PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6138926

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
ULTRAHAPTICS IP TWO LIMITED	05/24/2019

RECEIVING PARTY DATA

Name:	LMI LIQUIDATING CO., LLC
Street Address:	7 WEST 41ST AVENUE
Internal Address:	#523
City:	SAN MATEO
State/Country:	CALIFORNIA
Postal Code:	94403

PROPERTY NUMBERS Total: 249

Property Type	Number
Patent Number:	D726727
Patent Number:	D756443
Application Number:	61873351
Application Number:	61877641
Application Number:	61724091
Application Number:	61801479
Application Number:	61792025
Application Number:	61800327
Application Number:	14214605
Application Number:	14212485
Application Number:	15625856
Application Number:	15936185
Application Number:	61825480
Application Number:	14284280
Application Number:	61724073
Application Number:	13744810
Application Number:	14710499
Application Number:	14710512
Application Number:	15253741

PATENT REEL: 052848 FRAME: 0240

Property Type	Number
Application Number:	15387353
Application Number:	15681279
Application Number:	15862545
Application Number:	15953320
Application Number:	13724357
Application Number:	14723370
Application Number:	13414485
Application Number:	13742953
Application Number:	14106140
Application Number:	61873758
Application Number:	14474077
Application Number:	61891880
Application Number:	14516493
Application Number:	61886586
Application Number:	14506596
Application Number:	15493091
Application Number:	13742845
Application Number:	15349864
Application Number:	15586048
Application Number:	15937717
Application Number:	14106148
Application Number:	14959880
Application Number:	14959891
Application Number:	61724078
Application Number:	14075792
Application Number:	15193558
Application Number:	15977878
Application Number:	61724076
Application Number:	14075927
Application Number:	14163816
Application Number:	61895965
Application Number:	14523828
Application Number:	61897186
Application Number:	14527742
Application Number:	61898464
Application Number:	14530364
Application Number:	16000768
Application Number:	61898462

Property Type	Number
Application Number:	14530690
Application Number:	16004119
Application Number:	14094645
Application Number:	61916790
Application Number:	14572668
Application Number:	14572690
Application Number:	14572704
Application Number:	15681149
Application Number:	15861578
Application Number:	61905103
Application Number:	14541078
Application Number:	61750007
Application Number:	14149676
Application Number:	14149709
Application Number:	15488014
Application Number:	61752725
Application Number:	14156418
Application Number:	14156424
Application Number:	14156426
Application Number:	15491752
Application Number:	15638205
Application Number:	16055010
Application Number:	61752731
Application Number:	61752733
Application Number:	61791204
Application Number:	14156420
Application Number:	61808959
Application Number:	61808984
Application Number:	61872538
Application Number:	14156429
Application Number:	61911975
Application Number:	14560923
Application Number:	61756808
Application Number:	14151394
Application Number:	61924088
Application Number:	14589761
Application Number:	15677880
Application Number:	16153578

Property Type	Number
Application Number:	62040169
Application Number:	14833016
Application Number:	61749638
Application Number:	14149663
Application Number:	61755660
Application Number:	14162720
Application Number:	14790940
Application Number:	61937410
Application Number:	14616603
Application Number:	14616612
Application Number:	62007885
Application Number:	14625632
Application Number:	15832697
Application Number:	62003298
Application Number:	14625635
Application Number:	61924193
Application Number:	14590983
Application Number:	61767997
Application Number:	14187186
Application Number:	15385580
Application Number:	15699931
Application Number:	15989092
Application Number:	61768727
Application Number:	14190072
Application Number:	61927919
Application Number:	14598149
Application Number:	61938635
Application Number:	14620093
Application Number:	14620182
Application Number:	14620183
Application Number:	16016292
Application Number:	61773246
Application Number:	14198392
Application Number:	61792087
Application Number:	14214336
Application Number:	15696084
Application Number:	61791151
Application Number:	14214584

Property Type	Number
Application Number:	15457943
Application Number:	61792354
Application Number:	14214569
Application Number:	15641128
Application Number:	61792551
Application Number:	14214677
Application Number:	16022638
Application Number:	61952843
Application Number:	14658064
Application Number:	15611784
Application Number:	61791067
Application Number:	61816487
Application Number:	14262691
Application Number:	15917066
Application Number:	61824666
Application Number:	14281804
Application Number:	61824691
Application Number:	14281817
Application Number:	15213899
Application Number:	15411909
Application Number:	15933199
Application Number:	61824674
Application Number:	14281825
Application Number:	61837975
Application Number:	14311166
Application Number:	61981162
Application Number:	14690296
Application Number:	15693365
Application Number:	16055012
Application Number:	62005981
Application Number:	14725510
Application Number:	61991337
Application Number:	14708021
Application Number:	14708184
Application Number:	29492103
Application Number:	14286165
Application Number:	61996778
Application Number:	14712699

