporation	System And Method For Laser Processing At Non-Constant Velocities.	2008-0029491	9/15/2006	Not Applicable	GSI Group Corporation

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	System And Method For Multi-Pulse Laser Processing.	2008-0164240	1/3/2008	Not Applicable	GSI Group Corporation
GSI Group Corporation	Triangulation-Based 3- D Imaging And Processing Method And System.	5,654,800	7/29/1996	8/5/1997	GSI Lumonics Corporation
GSI Group Corporation	Triangulation-Based 3- D Imaging And Processing Method And System.	5,812,269	5/9/1997	9/22/1998	GSI Lumonics Corporation
GSI Group Corporation	Triangulation-Based 3- D Imaging And Processing Method And System.	5,546,189	5/19/1994	8/13/1996	GSI Group Corporation
GSI Group Corporation	Versatile Method And System For High Speed 3D Imaging Of Microscopic Targets.	6,098,031	3/5/1998	8/1/2000	GSI Lumonics Corporation
GSI Group Inc.	Waveguide Device With Mode Control And Pump Light Confinement And Method of Using Same.	6,785,304	7/24/2001	8/31/2004	GSI Lumonics Inc.
GSI Group Corporation	Wireless Chart Recorder System And Method.	7,135,987	5/30/2003	Not Listed	GSI Lumonics Corporation
GSI Group Corporation	Methods and Systems For Precisely Relatively Positioning A Waist of A Pulsed Laser Beam And Method For Controlling Energy Delivered To A Target Structure.	2008-0094640	12/21/2006	Not Applicable	GSI Group Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Methods And Systems For Thermal-Based Laser Processing A Multi-Material Device	2007-0215820 7,955,905	12/20/2006	6/7/2011	GSI Group Corporation
GSI Group Corporation	Monitoring Bearing Performance.	6,956,491	6/13/2003	10/18/2005	GSI Lumonics Corporation
GSI Group Corporation	Rotary Device With Matched Expansion Ceramic Bearings.	6,710,487	1/10/2001	3/23/2004	GSI Lumonics Corporation
GSI Group Corporation	Apparatus For Controlled Movement Of An Element.	7,129,601	2/13/2002	10/31/2006	GSI Lumonics Corporation
GSI Group Corporation	System And Method For Adjusting A PID Controller In A Limited Rotation Motor System.	7,190,144	1/21/2005	3/13/2007	GSI Lumonics Corporation
GSI Group Corporation	Capacitive Position Sensor.	4,694,235	8/1/1986	9/15/1987	GSI Lumonics Corporation
GSI Group Corporation	Capacitive Transducing With Feedback.	5,537,109	5/28/1993	7/16/1996	GSI Lumonics Corporation
GSI Group Corporation	Composite Rotor And Output Shaft For Galvanometer Motor And Method Of Manufacture Thereof.	7,365,464	9/1/2004	4/29/2008	GSI Lumonics Corporation
GSI Group Corporation	Controlled High Speed Reciprocating Angular Motion Actuator.	6,448,673	6/1/2001	9/10/2002	GSI Lumonics Corporation
GSI Group Corporation	Digital Control Servo System.	7,200,464	9/21/2001	4/3/2007	GSI Lumonics Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Galvanometer Motor With Composite Stator Assembly.	6,982,504	1/24/2003	1/3/2006	GSI Lumonics Corporation
GSI Group Corporation	Galvanometer Position Detector.	6,426,635	12/30/1999	7/30/2002	GSI Lumonics Inc.
GSI Group Corporation	Galvanometer Unit.	6,433,449	3/14/2002	8/13/2002	GSI Lumonics Inc.
GSI Group Corporation	Galvanometer Unit.	6,380,649	11/2/1999	4/30/2002	GSI Lumonics Inc.
GSI Group Corporation	Mirror Mounting Structures And Methods For Scanners Employing Limited Rotation Motors.	7,471,432	4/11/2007	12/30/2008	GSI Group Corporation
GSI Group Corporation	Mirror Mounting Structures And Methods For Scanners Employing Limited Rotation Motors.	7,212,325	11/23/2004	5/1/2007	GSI Lumonics Corporation
GSI Group Corporation	Rotor Shaft For Limited Rotation Motor And Method Of Manufacture Thereof.	7,262,535	12/17/2004	8/28/2007	GSI Lumonics Corporation
GSI Group Corporation	Method And Apparatus For Beam Deflection.	7,136,547	2/13/2002	11/14/2006	GSI Lumonics Corporation
GSI Group Corporation	Method And Apparatus For Reducing The Stress On Rotating Shaft Bearings.	6,390,684	7/3/2001	5/21/2002	GSI Lumonics Corporation
GSI Group Corporation	Method For A Galvanometer With Axial Symmetry And Improved Bearing Design.	6,612,015	10/22/2001	9/2/2003	GSI Lumonics Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Method For Optimum Material Selection And Processing For Dynamic Mirror Applications.	7,404,647	12/10/2004	7/29/2008	GSI Lumonics Corporation
GSI Group Corporation	Method For Tuning The Resonant Frequency Of Crossed- Flexure Pivot Galvanometers.	6,265,794	10/29/1999	7/24/2001	GSI Lumonics Corporation
GSI Group Corporation	Moving Magnet Galvanometers Having A Varied Density Winding Distribution Coil For A Desired Performance Characteristic.	5,225,770	2/25/1991	7/6/1993	GSI Lumonics Corporation
GSI Group Corporation	Moving Magnet Optical Scanner With Novel Rotor Design.	5,424,632	10/22/1992	6/13/1995	GSI Lumonics Corporation
GSI Group Corporation	Optical Element For Scanning System And Method Of Manufacture Thereof	6,749,309	9/27/2001	6/15/2004	GSI Lumonics Corporation
GSI Group Corporation	Optical Position Transducer Systems And Methods Employing Reflected Illumination For Limited Rotation Motor Systems.	2008-0013106 7,820,956	6/4/2007	10/26/2010	GSI Group Corporation
GSI Group Corporation	Optical Scanner With Damped Coupling.	5,097,356	6/1/1990	3/17/1992	GSI Lumonics Corporation
GSI Group Corporation	Optical Scanning System.	5,237,444	6/26/1992	8/17/1993	General Scanning, Inc.

