

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3515238

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	PRIMESENSE LTD.	08/24/2015
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	APPLE INC.	
<b>Street Address:</b>	1 INFINITE LOOP	
<b>City:</b>	CUPERTINO	
<b>State/Country:</b>	CALIFORNIA	
<b>Postal Code:</b>	95014	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	14846856
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(972)356-2229	
<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>	97235622291	
<b>Email:</b>	office@dkpat.co.il	
<b>Correspondent Name:</b>	D. KLIGLER I.P. SERVICES LTD.	
<b>Address Line 1:</b>	P.O. BOX 57651	
<b>Address Line 4:</b>	TEL AVIV, ISRAEL 61576	
<b>ATTORNEY DOCKET NUMBER:</b>	P24053USD1/1020-1090.12	
<b>NAME OF SUBMITTER:</b>	MILLANA REBECCA BUDAGOV	
<b>SIGNATURE:</b>	/Millana Rebecca Budagov/	
<b>DATE SIGNED:</b>	09/07/2015	
<b>Total Attachments: 15</b>		
source=1020-1090-12-AssignmentApple#page1.tif		
source=1020-1090-12-AssignmentApple#page2.tif		
source=1020-1090-12-AssignmentApple#page3.tif		
source=1020-1090-12-AssignmentApple#page4.tif		
source=1020-1090-12-AssignmentApple#page5.tif		
source=1020-1090-12-AssignmentApple#page6.tif		

source=1020-1090-12-AssignmentApple#page7.tif  
source=1020-1090-12-AssignmentApple#page8.tif  
source=1020-1090-12-AssignmentApple#page9.tif  
source=1020-1090-12-AssignmentApple#page10.tif  
source=1020-1090-12-AssignmentApple#page11.tif  
source=1020-1090-12-AssignmentApple#page12.tif  
source=1020-1090-12-AssignmentApple#page13.tif  
source=1020-1090-12-AssignmentApple#page14.tif  
source=1020-1090-12-AssignmentApple#page15.tif

## ASSIGNMENT OF PATENT RIGHTS

This patent assignment ("Patent Assignment") is entered into as of August 16, 2014, by and between PrimeSense Ltd., a company duly incorporated under the law of the State of Israel under Company Number 513684761, with its registered office at 28 Habarzel Street, Tel Aviv 69710, Israel ("Assignor"), and Apple Inc., a California corporation with its principal executive offices at 1 Infinite Loop, Cupertino, CA 95014 ("Assignee").

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor does hereby irrevocably sell, assign, transfer, and convey unto Assignee or its designees all of Assignor's right, title, and interest, including without limitation, the right to sue or assert causes of action for past, present and future infringement, in and to all of the following (collectively, the "Patent Rights"):

- (a) the provisional patent applications, patent applications and patents listed in the attached Exhibit A-2 (the "Patents");
- (b) all provisional patent applications, patent applications, patents or other similar governmental grants or issuances (i) from which any of the Patents directly or indirectly claims priority and/or (ii) for which any of the Patents directly or indirectly forms a basis for priority;
- (c) reissues, re-examinations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, and divisions of any item in the foregoing categories (a) and (b);
- (d) rights to all inventions claimed in any item in the foregoing categories (a) through (c);
- (e) items in any of the foregoing in categories (a) through (d), whether or not expressly listed as Patents below and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;
- (f) rights to all inventions, invention disclosures, and discoveries described in any item in the foregoing categories (a) through (e), and all other rights arising out of such inventions, invention disclosures, and discoveries;
- (g) rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type with respect to any inventions claimed in any item in the foregoing categories (a) through (c), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;
- (h) causes of action (whether currently pending, filed, or otherwise) and other enforcement rights under or on account of any of the Patents and/or any item in any of the foregoing categories (a) through (c), including, without limitation, all causes of action and other enforcement rights for (i) damages, (ii) injunctive relief, and (iii) other remedies of any kind for past, current, and future infringement; and
- (i) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in the foregoing categories (b) through (h).

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

This Assignment of Patent Rights is being entered into in connection with that certain Intellectual Property Purchase Agreement between Assignor and Assignee. If there is any inconsistency between this Assignment of Patent Rights and such Intellectual Property Purchase Agreement, the Intellectual Property Purchase Agreement shall prevail.

[Remainder of Page Intentionally Left Blank]

ASSIGNOR

For and on behalf of: PRIMESENSE LTD.

  
\_\_\_\_\_  
Name: Gene Levoff

Title: Director

Date: August 28, 2014

ASSIGNEE

For and on behalf of: APPLE INC.