Property Type	Number
Application Number:	15728242
Application Number:	15989090
Application Number:	62035008
Application Number:	14821499
Application Number:	61856976
Application Number:	14338136
Application Number:	61857414
Application Number:	61857399
Application Number:	14339367
Application Number:	62001044
Application Number:	14718002
Application Number:	15681251
Application Number:	62008438
Application Number:	14732616
Application Number:	15588138
Application Number:	15888965
Application Number:	62017805
Application Number:	14751056
Application Number:	16016463
Application Number:	61864097
Application Number:	14457015
Application Number:	14476694
Application Number:	62038112
Application Number:	14826102
Application Number:	14154730
Application Number:	15358104
Application Number:	16054891
Application Number:	62094015
Application Number:	14626820
Application Number:	62104675
Application Number:	14997454
Application Number:	62107345
Application Number:	14626683
Application Number:	15678896
Application Number:	62111090
Application Number:	62116366
Application Number:	14626898
Application Number:	15587173

Property Type	Number
Application Number:	62116368
Application Number:	14626904
Application Number:	62133250
Application Number:	61811415
Application Number:	14250758
Application Number:	14280018
Application Number:	15392920
Application Number:	15696086
Application Number:	13952226
Application Number:	14155722
Application Number:	15279363
Application Number:	62215701
Application Number:	15256446
Application Number:	62296561
Application Number:	62335497
Application Number:	62335534
Application Number:	62335542
Application Number:	62335545
Application Number:	15432869
Application Number:	15432872
Application Number:	15432876
Application Number:	15605852
Application Number:	61871790
Application Number:	14474068
Application Number:	15664959
Application Number:	15942296
Application Number:	62676908
PCT Number:	US2013069231
PCT Number:	US2013021709
PCT Number:	US2013021713
PCT Number:	US2015012441
PCT Number:	US2014023675
PCT Number:	US2014011737
PCT Number:	US2014013012
PCT Number:	US2014012834
PCT Number:	US2015032705
PCT Number:	US2014029892
PCT Number:	US2014030013

Property Type	Number
PCT Number:	US2015030040
PCT Number:	US2016017632

CORRESPONDENCE DATA

Fax Number:

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.

Email: aalwine@mwe.com
Correspondent Name: JUDY M. MOHR

Address Line 1: MCDERMOTT WILL & EMERY

Address Line 2: 275 MIDDLEFIELD ROAD, SUITE 100
Address Line 4: MENLO PARK, CALIFORNIA 94025

NAME OF SUBMITTER:	JUDY M. MOHR	
SIGNATURE:	/Judy M. Mohr/	
DATE SIGNED:	06/05/2020	

Total Attachments: 31

source=UH-IP Security Agreement (UK Buyer)-Final#page1.tif source=UH-IP Security Agreement (UK Buyer)-Final#page2.tif source=UH-IP Security Agreement (UK Buyer)-Final#page3.tif source=UH-IP Security Agreement (UK Buyer)-Final#page4.tif source=UH-IP Security Agreement (UK Buyer)-Final#page5.tif source=UH-IP Security Agreement (UK Buyer)-Final#page6.tif source=UH-IP Security Agreement (UK Buyer)-Final#page7.tif source=UH-IP Security Agreement (UK Buyer)-Final#page8.tif source=UH-IP Security Agreement (UK Buyer)-Final#page9.tif source=UH-IP Security Agreement (UK Buyer)-Final#page10.tif source=UH-IP Security Agreement (UK Buyer)-Final#page11.tif source=UH-IP Security Agreement (UK Buyer)-Final#page12.tif source=UH-IP Security Agreement (UK Buyer)-Final#page13.tif source=UH-IP Security Agreement (UK Buyer)-Final#page14.tif source=UH-IP Security Agreement (UK Buyer)-Final#page15.tif source=UH-IP Security Agreement (UK Buyer)-Final#page16.tif source=UH-IP Security Agreement (UK Buyer)-Final#page17.tif source=UH-IP Security Agreement (UK Buyer)-Final#page18.tif source=UH-IP Security Agreement (UK Buyer)-Final#page19.tif source=UH-IP Security Agreement (UK Buyer)-Final#page20.tif source=UH-IP Security Agreement (UK Buyer)-Final#page21.tif source=UH-IP Security Agreement (UK Buyer)-Final#page22.tif source=UH-IP Security Agreement (UK Buyer)-Final#page23.tif source=UH-IP Security Agreement (UK Buyer)-Final#page24.tif source=UH-IP Security Agreement (UK Buyer)-Final#page25.tif source=UH-IP Security Agreement (UK Buyer)-Final#page26.tif source=UH-IP Security Agreement (UK Buyer)-Final#page27.tif source=UH-IP Security Agreement (UK Buyer)-Final#page28.tif

