

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM455885

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
GEO SEMICONDUCTOR INC.		12/22/2017	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	Roadmap GEO LP III, as Administrative Agent		
<b>Street Address:</b>	130 Bloor Street West		
<b>Internal Address:</b>	Suite 603		
<b>City:</b>	Toronto, Ontario		
<b>State/Country:</b>	CANADA		
<b>Postal Code:</b>	M5S 1N5		
<b>Entity Type:</b>	Limited Partnership: CANADA		
<b>PROPERTY NUMBERS Total: 6</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	4480188	AUTOCAL	
<b>Registration Number:</b>	4125415	GEO	
<b>Registration Number:</b>	4352340	EWARP	
<b>Registration Number:</b>	4125410	GEO	
<b>Registration Number:</b>	3205074	VERICALL EDGE	
<b>Registration Number:</b>	3002865	REALTA	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	6123408827		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
<b>Phone:</b>	612-492-6842		
<b>Email:</b>	ip.docket@dorsey.com		
<b>Correspondent Name:</b>	Jeffrey R. Cadwell, Dorsey & Whitney LLP		
<b>Address Line 1:</b>	50 South Sixth Street		
<b>Address Line 2:</b>	Suite 1500		
<b>Address Line 4:</b>	Minneapolis, MINNESOTA 55402-1498		
<b>DOMESTIC REPRESENTATIVE</b>			
<b>Name:</b>	Jeffrey R. Cadwell, Dorsey & Whitney LLP		

OP \$165.00 4480188

<b>Address Line 1:</b>	50 South Sixth Street
<b>Address Line 2:</b>	Suite 1500
<b>Address Line 4:</b>	Minneapolis, MINNESOTA 55402-1498
<b>NAME OF SUBMITTER:</b>	Jeffrey R. Cadwell
<b>SIGNATURE:</b>	/Jeffrey R. Cadwell/
<b>DATE SIGNED:</b>	12/26/2017
<b>Total Attachments: 18</b>	
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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into with effect as of December 22, 2017, by and between Roadmap GEO LP III, as administrative agent (the “Agent”), for the benefit of the lenders from time to time party to the Note Purchase Agreement (as defined below) (the “Lenders”), and GEO SEMICONDUCTOR INC., a Delaware corporation (“Borrower”).

### RECITALS

The Lenders have agreed to make certain advances of money and to extend certain financial accommodations to Borrower under that certain Note Purchase Agreement by and between the Agent, the Lenders, and Borrower dated of even date herewith (as amended, restated, supplemented or otherwise modified from time to time, the “Note Purchase Agreement”). Capitalized terms used herein are used as defined in the Note Purchase Agreement. In connection with the Note Purchase Agreement, Borrower has granted to the Agent, for the benefit of the Lenders, a security interest in its personal property.

NOW, THEREFORE, Borrower agrees as follows:

### AGREEMENT

To secure its obligations under the Note Purchase Agreement, under the Notes made by Borrower in favor of the Lenders pursuant to the Note Purchase Agreement and under any other agreement now existing or hereafter arising between Borrower, the Lenders, and the Agent, Borrower grants, mortgages and charges to the Agent, for the benefit of the Lenders, a security interest in all of Borrower’s right, title and interest in, its intellectual property now owned or hereafter acquired or arising (including without limitation those Copyrights, Patents and Trademarks listed on Exhibit A hereto) and all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions, continuations, renewals, extensions and continuations-in-part thereof. Borrower represents and warrants that Exhibit A attached hereto set forth any and all intellectual property rights in connection to which Borrower has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

This Agreement may be executed in two or more counterparts, and delivered by facsimile or by electronic transmission in portable document format (PDF), each of which shall be deemed an original but all of which together shall constitute the same instrument.

[Signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

**BORROWER:**

Address of Borrower:

100 Metro Drive, Suite 620  
San Jose, CA 95110  
Attn: Shungo Goto

**GEO SEMICONDUCTOR INC.**

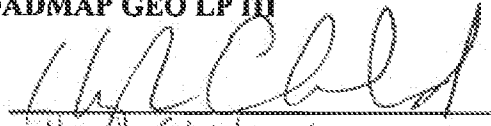
By:   
Name: David Orton  
Title: Chief Executive Officer

Address:

30 Bloor St W  
Suite 1003  
Toronto ON  
M5S 1N5

AGENT:

ROADMAP GEO LP III

By: 