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Asymmetrical Resonant Scanner And Device.	4,990,808	1/30/1989	2/15/1991	GSI Lumonics Corporation
GSI Group Corporation	Resonant Mechanical System.	4,878,721	2/17/1987	11/7/1989	GSI Lumonics Corporation
GSI Group Corporation	Rotary Motor Having An Angular Position Transducer And Galvanometers Scanning System Employing Such Motor.	5,235,180	3/5/1992	8/10/1993	GSI Lumonics Corporation
GSI Group Corporation	Rotary Optical Encoder Employing Multiple Sub-Encoders With Common Reticle Substrate.	7,482,575	8/2/2007	1/27/2009	GSI Group Corporation
GSI Group Corporation	Smart Energy Emitting Head.	6,581,833	11/2/2001	6/24/2003	GSI Group Corporation
GSI Group Corporation	Continuous Position Calibration For Servo Controlled Rotary System.	6,768,100	10/29/2001	7/27/2004	GSI Lumonics Corporation
GSI Group Corporation	System And Method For Diagnosing A Controller In A Limited Rotation Motor System.	7,170,251	1/21/2005	1/30/2007	GSI Lumonics Corporation
GSI Group Corporation	System And Method For Diagnosing A Controller In A Limited Rotation Motor System.	7,291,999	11/30/2006	11/6/2007	GSI Group Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	System And Method For Employing A Resonant Scanner In An X-Y High Speed Drilling System By Providing Low Net Scanning Velocity During Drilling.	2008-0049285 7,817,319	7/26/2007	10/19/2010	GSI Group Corporation
GSI Group Corporation	System And Method For High Power Laser Processing.	2007-0029289 7,672,343	7/07/2006	3/2/2010	GSI Group Corporation
Continuum Electro-Optics, Inc.	System And Method For Optimizing Character Marking Performance.	2005-0177330	5/10/1991	2/9/1993	Continuum Electro-Optics, Inc.
Continuum Electro-Optics, Inc.	System And Method For Providing Rotation Control In A Limited Rotation Motor System.	7,649,288	9/24/2007	1/19/2010	GSI Group Corporation
GSI Group Corporation	System Of Monitoring Bearing Performance.	6,593,854	6/18/2001	7/15/2003	GSI Lumonics Corporation
GSI Group Corporation	Torsion Bar Scanner With Damping.	4,919,500	9/9/1988	4/24/1990	GSI Lumonics Corporation
GSI Group Corporation	Variable Reactance Position Detector.	6,486,683	12/30/1999	11/26/2002	GSI Lumonics Inc.
GSI Group Inc.	Method And System For Triangulation- Based, 3-D Imaging Utilizing An Angled Scanning Beam Of Radiant Energy.	5,617,209	4/27/1995	4/1/1997	GSI Lumonics, Corporation
GSI Group Inc.	High-Speed Precision Positioning Apparatus.	6,144,118	9/18/1998	11/07/2000	GSI Lumonics, Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Inc.	High-Speed, Precision, Laser-Based Method And System For Processing Material Of One Or More Targets Within A Field.	6,777,645	3/27/2002	8/17/2004	GSI Lumonics, Corporation
GSI Group Corporation	Laser Processing.	6,911,622	5/05/2003	6/28/2005	GSI Group Corporation
GSI Group Corporation	Systems And Methods For Controlling Limited Rotation Motor Systems.	2008-0303474	6/08/2007	Not Applicable	GSI Group Corporation
GSI Group Corporation	Mirror Mounting.	2009-0062024	8/27/2007	Not Applicable	GSI Group Corporation
GSI Group Corporation	Laser Processing Of Conductive Links.	2009-0016388	5/15/2008	Not Applicable	GSI Group Corporation
GSI Group Corporation	Link Processing With High Speed Beam Deflection.	2009-0095722	9/18/2008	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method and System for High-Speed, Precise, Micromachining an Array of Devices	2011-0108534	1/11/2011	Not Applicable	GSI Group Corporation
GSI Group Corporation	Laser-based Method and System for Removing One or More Target Link Structures	2011-0062127	11/19/2010	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method and System for Laser Processing Targets of Different Types on a Workpiece	2010-0237051	6/3/2010	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method and System for High-Speed, Precise, Micromachining an Array of Devices	7,871,903	1/18/2011	Not Applicable	GSI Group Corporation