source=UH-IP Security Agreement (UK Buyer)-Final#page29.tif source=UH-IP Security Agreement (UK Buyer)-Final#page30.tif source=UH-IP Security Agreement (UK Buyer)-Final#page31.tif



PLAIN ENGLISH INTELLECTUAL PROPERTY SECURITY AGREEMENT

This is a Plain English Intellectual Property Security Agreement dated as of May 24, 2019, by and between ULTRAHAPTICS IP TWO LIMITED, a company registered in England and Wales with number 11978350 ("Grantor"), and LMI LIQUIDATING CO., LLC, a Delaware limited liability company ("Grantee") (the "Agreement").

The words "We", "Us", or "Our", refer to the Grantee, which is LMI LIQUIDATING CO., LLC. The words "You" or "Your" refers to the Grantor, which is ULTRAHAPTICS IP TWO LIMITED, and not any individual. The words "the Parties" refers to both LMI LIQUIDATING CO., LLC and ULTRAHAPTICS IP TWO LIMITED.

Reference is made to (i) the Promissory Note dated as of the date hereof (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "Promissory Note"), by and betweem You and Us, and (ii) that certain Debenture dated as of the date hereof (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "Debenture"), by and between You and Us. Pursuant to the Debenture and subject to certain limitations set forth therein, You have granted to Us a lien on and a security interest in all the present and future rights, title, and interest that You may now have or hereafter acquire in all Intellectual Property and applications for Intellectual Property constituting Collateral.

In consideration for the mutual covenants and agreements contained in the Promissory Note, Debenture and this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the Parties agree as follows:

1. GRANT OF SECURITY INTEREST

You grant to Us a lien upon and continuing security interest in all of Your right, title, and interest in, to and under all of the following (all of the following items of property collectively will be referred to as the "Intellectual Property Collateral"), whether now existing or hereafter arising or acquired:

- ⇒ all patents, patent licenses, and patent applications, including specifically those listed on the attached **Schedule A**, together with any reissues, divisions, continuations, renewals, extensions and continuations thereof:
- ⇒ all trademarks, trademark licenses, and trademark applications, including specifically those listed on the attached **Schedule B** together with any renewals thereof and excluding any "intent-to-use" application for registration of a trademark filed pursuant to Section 1(b) of the Lanham Act, 15 U.S.C. § 1051, prior to the filing of a "Statement of Use" pursuant to Section 1(d) of the Lanham Act or an "Amendment to Allege Use" pursuant to Section 1(c) of the Lanham Act with respect thereto, solely to the extent, if any, that, and solely during the period, if any, in which, the grant of a security interest therein would impair the validity or enforceability of any registration that issues from such intent-to-use application under applicable federal law;
- ⇒ all copyrights, copyright licenses, and applications for copyrights, including specifically those listed on the attached **Schedule C**;
- ⇒ the right to sue for past, present and future infringements of the foregoing and all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof; and
- \Rightarrow all proceeds of any of the foregoing.

You represent and warrant to Us that Schedules A, B, and C attached hereto set forth any and all intellectual property rights in connection to which You have registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

IP Security Agreement (UK Buyer)

2. DEBENTURE

This security interest is granted to secure the Secured Obligations under the Promissory Note. All the capitalized terms used but not otherwise defined are used in this Agreement with the same meaning as defined in the Debenture.

3. OUR RIGHT TO SUE

So long as an Event of Default has occurred that is continuing, subject to the terms of the Promissory Note and Debenture, We shall have the right, but shall in no way be obligated, to bring suit in Our own name to enforce Your rights in the Intellectual Property Collateral. If We commence any such suit, You shall, at Our request, and subject to the terms and provisions of the Promissory Note and Debenture, do all lawful acts and execute and deliver all proper documents or information that may be necessary to aid Us in such enforcement. You shall promptly, upon demand, reimburse and indemnify Us for all of Our reasonable and documented costs and expenses, including reasonable and documented attorney's fees, related to Our exercise of the above mentioned rights in accordance with the terms and provisions of the Promissory Note and Debenture.