  
\_\_\_\_\_  
Name: Jim Fowler

Title: Assistant Secretary

Date: August 28, 2014

EXHIBIT A-2  
LIST OF PATENTS ASSIGNED

Country	Patent No.	App. No.	Pub. No.	Title
USA		60/785,187		Three dimensional sensing using Speckle Patterns
PCT		PCT/IL2007/000306		Three dimensional sensing using Speckle Patterns
PCT		PCT/IL2006/000335		Method and system for object reconstruction
USA	8,390,821	12/282,517	2009-0096783	Three dimensional sensing using Speckle Patterns
Japan	5174684	2008-558981		Three dimensional sensing using Speckle Patterns
China	200780016626	200780016626		Three dimensional sensing using Speckle Patterns
South Korea	10-1331543	10-2008-7025030		Three dimensional sensing using Speckle Patterns
USA		13/748,617	2013-0136305	Pattern generation using diffractive optical elements
USA		12/330,766	2009-0185274	Optical designs for zero order reduction
PCT		PCT/IL2008/001592		Optical designs for zero order reduction
Japan		2010-542733		Optical designs for zero order reduction
China	200880119911.90	200880119911.9		Optical designs for zero order reduction
Europe		8871178.3	EP2235584	Optical designs for zero order reduction
USA	8,630,039	12/955,939	2011-0075259	Optical designs for zero-order reduction
USA		12/955,940	2011-0069389	Optical designs for zero-order reduction
China		2014100247786.00		Optical designs for zero-order reduction
Japan		to be advised		Optical designs for zero-order reduction
USA		<u>60/776,655</u>		Range Mapping Using Speckle Decorrelation
PCT		PCT/IL2007/000262		Range Mapping Using Speckle Decorrelation
China	ZL200780006560.6	200780006560.60		Range Mapping Using Speckle Decorrelation
USA	7,433,024	11/712,932	2007-0216894	Range Mapping Using Speckle Decorrelation
Japan	4917615	2008555949	2009528514	Range Mapping Using Speckle Decorrelation

Country	Patent No.	App. No.	Pub. No.	Title
USA		60/799,952		Modeling of Humanoid Forms from Depth Maps
PCT		PCT/IL2007/000574		Modeling of Humanoid Forms from Depth Maps
China	ZL 200780013930.9	200780013930.9	CN10657825A	Modeling of Humanoid Forms from Depth Maps
USA	8,249,334	12/300,086	2010-0034457	Modeling of Humanoid Forms from Depth Maps
Japan	5167248	2009-508667	2009-536731	Modeling of Humanoid Forms from Depth Maps
China		201410028261.40		Modeling of Humanoid Forms from Depth Maps
USA		60/909,487		Depth mapping using projected patterns
USA	8,150,142	11/899,542	2008-0240502	Depth mapping using projected patterns
PCT		PCT/IL2008/000458		Depth mapping using projected patterns
Taiwan		97112039.0		Depth mapping using projected patterns
USA	8,493,496	12/522,171	2010-0118123	Depth mapping using projected patterns
USA		13/931,935	2013-0294089	Pattern Projection using microlenses
USA		60/885,899		Depth mapping using multi*beam illumination
PCT		PCT/IL2008/000095		Depth mapping using multi*beam illumination
USA	8,350,847	12/522,172	2010-0020078	Depth mapping using multi*beam illumination
USA		60/852,436		
PCT		PCT/IL2007/000327		Depth-varying Light Fields for Three Dimensional Sensing
USA	8,050,461	11/724,068	2008-0106746	Depth-varying Light Fields for Three Dimensional Sensing
Europe		7713347.8	EP1994503	Depth-varying Light Fields for Three Dimensional Sensing
China		200780009053.8		Depth-varying Light Fields for Three Dimensional Sensing
South Korea		7022317/2008		Depth-varying Light Fields for Three Dimensional Sensing
Japan		2008558984.0	2009530604	Depth-varying Light Fields for Three Dimensional Sensing
China		201010502415.0		Depth-varying Light Fields for Three Dimensional Sensing
USA	8,374,397	13/043,488	2011-0158508	Depth-varying Light Fields for Three Dimensional Sensing