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
GSI Group Corporation	Method and System for High-Speed, Precise, Micromachining an Array of Devices	2010-0140239	12/22/2009	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method and System for High-Speed, Precise, Laser Trimming and Scan Laser for Use Therein	2009-0321396	7/8/2009	Not Applicable	GSI Group Corporation
GSI Group Corporation	Method and System for Exposing Delicate Structures of a Device Encapsulated in a Mold Compound	2011-0089152	10/16/2009	Not Applicable	Control Laser Corporation
Continuum Electro-Optics, Inc.	Mode Locked Laser With Variable Pulse Duration.	7,356,053	10/16/2003	4/8/2008	Continuum Electro-Optics, Inc.
Continuum Electro-Optics, Inc.	Method And Apparatus For Parametric Generation Of Mid- infrared Light In KNBO3.	5,065,046	11/28/1990	11/12/1991	Continuum Electro-Optics, Inc.
Continuum Electro-Optics, Inc.	Diffraction Filtered Large Mode Laser Resonator.	5,065,407	4/12/1990	11/12/1991	Continuum Electro-Optics, Inc.
Continuum Electro-Optics, Inc.	High Output Coupling Cavity Design For Optical Parametric Oscillators.	5,079,445	7/12/1990	1/7/1992	Continuum Electro-Optics, Inc.
ontinuum Electro-Optics, Inc.	Tunable Pulsed Titanium:Sapphire Laser And Conditions For Its Operation.	5,081,630	9/29/1989	1/14/1992	Continuum Electro-Optics, Inc.