4. FURTHER ASSURANCES

Subject to the terms of the Promissory Note and Debenture, You will from time to time execute, upon Our request, deliver and file, alone or with Us, any security agreements, or other documents required to perfect and give priority to Our lien on the Intellectual Property Collateral. You will from time to time obtain any instruments or documents as We may reasonably request, and take all further action that may be reasonably necessary, or that We may reasonably request, to carry out more effectively the provisions and purposes of this Agreement or the Promissory Note and Debenture or to confirm, perfect, preserve and protect the liens granted to Us.

5. MODIFICATION

This Agreement can only be altered, amended or modified in a writing signed by the Parties. Notwithstanding the foregoing, however, You hereby irrevocably appoint Us (and any of Our designated officers, agents or employees) as Your true and lawful attorney to modify, in Our sole discretion, this Agreement without first obtaining Your approval of or signature to such modification solely by amending Schedules A, B, and C to this Agreement, as appropriate, to include reference to any right, title or interest in any Intellectual Property Collateral that constitutes Collateral under the Debenture acquired by You before or after the execution hereof or to delete any reference to any right, title or interest in any Intellectual Property Collateral in which You no longer have or claim to have any right, title or interest. The appointment of Us as Your attorney in fact, and each and every one of Our limited rights and powers, being coupled with an interest, is irrevocable until the Discharge Date (as defined in the Promissory Note).

6. BINDING EFFECT; REMEDIES NOT EXCLUSIVE

This Agreement shall be binding upon You and Your respective successors and assigns, and shall inure to the benefit of Us, and Our nominees and assigns.

Our rights and remedies with respect to the security interest granted hereby are in addition to those set forth in the Promissory Note, Debenture and the other documents executed in connection therewith, and those which are now or hereafter available to Us as a matter of law or equity. Each of Our rights, powers and remedies provided for herein or in the Promissory Note, Debenture and the other documents executed in connection therewith, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Us of any one or more of the rights, powers or remedies provided for in this Agreement, Promissory Note, Debenture and the other documents executed in connection therewith, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Us, of any or all other rights, powers or remedies.

7. GOVERNING LAW; COUNTERPARTS

IP Security Agreement (UK Buyer)

This Agreement shall be deemed made and accepted in and shall be governed by and construed in accordance with the laws of the State of California, and (where applicable) the laws of the United States of America.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.

(Signature Page to Follow)

IP Security Agreement (UK Buyer)

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date first set forth above.

You:	ULTRAHABITICS IP TWO LIMITED
Signature:	Robert Blenkinsopp
Print Name:	Robert ⁹⁷ Effénkinsopp
Fillit Name.	 Director
Title:	
Us:	LMI LIQUIDATING CO., LLC
Signature:	
Print Name:	
Title:	

[SIGNATURE PAGE TO PLAIN ENGLISH INTELLECTUAL PROPERTY SECURITY AGREEMENT]

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date first set forth above.

£08;	ULIKAHAPIKS IP I WULIMILIN
Signature:	
Print Name:	
Title:	
Us:	LMI LIQUIDATING CO., LLC Solely as Anigane for boness of constant of the second constant of constant of the co
Signature:	" Ing Potion, Fre.
Print Name:	Matthew English
Title:	Wanager

[SIGNATURE PAGE TO PLAIN ENGLISH INTELLECTUAL PROPERTY SECURITY AGREEMENT]

SCHEDULE A

To Plain English Intellectual Property Security Agreement Between ULTRAHAPTICS IP TWO LIMITED, as You (Grantor) and LMI LIQUIDATING CO., LLC, as Us (Grantee)