Country	Patent No.	App. No.	Pub. No.	Title
USA		61/079,254		Integrated processor for 3D mapping
PCT		PCT/IL2009/000285		Integrated processor for 3D mapping
USA	8,456,517	12/397,362	2010-0007717	Integrated processor for 3D mapping
Taiwan		98116733.0		Integrated processor for 3D mapping
Japan		2011-517308		Integrated processor for 3D mapping
China		200980120888X		Integrated processor for 3D mapping
USA		13/874,562	2013-0241824	Integrated processor for 3D mapping
USA		60/944,807		Distance-varying illumination techniques
PCT		PCT/IL2008/000838		Distance-varying illumination techniques
USA	8,494,252	12/522,176	2010-0290698	Distance-varying illumination techniques
USA		13/921,224	2013-0279753	Distance-varying illumination and imaging techniques for depth mapping
USA		61/020,754		Methods and systems of using 3D information for a computer system user interface
USA		61/020,756		Methods and systems of using 3D information for user interface with computer games
USA		61/032,158		Methods and systems of using 3D information for a computer system user interface
USA	8,166,421	12/352,622	2009-0183125	Three-dimensional user interface
USA		13/423,314	2012-0204133	Gesture-based user interface
USA		13/423,322	2012-0202569	Three-dimensional user interface for game applications
USA		60/724,903		Method and system for object reconstruction
PCT		PCT/IL2006/000335		Method and system for object reconstruction
Japan	5001286	2008-535179		Method and system for object reconstruction
South Korea	101264955	10-2008-7008228		Method and system for object reconstruction
Europe		6711317.5	EP1934945	Method and system for object reconstruction



Country	Patent No.	App. No.	Pub. No.	Title
USA	8,400,494	11/991,994	2010-0177164	Method and system for object reconstruction
China		200680038004.2	CN 101288105A	Method and system for object reconstruction
USA		13/763,738	2013-0155195	Method and system for object reconstruction
USA		61/151,853		Depth ranging with Moire patterns
USA	8,462,207	12/703,794	2010-0201811	Depth ranging with Moire patterns
USA		61/157,560		Reference Image Techniques for 3D sensing
USA		12/707,678	2010-0225746	Reference Image Techniques for 3D sensing
China		201010122081.4	CN 101825431 A	Reference Image Techniques for 3D sensing
Taiwan		99106489.0		Reference Image Techniques for 3D sensing
USA		61/160,343		Efficient production of diffractive optical elements
USA		61/229,301		Efficient production of diffractive optical elements
USA		12/723,644		Efficient production of diffractive optical elements
USA		61/159,808		Interfaces for 3D based Man-Machine Interaction
USA		12/721,582		Interfaces for 3D based Man-Machine Interaction
PCT		PCT/IB2010/051055		Interfaces for 3D based Man-Machine Interaction
USA		61/162,309		Integrated chip with experience understanding
USA		61/171,087		Three-Dimensional Mapping and Imaging
USA	8,717,417	12/758,047	2010-0265316	Three-Dimensional Mapping and Imaging
USA		14/149,859		Three-Dimensional Mapping and Imaging
USA		12/683,452	2011-0164032	Three-Dimensional User Interface
USA		12/605,340	2011-0096182	Error Compensation in Three-Dimensional Mapping
USA		13/541,775	2012-0281240	Error Compensation in Three-Dimensional Mapping
USA		61/229,749		Optical pattern projection
USA	8,384,997	12/840,312	2010-0284082	Optical pattern projection

Country	Patent No.	App. No.	Pub. No.	Title
USA		13/734,980	2013-0120841	Optical pattern projection
USA		61/229,754		Pattern-based depth mapping with stereoscopic assistance
USA		12/844,864	2011-0025827	Pattern-based depth mapping with stereoscopic assistance
PCT		PCT/IB2010/053430		Pattern-based depth mapping with stereoscopic assistance
Taiwan		99125181.0		Pattern-based depth mapping with stereoscopic assistance
USA		61/233,502		Extraction of Skeletons from 3D Maps
USA	8,565,479	12/854,188	2011-0052006	Extraction of Skeletons from 3D Maps
USA		14/020,851	2014-0010425	Extraction of Skeletons from 3D Maps
USA		61/261,336		Optical Projector with beam monitor
USA		61/300,465		Integrated photonics module for optical projection
USA	8,492,696	12/945,908	2011-0114857	Optical Projector with beam monitor
Japan		2010-251347		Optical Projector with Beam Monitor
China		201010547499X	CN 102062952	Optical Projector with Beam Monitor
USA		13/936,234	2013-0292545	Optical projector with beam monitor including sensing intensity of beam pattern not projected toward an object
USA		61/267,050		Depth-Based Gain Control
USA		12/958,427	2011-0134114	Depth-Based Gain Control
USA		61/308,996		Tracking body parts by combined color image and depth processing
USA		13/036,022	2011-0211754	Tracking body parts by combined color image and depth processing
USA		12/762,336	2011-0254765	Remote Text Input using Handwriting
USA		61/300,465		Integrated photonics module for optical projection
USA		13/008,042	2011-0188054	Integrated photonics module for optical projection
Europe		11150668.9	EP2363686	Integrated photonics module for optical projection
China		201110035986.2	CP1110020/ME	Integrated photonics module for optical projection