Name: Hugh Cleland

Title: Chief Executive Officer, Caprice Services Partner  
LP III on behalf of Roadmap GEO LP III

EXHIBIT A

INTELLECTUAL PROPERTY  
Filed by Mobilygen (Maxim)

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
X	Method and Apparatus for Frame, Field and Macroblock Adaptive Progressive/Interlace Coding Selection	8,483,268	11/374,762	14-Mar-06	Issued	9-Jul-13
X	Method and/or Apparatus for Detecting Homogeneity of Blocks In Image Processing System	7,715,652	11/232,459	21-Sep-05	Issued	11-May-10
X	Method and Apparatus for Entropy Coding	7,199,735	11/271,252	12-Nov-05	Issued	3-Apr-07
X	Method and Apparatus for Entropy Coding	7,281,771	11/675,747	16-Feb-07	Issued	16-Oct-07
X	Method and Apparatus of Adaptive lambda Estimation in Lagrangian Rate-Distortion Optimization for Video Coding	8,094,715	11/268,803	8-Nov-05	Issued	10-Jan-12
X	Method and Apparatus for Dependent Coding in Low-Delay Compression	7,734,106	11/314,628	21-Dec-05	Issued	8-Jun-10
X	Method and Apparatus for Image Decoder Post-Processing Using Image Pre-Processing and Image Encoding Information	7,684,626	11/292,199	1-Dec-05	Issued	23-Mar-10
X	Methods and/or Apparatus for Detecting Edges of Blocks in Image Processing	7,590,288	11/268,130	7-Nov-05	Issued Abandoned	15-Sep-09

**INTELLECTUAL PROPERTY**

**Filed by Mobilygen (Maxim)**

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
US	Integrated Camera Image Signal Processor and Video Encoder	<u>7,859,574</u>	11/410,729	25-Apr-06	Issued	28-Dec-10
X	Iteration Based Method and/or Apparatus for Offline High Quality Encoding of Multimedia Content	<u>7,953,147</u>	11/334,247	18-Jan-06	Issued	31-May-11
X	High Quality Low Bitrate Video Coding by Enabling and Disabling a Non-residual Mode	<u>8,306,118</u>	11/365,195	1-Mar-06	Issued	6-Nov-12
X	Method and Apparatus for QP Modulation Based on Perceptual Models for Picture Encoding	<u>8,135,062</u>	11/332,025	16-Jan-06	Issued	13-Mar-12
X	Method and Apparatus for QP Modulation Based on Perceptual Models for Picture Encoding	<u>9,282,336</u>	13/419,294	16-Jan-06	Issued	8-Mar-16
X	System and method for performing optimized quantization via quantization re-scaling	<u>8,031,768</u>	11/013,839	15-Dec-04	Issued	4-Oct-11
X	System and method of reduced-temporal-resolution update for video coding and quality control	<u>8,325,797</u>	11/104,255	11-Apr-05	Issued	4-Dec-12
X	System and method for generating a fixed point approximation to nonlinear functions	<u>7,657,589</u>	11/207,024	17-Aug-05	Issued	2-Feb-10
X	System and method for generating a fixed point approximation to nonlinear functions	<u>8,356,066</u>	12/639,354	16-Dec-09	Issued	15-Jan-13
US						

**INTELLECTUAL PROPERTY**

**Filed by Mobilygen (Maxim)**

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
X	Method, system and device for improving video quality through in-loop temporal pre-filtering	<u>8,218,655</u>	11/230,943	19-Sep-05	Issued	10-Jul-12
X	Method, system and device for improving video quality through in-loop temporal pre-filtering	<u>9,025,676</u>	13/545,930	10-Jul-12	Issued	5-May-16
X	System and method for transform coding randomization	<u>7,778,476</u>	11/255,661	21-Oct-05	Issued	17-Aug-10
X	Method and Apparatus for Modeling Quantization Matrices for Image/Video Encoding	<u>8,326,068</u>	11/512,736	30-Aug-06	Issued	4-Dec-12
X	Method and/or Architecture for Controlling Encoding Parameters Using Integrated Information from Camera ISP	<u>7,733,380</u>	11/564,483	29-Nov-06	Issued	8-Jun-10
X	Method and/or Architecture for Motion Estimation Using Integrated Information From Camera ISP	<u>8,135,068</u>	11/769,023	27-Jun-07	Issued	13-Mar-12
X	Method and/or Apparatus for Multiple Pass Digital Image Stabilization	<u>8,149,911</u>	11/675,715	16-Feb-07	Issued	3-Apr-12
X	Method and/or Architecture for Interlaced Video Resampling and Color Format Conversion Using Combined Vertical-Temporal Resolution Extensions	<u>8,253,856</u>	11/608,968	11-Dec-06	issued	28-Aug-12
X	Methods and/or Apparatus for Implementing Rate Distortion Optimization in Video	<u>8,175,150</u>	11/750,644	18-May-07	Issued	8-May-12