PATENTS, PATENT LICENSES, AND PATENT APPLICATIONS

Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description		
ULTRAHAPTICS IP TWO LIMITED	US	US Prov. App. No. 61/873,351		FREE-SPACE USER INTERFACE AND CONTROL USING VIRTUAL CONSTRUCTS		
ULTRAHAPTICS IP TWO LIMITED	US	US Prov. App. No. 61/877,641		FREE-SPACE USER INTERFACE AND CONTROL USING VIRTUAL CONSTRUCTS		
ULTRAHAPTICS IP TWO LIMITED	US	US Prov. App. No. 61/724,091		SYSTEMS AND METHODS FOR CAPTURING MOTION IN THREE- DIMENSIONAL SPACE		
ULTRAHAPTICS IP TWO LIMITED	US	61/801,479		Determining Positional Information for An Object In Space		
ULTRAHAPTICS IP TWO LIMITED	US	61/792,025		Determining Positional Information for An		
ULTRAHAPTICS IP TWO LIMITED	US	61/800,327		Determining Positional Information for An Object In Space		
ULTRAHAPTICS IP TWO LIMITED	US	14/214,605	9,702,977	Determining Positional Information Of An Object In Space		
ULTRAHAPTICS IP TWO LIMITED	US	14/212,485		Determining Positional Information For An Object In Space		
ULTRAHAPTICS IP TWO LIMITED	US	15/625,856	9,927,522	Determining Positional Information Of An		
ULTRAHAPTICS IP TWO LIMITED	US	15/936,185		Determining Positional Information Of An Object In Space		
ULTRAHAPTICS IP TWO LIMITED	US	61/825,480		Contactless Cursor Control Using Free- space Motion Detection		
ULTRAHAPTICS	US	[Unfiled]		Contactless Cursor Control Using		

IP Security Agreement (UK Buyer)

Patents	Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description			
IP TWO LIMITED				Free- space Motion Detection			
ULTRAHAPTICS IP TWO LIMITED	US	14/284,280	9,507,442	Multi-function Stylus for Motion Capture			
ULTRAHAPTICS IP TWO LIMITED	US	61/724,073		Object Detection and Tracking With Variable-field Illumination Devices			
ULTRAHAPTICS IP TWO LIMITED	US	13/744,810	9,285,893	Object Detection and Tracking With Variable-field Illumination Devices			
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US13/69 231		Object Detection and Tracking With Variable-field Illumination Devices			
ULTRAHAPTICS IP TWO LIMITED	DE	11 2013 005 337.3		Object Detection and Tracking With			
ULTRAHAPTICS IP TWO LIMITED	CN	20138005840 92		Object Detection and Tracking With Variable-field Illumination Devices			
ULTRAHAPTICS IP TWO LIMITED	JP	2015-541939		Object Detection and Tracking With Variable-field Illumination Devices			
ULTRAHAPTICS IP TWO LIMITED	US	[Closed]		Tbd			
ULTRAHAPTICS IP TWO LIMITED	US	[Closed]		Tbd			
ULTRAHAPTICS IP TWO LIMITED	US	14/710,499	9,697,643	Systems and Methods of Object Shape			
ULTRAHAPTICS IP TWO LIMITED	US	14/710,512	9,436,998	Systems and Methods of Constructing Three-Dimensional (3D) Model of an Object Using Image Cross-Sections			
ULTRAHAPTICS IP TWO LIMITED	US	[Closed]		Systems and Methods of Object Shape and Position Determination Using Image Cross-Sections			
ULTRAHAPTICS IP TWO LIMITED	US	15/253,741	9,767,345	Systems and Methods of Constructing Three-Dimensional (3D) Model of an Object Using Image Cross-Sections			
ULTRAHAPTICS	US	15/387,353	9,741,136	Systems and Methods of Object			

Patents	Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description			
IP TWO LIMITED				Shape			
ULTRAHAPTICS IP TWO LIMITED	US	15/681,279	9,881,386	Systems and Methods of Object Shape and Position Determination in Three- Dimensional (3D) Space			
ULTRAHAPTICS IP TWO LIMITED	US	15/862,545		Systems and Methods of Object Shape and Position Determination in Three- Dimensional (3D) Space			
ULTRAHAPTICS IP TWO LIMITED	US	15/953,320		Systems and Methods of Locating a Control Object Appendage in Three Dimensional (3D) Space			
ULTRAHAPTICS IP TWO LIMITED	US	13/724,357	9,070,019	Systems and Methods for Capturing			
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US13/21 709		Systems and Methods for Capturing Motion In Three-dimensional Space			
ULTRAHAPTICS IP TWO LIMITED	US	14/723,370	9,945,660	Systems and Methods of Locating a Control Object Appendage in Three Dimensional (3D) Space			
ULTRAHAPTICS IP TWO LIMITED	PC	[Closed]		Predictive Information for Free Space Gesture Control and Communication			
ULTRAHAPTICS IP TWO LIMITED	US	13/414,485		Motion Capture Using Cross-sections Of			
ULTRAHAPTICS IP TWO LIMITED	US	13/742,953	8,638,989	Systems and Methods for Capturing Motion in Three-Dimensional Space			
ULTRAHAPTICS IP TWO LIMITED	US	14/106,140	9,153,028	Systems and Methods for Capturing Motion in Three-Dimensional Space			
ULTRAHAPTICS IP TWO LIMITED	US	61/873,758		Predictive Information for Free Space Gesture Control and Communication			
ULTRAHAPTICS IP TWO LIMITED	US	14/474,077		Predictive Information for Free Space			
ULTRAHAPTICS IP TWO LIMITED	US	61/891,880		Velocity Field Interaction for Free Space Gesture Interface and Control			