Country	Patent No.	App. No.	Pub. No.	Title
USA		12/762,373	2011-0187878	Synchronization of Projected Illumination with Rolling Shutter of Image Sensor
China		201110035986.2	CN 102143342 A	Synchronization of Projected Illumination with Rolling Shutter of Image Sensor
Japan		2011-9310		Synchronization of Projected Illumination with Rolling Shutter of Image Sensor
USA		13/765,706	2013-0147921	Generation of patterned radiation
USA		61/306,980		Wideband Ambient Light Rejection
USA		61/374,373		Wideband Ambient Light Rejection
USA		13/031,627	2011-0205421	Wideband Ambient Light Rejection
USA		61/309,000		Non-Uniform Spatial Resource Allocation for Depth Mapping
USA		13/036,023	2011-0211044	Non-Uniform Spatial Resource Allocation for Depth Mapping
USA		61/349,894		Depth sensor with application interface
USA		13/098,497	2011-0292036	Depth sensor with application interface
USA		61/349,907		Analysis of 3D Scenes
USA	8,594,425	12/854,187	2011-0293137	Analysis of 3D Scenes
China		201110132428.8	CN 102262725 A	Analysis of 3D scenes
Japan		2011-76786		Analysis of 3D scenes
USA		13/867,083	2013-0230234	Analysis of 3D scenes with a surface model
USA		13/867,085	2013-0230215	Identifying components of a humanoid form in 3D scenes
USA		61/355,574		Gesture Based User Interface
USA		13/161,508	2011-0310010	Gesture Based User Interface
USA		61/383,342		Learning-Based Pose Estimation From Depth Maps
USA	8,582,867	13/229,727	2012-0070070	Learning-Based Pose Estimation From Depth Maps
USA		14/047,106	2014-0037191	Learning-Based Pose Estimation From Depth Maps
USA		61/372,469		Pattern Projector
USA		13/204,719	2012-0038986	Pattern Projector

Country	Patent No.	App. No.	Pub. No.	Title
USA		61/372,563		Multiprocessor System-on-a-Chip for Machine Vision Algorithms
USA		13/074,034	2012-0042150	Multiprocessor System-on-a-Chip for Machine Vision Algorithms
Japan		2011-127961		Multiprocessor SoC for Machine Vision
China		201110160959.8	CN102375800A	Multiprocessor SoC for Machine Vision
Taiwan		100120929.0		Multiprocessor SoC for Machine Vision
South Korea		10-2011-0055455		Multiprocessor SoC for Machine Vision
USA		61/372,729		Scanning Projectors And Image Capture Modules For 3D Mapping
USA		61/425,788		Scanning projectors and image capture modules
PCT		PCT/IB2011/053560		Scanning Projectors And Image Capture Modules For 3D Mapping
Taiwan		100128723.0		Scanning Projectors And Image Capture Modules For 3D Mapping
USA		13/810,451	2013-0127854	Scanning Projectors And Image Capture Modules For 3D Mapping
China		201180037859.4	CN 103053167 A	Scanning Projectors And Image Capture Modules For 3D Mapping
USA		61/376,389		Automatic Detection of Lens Deviations
USA		13/215,235	2012-0050488	Automatic Detection of Lens Deviations
USA		61/365,788		Interactive Reality Augmentation For Natural Interaction
PCT		PCT/IB2011/053192		Interactive Reality Augmentation For Natural Interaction
China		201180027794.5	CN 102959616 A	Interactive Reality Augmentation For Natural Interaction
Japan		2013520267.0		Interactive Reality Augmentation For Natural Interaction
USA		13/726,128	2013-0107021	Interactive Reality Augmentation For Natural Interaction
USA		13/726,129	2013-0106692	Adaptive projector
PCT		PCT/IB2013/061269		Adaptive projector
USA		61/386,591		Virtual keyboard for a non(tactile three dimensional user interface
USA		13/244,490	2012/0078614	Virtual keyboard for a non(tactile three dimensional user interface
USA		61/422,239		Three dimensional user interface session control using depth sensors