**INTELLECTUAL PROPERTY**

**Filed by Mobilygen (Maxim)**

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
	Compression					
	Method & Apparatus for Applying Accurate Parameter Estimation and Efficient Fade Detection in Weighted Prediction for Video Compression	<u>8,270,483</u>	12/126,057	23-May-08	Issued	18-Sep-12
US	Data Flow Integrated Circuit Architecture	<u>6,145,073</u>	09/174,439	16-Oct-98	Issued	7-Nov-00
X	Automatic Code Generation for Integrated Circuit Design	<u>6,996,799</u>	09/634,131	8-Aug-00	Issued	7-Feb-06
X	Multithreaded Data/Context Flow Processing Architecture	<u>6,889,310</u>	09/927,625	9-Aug-01	Issued	3-May-05
X	Random Access Memory Controller with Out of Order Execution	<u>7,093,094</u>	10/215,705	9-Aug-02	Issued	15-Aug-06
X	Random Access Memory Controller with Out of Order Execution	<u>7,281,110</u>	11/498,375	3-Aug-06	Issued	9-Oct-07
X	Memory Word Array Organization and Prediction Combination for Memory Access	<u>8,165,219</u>	10/794,280	3-Mar-04	Issued	24-Apr-12
US	Memory Word Array Organization and Prediction Combination for Memory Access	4496209	2006-501222	3-Mar-04	Issued	16-Apr-10
JP	Memory Word Array Organization and Prediction Combination for Memory Access	<u>7,765,547</u>	10/996,691	24-Nov-04	Issued	27-Jul-10
X	Hardware Multithreading Systems and Methods	<u>8,149,909</u>	11/249,213	13-Oct-05	Issued	3-Apr-12
US	Encoding Control using Non-Exclusive Content Categories					

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Filed by Mobilygen (Maxim)

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
US	Video Encoding Control using Non-Exclusive Content Categories	8,831,093	13/437,183	02-Apr-12	Issued	09-Sep-14
x	Video Encoding Statistics Extraction using Non-Exclusive Content Categories	<u>8,126,283</u>	11/250,102	13-Oct-05	Issued	28-Feb-12
x	Video Encoding Mode Decisions According to Content Categories	<u>8,081,582</u>	11/250,109	13-Oct-05	Issued	20-Dec-11
x	Adaptive Motion Estimation Cache Organization	<u>8,325,798</u>	11/305,457	15-Dec-05	Issued	4-Dec-12
x	Adaptive Motion Estimation Cache Organization	<u>9,414,062</u>	13/692,063	03-Dec-12	Issued	09-Aug-16
x	System, Software and Method for Implementing an Integrated, Device Independent, Packet Telephony Framework Software Solution	<u>6,985,480</u>	10/306,714	27-Nov-02	Issued	10-Jan-06
x	Multi-Service Cellular Phone Network Access to Device	<u>8,326,349</u>	12/042,655	5-Mar-08	Issued	14-Nov-12
x	Systems and Methods for Adaptive Echo Cancellation	<u>8,175,261</u>	11/917,764	16-Jun-08	Issued	8-May-12
x	Systems and Methods for Adaptive Echo Cancellation	2427332	512300.5	16-Jun-05	Issued	17-Apr-07
x	Systems and Methods for Dual-Tone Multiple Frequency Symbol Detection	2430832	519961.7	30-Sep-05	Issued	8-May-07
US	Integrated Camera Image Signal Processor and Video Encoder	8,803,995	12/979,550	28-Dec-10	Issued	12/Aug/14
x	Method and or Apparatus for Optimized Video Coding	8,687,699	11/434,953	16-May-06	Issued	1-Apr-14