Patents				
Proprietor/ADP number	Territory	Application number	Patent number	Description
ULTRAHAPTICS IP TWO LIMITED	US	14/516,493		Velocity Field Interaction for Free Space Gesture Interface and Control
ULTRAHAPTICS IP TWO LIMITED	US	61/886,586		Directing Light for Free Space Gesture Control and Communication
ULTRAHAPTICS IP TWO LIMITED	US	14/506,596	9,632,572	Enhanced Field Of View To Augment
ULTRAHAPTICS IP TWO LIMITED	US	15/493,091		Enhanced Field Of View To Augment Three-dimensional (3D) Sensory Space for Free-space Gesture Interpretation
ULTRAHAPTICS IP TWO LIMITED	CN	20123050127 02	ZL201230 5012702	Electronic Sensor
ULTRAHAPTICS IP TWO LIMITED	JP	2013-621	1496843	Motion Sensor
ULTRAHAPTICS IP TWO LIMITED	EP	002119107- 0001	00211901 7-0001	Electronic Sensors
ULTRAHAPTICS IP TWO LIMITED	US	13/742,845	8,693,731	Enhanced Contrast for Object Detection and Characterization By Optical Imaging
ULTRAHAPTICS IP TWO LIMITED	JP	2016-104145		Enhanced Contrast for Object Detection and Characterization By Optical Imaging
ULTRAHAPTICS IP TWO LIMITED	US	15/349,864	9,652,668	Enhanced Contrast for Object Detection and Characterization By Optical Imaging Based on Differences Between Images
ULTRAHAPTICS IP TWO LIMITED	CN	20171022510 6.5		Enhanced Contrast for Object Detection and Characterization By Optical Imaging
ULTRAHAPTICS IP TWO LIMITED	US	15/586,048	9,934,580	Enhanced Contrast for Object Detection
ULTRAHAPTICS	US	15/937,717		Enhanced Contrast for Object Detection and Characterization By

Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description		
IP TWO LIMITED				Optical Imaging Based on Differences Between Images		
ULTRAHAPTICS IP TWO LIMITED	US	14/106,148	9,626,591	Enhanced Contrast for Object Detection and Characterization By Optical Imaging		
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US13/21 713		Enhanced Contrast for Object Detection		
ULTRAHAPTICS IP TWO LIMITED	DE	11 2013 000 590.5	11 2013 000 590.5	Enhanced Contrast for Object Detection and Characterization By Optical Imaging		
ULTRAHAPTICS IP TWO LIMITED	CN	20138001227 65	ZL 20138001 22765	Enhanced Contrast for Object Detection		
ULTRAHAPTICS IP TWO LIMITED	JP	2014-552391		Enhanced Contrast for Object Detection and Characterization By Optical Imaging		
ULTRAHAPTICS IP TWO LIMITED	US	14/959,880	9,495,613	Enhanced Contrast for Object Detection and Characterization By Optical Imaging Using Formed Difference Images		
ULTRAHAPTICS IP TWO LIMITED	US	14/959,891	9,672,441	Enhanced Contrast for Object Detection and Characterization By Optical Imaging Based on Differences Between Images		
ULTRAHAPTICS IP TWO LIMITED	DE	11 2013 007 297.1		Enhanced Contrast for Object Detection and Characterization By Optical Imaging		
ULTRAHAPTICS IP TWO LIMITED	US	61/724,078		Three-dimensional Image Sensors		
ULTRAHAPTICS IP TWO LIMITED	US	14/075,792	9,386,298	Three-dimensional Image Sensors		
ULTRAHAPTICS IP TWO LIMITED	US	15/193,558	9,973,741	Three-dimensional Image Sensors		