Country	Patent No.	App. No.	Pub. No.	Title
USA		13/314,210	2012-0313848	Three dimensional user interface session control using depth sensors
USA		14/055,997	2014-0043230	Three dimensional user interface session control using depth sensors
USA		61/415,352		Depth Mapping Using Time-Coded Illumination
PCT		PCT/IB2011/055155		Depth Mapping Using Time-Coded Illumination
USA		13/885,688	2014-0022348	Depth Mapping Using Time-Coded Illumination
Europe		11841463.0	EP2643659	Depth Mapping Using Time-Coded Illumination
USA		13/907,998	2013-0278787	Imaging and Processing using Dual Clocks
USA		61/419,891		Lens Arrays for Pattern Projection and Imaging
USA		13/311,584	2012-0140109	Lens Arrays for Pattern Projection and Imaging
USA		13/311,589	2012-0140094	Pattern projection and imaging using lens arrays
USA		61/420,809		Three dimensional user interface cursor control
USA		61/448,670		Three dimensional user interface cursor control
USA		61/538,970		Subjective Z-Axis Coordinate Transformation
USA		13/314,207	2012-0223882	Three dimensional user interface cursor control
USA		61/440,877		Gaze Detection in a 3D Mapping Environment
USA		61/538,867		Pointing gesture calibration
USA		61/526,692		
USA		13/984,031	2014-0028548	Gaze Detection in a 3D Mapping Environment
PCT		PCT/IB2012/050577		Gaze Detection in a 3D Mapping Environment
USA		13/960,822	2013-0321265	Gaze-based display control
USA		13/960,823	2013-0321271	Pointing-based display interaction
China		201280007484.1	CN 103347437	Gaze Detection in a 3D Mapping Environment
Europe		12745037.7	EP2672880	Gaze Detection in a 3D Mapping Environment
USA		61/433,536		Objective Optics with Interference Filter

Country	Patent No.	App. No.	Pub. No.	Title
USA	8,717,488	13/351,242	2012-0182464	Objective Optics with Interference Filter
USA		14/231,761		Objective Optics with Interference Filter
USA		61/486,786		Device Wake-Up from Low Power Standby
USA		61/439,888		Objective optics with interference filter
USA		61/526,692		Sessionless Pointing User Interface
USA		13/592,352	2013-0055120	Sessionless Pointing User Interface
USA		61/523,404		Combining Explicit Select Gestures And Timeclick In A Non-Tactile Three Dimensional User Interface
USA		13/584,831	2013-0044053	Combining Explicit Select Gestures And Timeclick In A Non-Tactile Three Dimensional User Interface
USA		61/526,696		Visual Feedback For Tactile And Non-Tactile User Interfaces
USA		13/592,369	2013-0055150	Visual Feedback For Tactile And Non-Tactile User Interfaces
USA		61/471,215		Multi-Zone Imaging Sensor and Lens Array
USA		13/437,977	2012-0249744	Multi-Zone Imaging Sensor and Lens Array
PCT		PCT/IL2005/001194		Method and device for scanning light
USA	7,952,781	11/667,709	2008-0123167	Method and device for scanning light
USA	8,437,063	13/100,312	2011-0286066	Method and device for scanning light
Europe		05804455-3	EP1815670	Method And Device For Scanning Light
Europe		10192429-8	EP2362634	Method And Device For Scanning Light
Europe		12155674.0	EP2597859	Method And Device For Scanning Light
USA		13/856,444	2013-0242363	Method And Device For Scanning Light
USA		61/429,767		Extracting user profiles from 3D sensing
USA		13/295,106	2012-0169583	Scene Profiles For Non(Tactile User Interfaces
Japan		2011-269446		Scene Profiles For Non(Tactile User Interfaces
USA		61/504,339		Zoom-based gesture user interface