**INTELLECTUAL PROPERTY**

**Filed by Mobilygen (Maxim)**

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
X	Methods and/or Apparatus for Controlling Zero-Residual Coding in Predictive Image/Video Coding	9,036,712	11/430,127	8-May-06	Issued	29-Apr-15
X	Method and Apparatus for Selecting Optimal Video Encoding Parameter Configurations	8,831,089	11/496,410	31-Jul-06	Issued	9-Sep-14
X	Block and Mode Reordering	9,976,870	11/512,684	30-Aug-06	Issued	18-Feb-15
X	Method and/or Apparatus for Multiple Pass Digital Image Stabilization	8,923,400	11/939,715	14-Nov-07	Issued	10-Dec-14
X	Memory Word Array Organization and Prediction Combination for Memory Access	8,687,706	13/454,922	24-Apr-12	Issued	1-Apr-14
	Array Arrangement for Memory Words and Combination of Video Prediction Data for an Effective Memory Access		EP04716981	3-Mar-04	Withdrawn	
US	Hardware Multithreading Systems and Methods	8,640,129	12/818,006	17-Jun-10	Issued	28-Jan/14
US	Video Quality by Controlling Inter Frame Encoding According to Frame Position in GOP	8,774,272	11/182,164	15-Jul-05	Issued	18-Jun-14
X	Skipped Video Data Recovery using Multiple Alternative Recovery Modes	8,811,495	11/671,816	6-Feb-07	Issued	19/Aug/14
X	Presence and/or Capability Based Communication	8,625,766	11/452,118	12-Jun-06	Issued	7-Jan-14
X	I-Frame Size Estimation Based on Edge Strength	8,804,822	12/904,005	13-Oct-10	Issued	12/Aug/14

**INTELLECTUAL PROPERTY**

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<b>National</b>	<b>TITLE</b>	<b>PATENT NO.</b>	<b>APPLICATION NO.</b>	<b>FILING DATE</b>	<b>STATUS</b>	<b>ISSUE DATE</b>
US	Video Encoding Control using Non-Exclusive Content Categories	8,831,093	13/437,183	2-Apr-12	Issued	9/Sep/14
US	Method and/or Apparatus for Multiple Pass Digital Image Stabilization	8,923,400	11/939,715	14-Nov-07	Issued	10/Dec/14

**TRADEMARK**

**REEL: 006236 FRAME: 0365**

**INTELLECTUAL PROPERTY**

**Filed by Geo (and SOI)**

<b>National</b>	<b>TITLE</b>	<b>PATENT NO.</b>	<b>APPLICATION NO.</b>	<b>FILING DATE</b>	<b>STATUS</b>	<b>ISSUE DATE</b>
US	Method and system for processing a non-linear two dimensional spatial transformation	7,126,616	10/167,375	12/Jun/02	issued	24/Oct/06
US	Method and system for processing a non-linear two dimensional spatial transformation	1,395,952	2734958.8	12/Jun/02	Issued Abandoned	
US	Method and system for processing two-dimensional image data	6,917,363	10/166,387	11/Jun/02	issued	12/Jul/05
GB	Method and system for processing two-dimensional image data	1,395,951	2744961	11/Jun/02	Issued Abandoned	
US	System and method for correcting multiple axis displacement distortion	7,352,913	10/166,692	12/Jun/02	issued	1/Apr/08
GB	System and method for correcting multiple axis displacement distortion	1,395,865	2737688.8	12/Jun/02	issued	
CN	System and method for correcting multiple axis displacement distortion	2,815,739	2815738.9	12/Jun/02	issued	
US	System and method for representing a general two dimensional spatial transformation	7,324,706	10/939,045	9/Sep/04	issued	29/Jan/08
GB,FR,DE	System and method for representing a general two dimensional spatial transformation	1,800,245	4783583	9/Sep/04	issued	
CN	System and method for representing a general two dimensional spatial transformation	200480043955.X	200480043955.X	9/Sep/04	issued	