<u>Grantor</u>	<u>Title</u>	Application/Publication. Patent No.	Filing Date	Issue Date	Record Owner
Continuum Electro-Optics, Inc.	Laser Saturable Absorber And Passive Negative Feedback Elements, And Method Of Producing Energy Output Therefrom.	6,546,027	12/1/1999	4/8/2003	Continuum Electro-Optics, Inc.
Continuum Electro-Optics, Inc.	Multi-Pass Laseramplifier System.	5,172,263	5/10/1991	12/15/1992	Continuum Electro-Optics, Inc.
Continuum Electro-Optics, Inc.	Tunable Pulsed Single Longitudinal Mode Optical Parametric Oscillator.	5,235,456	5/10/1991	8/10/1993	Continuum Electro-Optics, Inc.
Continuum Electro-Optics, Inc.	Narrow Linewidth BBO Optical Parametric Oscillator Utilizing Extraordinary Resonance.	5,406,409	3/30/1994	4/11/1995	Continuum Electro-Optics, Inc.
Continuum- Electro-Optics, Inc.	Automated Single Longitudinal Mode Locking System.	5,185,751	5/10/1991	2/09/1993	Continuum- Electro-Optics, Inc.
Continuum- Electro-Optics, Inc.	Single Longitudinal Mode Laser Without Seeding.	5,412,673	12/22/1993	5/02/1995	Continuum- Electro-Optics, Inc.
Continuum- Electro-Optics, Inc.	Side Pumping Arrangement.	5,455,838	11/15/1993	10/03/1995	Continuum- Electro-Optics, Inc.
Continuum- Electro-Optics, Inc.	Narrow Linewidth BBO Optical Parametric Oscillator Utilizing Extraordinary Resonance.	5,594,592	3/09/1995	1/14/1997	Continuum- Electro-Optics, Inc.
Continuum- Electro-Optics, Inc.	Methods And Apparatus For An Improved Amplifier For Driving A Non- Linear Load.	7,276,857	2/07/2005	10/02/2007	Continuum- Electro-Optics, Inc.

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
Continuum- Electro-Optics, Inc.	Methods And Apparatus For An Improved Amplifier For Driving A Dynamic Load.	7,342,363	2/07/2005	3/11/2008	Continuum- Electro-Optics, Inc.
Continuum- Electro-Optics, Inc.	Power Supply System Method Of Use.	7,436,153	5/20/2005	10/14/2008	Continuum- Electro-Optics, Inc.
Control Systemation, Inc.	Failure Analysis Methods And Systems.	7,271,012	7/14/2004	9/18/2007	Control Systemation, Inc.
Excel Technology, Inc.	Broadly Tunable, High Repetition Rate Solid State Lasers And Uses Thereof.	5,121,398	7/23/1990	6/09/1992	Excel Technology, Inc.
MicroE Systems Corp.	Absolute Encoder Employing Linked Sub-Encoders And Beat Track.	7,368,705	6/28/2007	5/06/2008	GSI Group Corporation
MicroE Systems Corp.	Absolute Encoder Employing Concatenated, Multi- Bit, Interpolated Sub- Encoders.	7,253,395	11/17/2004	8/07/2007	GSI Group Corporation
MicroE Systems Corp.	Precision Material- Handling Robot Employing High- Resolution, Compact Absolute Encoder.	7,321,113	5/25/2005	1/22/2008	GSI Group Corporation
MicroE Systems Corp.	Multi-Track Absolute Encode.	6,366,047	7/13/2000	4/4/2002	GSI Lumonics Corporation
MicroE Systems Corp.	Optical Position Encoder Having Alignment Indicators Providing Quantitative Alignment Indications.	7,067,797	9/15/2004	6/27/2006	GSI Group Corporation