Country	Patent No.	App. No.	Pub. No.	Title
USA		61/521,448		Zoom-based gesture user interface
USA		61/523,349		Zoom-based gesture user interface
USA		13/541,786	2013-0014052	Zoom-based gesture user interface
USA		61/521,406		Projectors of structured light
USA		13/567,095	2013-0038881	Projectors of structured light
USA		14/242,895		Projectors of structured light
USA		61/521,395		Lens array projector
USA		13/567,099	2013-0038941	Lens array projector
USA		61/525,771		TV watching paradigm
USA		61/603,949		Asymmetric Mapping in Tactile and Non(Tactile User Interfaces
USA		13/778,172	2013-0222239	Asymmetric Mapping in Tactile and Non(Tactile User Interfaces
USA		13/461,802	2013-0293679	Upper(Body Skeleton Extraction from Depth Maps
USA		61/568,185		A wavelength stabilized laser projector
USA		61/609,386		Learning(based estimation of hand and finger pose
USA		13/786,508	2013-0236089	Learning(based estimation of hand and finger pose
USA		61/652,899		Stabilizing Mechanisms, Application States, and User Context Aware Rating System
USA		13/904,050	2013-0265222	Stabilizing Mechanisms, Application States, and User Context Aware Rating System
USA		13/904,052	2013-0263036	Gesture-based interface with enhanced features
USA		61/598,921		Scanning Depth Engine
USA		13/766,801	2013-0207970	Scanning Depth Engine
PCT		PCT/IB2013/051189		Scanning Depth Engine
USA		13/766,811	2013-0206967	Integrated optoelectronic modules
Taiwan		102105535.0		Scanning Depth Engine
USA		61/595,092		Enhanced face detection using depth information

Country	Patent No.	App. No.	Pub. No.	Title
USA		13/751,173	2013-0202161	Enhanced face detection using depth information
USA		61/611,075		Projectors of Structured Light
South Korea		10-2013-0023877		Projectors of Structured Light
China	ZL 2013 2 0073847.3	201320073847.3		Projectors of Structured Light
China		201310051693.2	CN 103309137	Projectors of Structured Light
USA		61/675,828		Dual-axis scanning mirror
USA		61/835,655		Dual-axis scanning mirror
PCT		PCT/IB2013/056101		Dual-axis scanning mirror
USA		61/614,018		Gimbaled scanning mirror array
USA		13/798,251		Gimbaled scanning mirror array
PCT		PCT/IB2013/051985		Gimbaled scanning mirror array
USA		61/929,071		Coupling schemes for gimbaled scanning mirror array
USA		61/614,029		Diffraction-based sensing of mirror position
USA		13/798,231	2013-0250387	Diffraction-based sensing of mirror position
PCT		PCT/IB2013/051986		Diffraction-based sensing of mirror position
USA		61/615,403		Virtual Touchpad and Touchscreen
USA		61/663,638		Enhanced Virtual Touchpad and Touchscreen
USA		13/849,514	2013-0283208	Gaze-enhanced Virtual Touchscreen
PCT		PCT/IB2013/052332		Enhanced Virtual Touchpad and Touchscreen
USA		13/849,517	2013-0283213	Enhanced Virtual Touchpad
USA		13/663,518		Depth mapping with enhanced resolution
USA		61/716,552		Overload protection for amplifier of photodiode signal
USA		14/058,247		Overload protection for amplifier of photodiode signal
USA		61/736,551		Detecting failure of scanning mirror
PCT		PCT/IB2013/060839		Detecting failure of scanning mirror



Country	Patent No.	App. No.	Pub. No.	Title
USA		61/732,354		Detecting user intent to remove a pluggable device
USA		14/093,474		Detecting user intent to remove a pluggable device
USA		61/717,427		Process variants for released devices
PCT		PCT/IB2013/059531		Production of micro-mechanical devices
Taiwan		102138298.0		Production of micro-mechanical devices
USA		14/350,580		Production of micro-mechanical devices
USA		61/764,554		Flexible Room Controls
USA		14/179,580		Flexible Room Controls
PCT		PCT/IB2014/058959		Flexible Room Controls
USA		61/781,086		MEMS hinges with enhanced rotatability
USA		14/207,796		MEMS hinges with enhanced rotatability
PCT		PCT/IB2014/059710		MEMS hinges with enhanced rotatability
USA		61/786,711		Scanner with multiple emitters
USA		14/207,701		Depth Scanning with Multiple Emitters
PCT		PCT/IB2014/059711		Depth Scanning with Multiple Emitters
USA		61/835,653		Calibration of time-of-light measurement using stray reflections
USA		61/835,657		Modular optics for scanning engine
USA		61/836,682		Integrated structured-light projector
USA		61/917,953		Monitoring DOE performance using total internal reflection
USA		61/910,998		IMU-assisted auto-focus calibration
USA		61/944,582		Strain-Based Sensing of Mirror Position
USA		61/929,140		Sensing of mirror position using fringing fields
USA		61/940,439		Interference filter enhanced beam scanning
USA		61/980,055		Active silicon optical bench