Patents				
Proprietor/ADP number	Territory	Application number	Patent number	Description
ULTRAHAPTICS IP TWO LIMITED	US	15/977,878		Three-dimensional Image Sensors
ULTRAHAPTICS IP TWO LIMITED	US	61/724,076		Object Detection and Tracking With Reduced Error Due To Background Illumination
ULTRAHAPTICS IP TWO LIMITED	US	14/075,927	9,392,196	Object Detection and Tracking With
ULTRAHAPTICS IP TWO LIMITED	US	14/163,816	9,348,419	Method for Synchronizing Operation Of Systems
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US2015/ 012441		Method for Synchronizing Operation of Systems
ULTRAHAPTICS IP TWO LIMITED	US	61/895,965		Determining Positional Information for An
ULTRAHAPTICS IP TWO LIMITED	US	14/523,828		Determining Positional Information for An Object In Space
ULTRAHAPTICS IP TWO LIMITED	US	61/897,186		Virtual Interactions for Machine Control
ULTRAHAPTICS IP TWO LIMITED	US	14/527,742		Virtual Interactions for Machine Control
ULTRAHAPTICS IP TWO LIMITED	US	61/898,464		Interactions With Virtual Objects for Machine Control
ULTRAHAPTICS IP TWO LIMITED	US	14/530,364	9,996,797	Interactions With Virtual Objects for Machine Control
ULTRAHAPTICS IP TWO LIMITED	US	16/000,768		Interactions With Virtual Objects for Machine Control
ULTRAHAPTICS IP TWO LIMITED	US	61/898,462		Predictive Information for Free Space
ULTRAHAPTICS IP TWO LIMITED	US	14/530,690	9,996,638	Predictive Information for Free Space Gesture Control and Communication
ULTRAHAPTICS	US	16/004,119		Predictive Information for Free Space

Patents				
Proprietor/ADP number	Territory	Application number	Patent number	Description
IP TWO LIMITED				Gesture Control and Communication
ULTRAHAPTICS IP TWO LIMITED	US	14/094,645		Determining The Orientation Of Objects In Space
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US14/23 675		Determining The Orientation Of Objects In
ULTRAHAPTICS IP TWO LIMITED	US	61/916,790		User-defined Virtual Interaction Space and Manipulation Of Virtual Cameras In The Interaction Space
ULTRAHAPTICS IP TWO LIMITED	US	14/572,668	9,740,296	User-defined Virtual Interaction Space and Manipulation Of Virtual Cameras In The Interaction Space
ULTRAHAPTICS IP TWO LIMITED	US	14/572,690	9,891,712	User-defined Virtual Interaction Space and Manipulation Of Virtual Cameras With Vectors
ULTRAHAPTICS IP TWO LIMITED	US	14/572,704	10,126,82	User-defined Virtual Interaction Space
ULTRAHAPTICS IP TWO LIMITED	US	15/681,149		User-defined Virtual Interaction Space and Manipulation Of Virtual Cameras In The Interaction Space
ULTRAHAPTICS IP TWO LIMITED	US	15/861,578		User-defined Virtual Interaction Space and Manipulation Of Virtual Cameras With Vectors
ULTRAHAPTICS IP TWO LIMITED	US	61/905,103		Interaction Strength Using Virtual Objects for Machine Control
ULTRAHAPTICS IP TWO LIMITED	US	14/541,078		Interaction Strength Using Virtual Objects
ULTRAHAPTICS IP TWO LIMITED	US	61/750,007		Object Detection and Tracking With Audio and Optical Signals
ULTRAHAPTICS IP TWO LIMITED	US	14/149,676	9,626,015	Power Consumption In Motion- capture Systems With Audio and Optical Signals
ULTRAHAPTICS	US	14/149,709	9,465,461	Object Detection and Tracking With