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
MicroE Systems Corp.	Optical Encoder Having Slanted Optical Detector Elements For Harmonic Suppression.	7,324,212	2/28/2007	1/29/2008	GSI Group Corporation
MicroE Systems Corp.	Multi Track Optical Encoder Employing Beam Divider.	7,193,204	7/7/2003	3/20/2007	GSI Group Corporation
MicroE Systems Corp.	Interferometric Optical Position Encoder Employing Spatial Filtering Of Diffraction Orders For Improved Accuracy.	7,480,060	8/8/2007	1/20/2009	GSI Group Corporation
MicroE Systems Corp.	Encoder Self- Calibration Apparatus And Method.	6,897,435	10/31/2002	5/24/2005	GSI Lumonics Corporation
MicroE Systems Corp.	Diffuse Surface Interference Position Sensor.	5,783,752	2/20/1997	7/21/1998	GSI Lumonics Corporation
MicroE Systems Corp.	Non-Contacting Torque Sensor And Displacement Measuring Apparatus And Method.	5,754,295	12/20/1996	5/19/1998	GSI Lumonics Corporation
MicroE Systems Corp.	Position Encoder With Scale Calibration.	6,686,585	9/19/2001	2/3/2004	GSI Lumonics Corporation
MicroE Systems Corp.	Encoder Scale Error Compensation Employed Comparison Among Multiple Detectors.	7,126,109	6/14/2004	10/24/2006	GSI Group Corporation
MicroE Systems Corp.	Rotary Position Sensor With Offset Beam Generating Element And Elliptical Detector Array.	7,183,537	12/16/2003	2/27/2007	GSI Group Corporation

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
MicroE Systems Corp.	Method Of Generating An Index Signal For An Optical Encoder.	7,075,057	4/26/2005	7/11/2006	GSI Group Corporation
MicroE Systems Corp.	Optical Encoder With Burst Generator For Generating Burst Output Signals.	7,193,205	4/23/2006	3/20/2007	GSI Group Corporation
MicroE Systems Corp.	Apparatus For Detecting Relative Movement.	5,559,600	2/1/1995	9/24/1996	GSI Lumonics Corporation
MicroE Systems Corp.	Apparatus For Detecting Relative Movement Wherein A Detecting Means Is Positioned In A Region Of Natural Interference.	5,486,923	2/24/1995	1/23/1996	GSI Lumonics Corporation
MicroE Systems Corp.	Apparatus For Detecting Relative Movement Wherein A Detecting Means Is Positioned In A Region Of Natural Interference.	5,646,730	1/23/1996	7/8/1997	GSI Lumonics Corporation
MicroE Systems Corp.	Scale Assembly For Optical Encoder Having Affixed Optical Reference Markers.	7,343,693	11/9/2006	3/18/2008	GSI Group Corporation
MicroE Systems Corp.	Optical Track Sensing Device.	5,991,249	7/29/1997	11/23/1999	GSI Lumonics Corporation
MicroE Systems Corp.	Reference Point Talbot Encoder.	7,002,137	8/13/2002	2/21/2006	GSI Group Inc.

<u>Grantor</u>	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
Photo Research, Inc.	Apparatus With Multiple Light Detectors And Methods Of Use And Manufacture.	2007-0272844 7,897,912	5/25/2006	3/1/2011	Photo Research, Inc.
Photo Research, Inc.	Depolarizer For Light Measuring Instruments.	5,028,134	5/24/1990	7/2/1991	Photo Research, Inc.
Photo Research, Inc.	Spectral Intensity Measuring System To Pulsed Light Having A Multichannel Detector Array And Adjustment System Including A Digital Phase Locked Loop.	5,239,174	8/30/1991	8/24/1993	Photo Research, Inc.
Photo Research, Inc.	Synthetic Aperture Video Photometer System.	5,267,038	12/30/1988	11/20/1993	Photo Research, Inc.
Photo Research, Inc.	Multiaxis Photometric Inspection System & Method For Flat Panel Displays.	6,111,243	1/30/1998	8/29/2000	Photo Research, Inc.
Photo Research, Inc.	Led Measuring Device.	7,022,969	5/14/2004	4/4/2006	Photo Research, Inc.
Quantronix Corporation	Fiber Delivery System With Enhanced Passive Fiber Protection And Active Monitoring.	7,146,073	7/19/2004	12/5/2006	Quantronix Corporation
Quantronix Corporation	Mode-Locked Laser Method And Apparatus.	7,079,558	11/30/2004	7/18/2006	Excel/Quantronix, Inc.