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**Filed by Geo (and SOI)**

<b>National</b>	<b>TITLE</b>	<b>PATENT NO.</b>	<b>APPLICATION NO.</b>	<b>FILING DATE</b>	<b>STATUS</b>	<b>ISSUE DATE</b>
	System and method for representing a general two dimensional spatial transformation	1298,147	94121843	29/Jun/05	issued	20/Jun/08
TW	Image projection system and method for electronic correction of optical anomalies	7,474,799	10/461,320	12/Jun/03	issued	6/Jan/09
US	Image projection system and method for electronic correction of optical anomalies	1,512,123	3759800	12/Jun/03	issued	
GB	Image projection system and method for electronic correction of optical anomalies	973,855		12/Jun/03	issued	
KR	Image projection system and method for electronic correction of optical anomalies	3,813,601	3813600.7	12/Jun/03	issued	
CN	Panoramic vision system and method	7,576,767	10/899,410	26/Jul/04	issued	18/Aug/09
US	Panoramic vision system and method	4,543,147		26/Jul/04	issued	20/Jun/08
JP	Panoramic vision system and method	200,480,043,149	200480043148.8	26/Jul/04	issued	
CN	Panoramic vision system and method	1287,402	94121880	29/Jun/05	issued	21/Sep/07
TW	Short throw projection system and method	7,239,360	10/459,426	12/Jun/03	issued	3/Jul/07
US	Short throw projection system and method	1,512,283	3759801.8	12/Jun/03	Issued Abandoned	
GB	Short throw projection system and method	3,813,406	3813405.5	12/Jun/03	issued	
CN	Short throw projection system and method	705,062		12/Jun/03	issued	
KR	Short throw projection system and method					

**INTELLECTUAL PROPERTY**

**Filed by Geo (and SOI)**

<b>National</b>	<b>TITLE</b>	<b>PATENT NO.</b>	<b>APPLICATION NO.</b>	<b>FILING DATE</b>	<b>STATUS</b>	<b>ISSUE DATE</b>
	method					
US	Automatic keystone correction system and method	6,877,863	10/461,319	12/Jun/03	issued	12/Apr/05
US	Image projection system and method	7,384,158	10/752,955	7/Jan/04	issued	10/Jun/08
JP	Image projection system and method	4,538,598	93100341	7/Jan/04	issued	
TW	Image projection system and method	1231,886	200480001926.7	7/Jan/04	issued	
CN	Image projection system and method			7/Jan/04	issued	
KR	Image projection system and method	1,052,418		7/Jan/04	issued	
US	Dynamic warp map generation system and method	7,359,575	11/007,710	7/Dec/04	issued	15/Apr/08
TW	Dynamic warp map generation system and method	1298,145	94121881	29/Jun/05	issued	20/Jun/08
US	Color and Brightness Distortion Correction System and Method	8,055,070	11/770,082	28/Jun/07	issued	4/Feb/12
TW	Color and Brightness Distortion Correction System and Method	1459820	097100351	4/Dec/08	issued	1/Nov/14
US	Lens Optimization Using Electronic Aberration Correction	8,116,008	11/649,765	5/Jan/07	issued	8/Nov/11
US	System and Method for Automatic Calibration and Correction	8,406,562	11/835,686	8/Aug/07	issued	26/Mar/13
JP	System and Method for Automatic Calibration and Correction	5535431		8/Aug/07	issued	

**INTELLECTUAL PROPERTY**

**Filed by Geo (and SOI)**

<b>National</b>	<b>TITLE</b>	<b>PATENT NO.</b>	<b>APPLICATION NO.</b>	<b>FILING DATE</b>	<b>STATUS</b>	<b>ISSUE DATE</b>
TW	System and Method for Automatic Calibration and Correction	1411967	96129642	10/Aug/07	issued	11/Oct/13
CN	System and Method for Automatic Calibration and Correction		200710142701.9	13/Aug/07	issued	
KR	System and Method for Automatic Calibration and Correction				pending	
US	System and Method for Improving Color and Brightness Uniformity of Backlit LCD Displays	8,442,316	13/098,221	4/Aug/11	issued	24/Apr/13
TW	System and Method for Improving Color and Brightness Uniformity of Backlit LCD Displays	1482140	100120551	13/Jun/11	issued	21/Apr/15
CN	System and Method for Improving Color and Brightness Uniformity of Backlit LCD Displays				pending	
US	Method and System for Folding a SIMD Array	8,898,432	13/281,149		issued	25/Nov/14
US	Method and System for Adaptive Perspective Correction of Ultra Wide-Angle Lens Images		PCT12/027,189 13/808,464	1/Mar/12	pending	
TW	Method and System for Adaptive Perspective Correction of Ultra Wide-Angle Lens Images	1560648	PCTUS12/027,189 102107298	1/Mar/13	pending	30/Nov/16
CN	Method and System for Adaptive Perspective Correction of Ultra Wide-Angle Lens Images		PCTUS12/027,189 201280071057		pending	



INTELLECTUAL PROPERTY

Filed by Geo (and SOI)