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	<u>Issue Date</u>	Record Owner
Quantronix Corporation	Apparatus And Method For Measuring Intensity And Phase Of A Light Pulse With An Interferometric Asymmetric Single- Shot Autocorrelator.	6,801,318	4/30/2002	10/05/2004	Excel/Quantronix, Inc.
Quantronix Corporation	Stackable Integrated Diode Packaging.	6,151,341	5/27/1998	11/21/2000	Excel/Quantronix, Inc.
Quantronix Corporation	Scalable Vertically Diode-Pumped Solid- State Lasers.	6,075,803	5/27/1998	6/13/2000	Excel/Quantronix, Inc.
Quantronix Corporation	Intra-Cavity And Inter- Cavity Harmonics Generation In High- Power Lasers.	5,943,351	2/2/1998	8/24/1999	Excel/Quantronix, Inc.
Quantronix Corporation	Three Color Laser.	5,295,143	5/6/1992	3/15/1994	Excel Technology, Inc.
Quantronix Corporation	High Power ND:YLF Solid State Lasers.	5,148,445	9/26/1990	9/15/1992	Quantronix, Inc.
Quantronix Corporation	Laser Cutting And Sawing Method And Apparatus.	2007-0062917	11/30/2005	Not Applicable	Quantronix Corporation
Quantronix Corporation	Fiber Laser And Methods of Manufacture And Use.	2007-0098023	10/28/2005	Not Issued	Quantronix Corporation
Quantronix Corporation	Laser Delivery System And Method For Photolithographic Mask Repair.	6,341,009	2/24/2000	1/22/2002	Quantronix Corporation
Quantronix Corporation	Longitudinally Pumped Solid State Laser And Methods Of Making And Using.	7,408,971	2/28/2006	8/05/2008	Quantronix Corporation

Grantor	Title	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
Synrad, Inc.	Food Processing Using Laser Radiation.	2008-0124433	11/27/2006	Not Applicable	Synrad, Inc.
Synrad, Inc.	Laser Tube With External Adjustable Reactance For A Gas Discharge RF-Excited Laser.	7,480,323	5/17/2007	1/20/2009	Synrad, Inc.
Synrad, Inc.	System And Method For Laser Beam Coupling Between Waveguide And Optics.	6,603,794	9/5/2001	9/5/2003	Synrad, Inc.
Synrad, Inc.	Laser System And Method For Gain Medium With Output Beam Transverse Profile Tailoring Longitudinal Strips.	6,614,826	5/5/2000	9/2/2003	Synrad, Inc.
Synrad, Inc.	Laser System And Method For Beam Enhancement.	6,198,759	12/27/1999	3/6/2001	Synrad, Inc.
Synrad, Inc.	Laser With Heat Transfer System And Method.	6,198,758	12/27/1999	3/6/2001	Synrad, Inc.
Synrad, Inc.	Laser Assembly System And Method.	6,195,379	12/27/1999	2/27/2001	Synrad, Inc.
Synrad, Inc.	All Metal Electrode Sealed Gas Laser.	5,953,360	10/24/1997	9/14/1999	Synrad, Inc.
Synrad, Inc.	Sealed-Off, RF-Excited Gas Lasers And Method For Their Manufacture.	5,065,405	1/24/1990	11/21/1991	Synrad, Inc.
Synrad, Inc.	Colpits RF Power Oscillator For A Gas Discharge Laser.	2008-0285613	5/17/2007	Not Applicable	Synrad, Inc.

Grantor	<u>Title</u>	Application/Publication, Patent No.	Filing Date	Issue Date	Record Owner
Synrad, Inc.	Drive System For RF- Excited Gas Lasers.	5,008,894	3/30/1990	4/16/1991	Synrad, Inc.
Synrad, Inc.	Method And Apparatus For Multi-Color Laser Engraving.	5,215,864	9/28/1990	6/01/1993	Synrad, Inc.
Synrad, Inc.	RF-Excited Gas Laser System.	5,602,865	11/14/1995	2/11/1997	Synrad, Inc.
Synrad, Inc.	Laser Scanner.	5,646,765	6/07/1995	7/08/1997	Synrad, Inc.

# SCHEDULE C

# **Copyright Registrations**

Grantor	<u>Title</u>	Registration No.	Filing Date	Registration Date	Record Owner
Control Laser Corporation	Signature (Graphics Plus) Laser System Software: User Interface.	Txu000530393	1992	7/9/1992	Control Laser
Control Laser Corporation	Signature Laser System Software; Laser Control System.	Txu000530391	1992	7/9/1992	Control Laser

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