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
EP	Method and System for Adaptive Perspective Correction of Ultra Wide-Angle Lens Images		PCTUS12/027,189 12870125		pending	
TW	System and Method for Automatic Calibration and Correction	1411,967	96129642	10/Aug/07	issued	11/Oct/13
TW	System and Method for Automatic Calibration and Correction	1511,122	102131831	10/Aug/07	issued	1/Dec/15
US	System and Method for Calibrating Ultra Wide-Angle Lenses	8,619,248	13/440,031	5/Apr/12	issued	31/Dec/13
US	System and Method for Automatic Calibration and Correction	8,406,562	11/835,686	8/Aug/07	issued	26/Mar/13
US	Method and system for Automatic Projector Calibration	8,768,094	13/755,592	31/Jul/13	issued	1/Jul/14
US	System and Method for Robust Motion Detection	9,245,187	14/324,593	7/Jul/14	issued	26/Jan/16
US	System and Method for Robust Motion Detection	9,390,333	14/842,978	2/Sep/15	issued	12/Jul/16
US	Vehicle Vision System		14/742,331	17/Jun/15	pending	
US	Vehicle Vision System		15/489,069	17/Apr/17	pending	
US	Pattern-less Projector Calibration		14/100,524	12/Sep/13	pending	

**INTELLECTUAL PROPERTY**

Coowned with Teranex

National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
US	Parallel data processor	5,421,019	07/948,617	9/23/1992	issued	5/30/1995
US	Real-time image processor	5,606,707	08/312,926	9/30/1994	issued	2/25/1997
US	Methods and apparatus for performing fast floating point operations	5,966,085	09/057,040	4/9/1998	issued	10/12/1999
US	Pattern generation and shift plane operations for a mesh connected computer	6,067,609	09/057,469	4/9/1998	issued	5/23/2000
US	Parallel data processor	6,073,185	08/112,540	8/27/1993	issued	6/6/2000
US	Interface for processing element array	6,085,304	08/980,338	11/28/1997	issued	7/4/2000
US	Methods and apparatus for performing fast division operations in bit-serial processors	6,138,137	09/057,572	4/9/1998	issued	10/24/2000
US	Methods and apparatus for performing fast multiplication operations in bit-serial processors	6,167,421	09/057,571	4/9/1998	issued	12/26/2000
US	Directly accessing local memories of array processors for improved real-time corner turning processing	6,173,388	09/057,482	4/9/1998	issued	1/9/2001
US	Input/output support for processing in a mesh connected computer	6,185,667	09/057,468	4/9/1998	issued	2/6/2001
US	Mesh connected computer	6,212,628	09/057,481	4/9/1998	issued	4/3/2001
US	Mesh connected computer	6,275,920	09/552,319	4/24/2000	issued	8/14/2001
US	Distribution, processing, and reconstruction of variable-sized images using multiple processor arrays	6,425,026	09/511,697	2/23/2000	issued	7/23/2002
US	Method for measuring and analyzing digital video quality	6,577,764	09/918,824	8/10/2001	issued	6/10/2003
US	Method and apparatus for high density storage and handling of bit-plane data	7,593,016	11/101,771	4/8/2005	issued	9/22/2009

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National	TITLE	PATENT NO.	APPLICATION NO.	FILING DATE	STATUS	ISSUE DATE
US	Method and apparatus for management of bit plane resources	7,573,481	11/199,095	10/8/2005	issued	8/11/2009
US	Method and apparatus for reading and writing pixel-aligned subframes in a frame buffer	7,584,482	11/210,042	8/23/2005	issued	7/21/2009

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**Trademarks**

Serial Number	Reg. Number	Word Mark	Check Status	Word Only	Filing Date	Status	Effective Date
1	85903196	4,480,188 AUTOCAL	TSDR	Word Only	12-Apr-13	Registered	2/11/2014
4	85391156	4125415 GEO	TSDR	Mark (color)	5-Aug-11	Registered	4/10/2012
5	85391047	4352340 EWARP	TSDR	Word Only	5-Aug-11	Registered	6/18/2013
6	85391040	4125410 GEO	TSDR	Mark (B&W)	5-Aug-11	Registered	4/10/2012
7	78605942	3205074 VERICALL EDGE	TSDR	Word Only	11-Apr-05	Dead	9/13/2013
8	78369523	3002865 REALTA	TSDR	Word Only	17-Feb-02	Registered	9/25/2005

1                    1562733                    Geo (in Canada)                    Mark (B&W)                    3-Feb-12                    allowed