Patents	Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description			
IP TWO LIMITED				Audio			
ULTRAHAPTICS IP TWO LIMITED	PC	[Closed]		Object Detection and Tracking With Audio and Optical Signals			
ULTRAHAPTICS IP TWO LIMITED	US	15/488,014	10,097,75	Power Consumption in Motion- Capture			
ULTRAHAPTICS IP TWO LIMITED	US	61/752,725		Dynamic User Interactions for Display Control			
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US14/11 737		Dynamic User Interactions for Display Control and Customized Gesture Interpretation			
ULTRAHAPTICS IP TWO LIMITED	US	14/156,418	9,632,658	Dynamic User Interactions for Display			
ULTRAHAPTICS IP TWO LIMITED	US	14/156,424	10,042,51	Dynamic User Interactions for Display Control and Measuring Degree Of Completeness Of User Gestures			
ULTRAHAPTICS IP TWO LIMITED	US	14/156,426		Dynamic User Interactions for Display Control and Manipulation Of Display Objects			
ULTRAHAPTICS IP TWO LIMITED	CN	20148001437 5.1		Dynamic User Interactions for Display Control and Customized Gesture Interpretation			
ULTRAHAPTICS IP TWO LIMITED	DE	11 2014 000 441.3		Dynamic User Interactions for Display			
ULTRAHAPTICS IP TWO LIMITED	US	15/491,752		Dynamic User Interactions for Display Control and Scaling Responsiveness Of Display Objects			
ULTRAHAPTICS IP TWO LIMITED	US	15/638,205		Dynamic User Interactions for Display Control and Identifying Dominant Gestures			
ULTRAHAPTICS IP TWO LIMITED	US	16/055,010		Dynamic User Interactions for Display Control and Measuring Degree Of Completeness Of User			

Patents	Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description			
				Gestures			
ULTRAHAPTICS IP TWO LIMITED	US	61/752,731		Dynamic User Interactions for Display Control			
ULTRAHAPTICS IP TWO LIMITED	US	61/752,733		Dynamic User Interactions for Display			
ULTRAHAPTICS IP TWO LIMITED	US	61/791,204		Dynamic User Interactions for Display Control			
ULTRAHAPTICS IP TWO LIMITED	US	14/156,420	9,696,867	Dynamic User Interactions for Display Control and Identifying Dominant Gestures			
ULTRAHAPTICS IP TWO LIMITED	US	61/808,959		Gesture Filtering			
ULTRAHAPTICS IP TWO LIMITED	US	61/808,984		Gesture Filtering			
ULTRAHAPTICS IP TWO LIMITED	US	61/872,538		Interactive Training Recognition Of Free Space Gestures for Interface and Control			
ULTRAHAPTICS IP TWO LIMITED	US	14/156,429		Customized Gesture Interpretation			
ULTRAHAPTICS IP TWO LIMITED	US	61/911,975		Initializing Predictive Information for Free			
ULTRAHAPTICS IP TWO LIMITED	US	14/560,923	9,645,654	Initializing Predictive Information for Free Space Gesture Control and Communication			
ULTRAHAPTICS IP TWO LIMITED	US	61/756,808		Display-borne Optical System for Variable Field-of-view Imaging			
ULTRAHAPTICS IP TWO LIMITED	US	14/151,394		Image Capture System and Method			
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US14/13 012		Image Capture System and Method			
ULTRAHAPTICS	US	61/924,088		Motion Control Assembly With			

Patents				
Proprietor/ADP number	Territory	Application number	Patent number	Description
IP TWO LIMITED				Battery
ULTRAHAPTICS IP TWO LIMITED	US	14/589,761	9,740,242	Motion Control Assembly With Battery Pack
ULTRAHAPTICS IP TWO LIMITED	US	15/677,880	10,095,26 9	Motion Control Assembly With Battery Pack
ULTRAHAPTICS IP TWO LIMITED	US	16/153,578		Motion Control Assembly With Battery Pack
ULTRAHAPTICS IP TWO LIMITED	US	62/040,169		Systems and Methods Of Interacting With A Robotic Tool Using Free- form Gestures
ULTRAHAPTICS IP TWO LIMITED	US	14/833,016		Systems and Methods of Interacting with
ULTRAHAPTICS IP TWO LIMITED	US	61/749,638		Optimizing Power Consumption In Motion- capture Systems
ULTRAHAPTICS IP TWO LIMITED	US	14/149,663		Power Consumption In Motion- capture Systems
ULTRAHAPTICS IP TWO LIMITED	US	61/755,660		Systems and Methods for Tracking Object Movements In Three- dimensional Space
ULTRAHAPTICS IP TWO LIMITED	US	14/162,720	9,105,103	Systems and Methods Of Tracking Object Movements In Three- dimensional Space
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US14/12 834		Systems and Methods Of Tracking Object
ULTRAHAPTICS IP TWO LIMITED	US	14/790,940	9,747,691	Retraction Based Three-Dimensional Tracking of Object Movements
ULTRAHAPTICS IP TWO LIMITED	US	61/937,410		Systems and Methods Of Providing Haptic-like Feedback In Three- dimensional (3d) Sensory Space
ULTRAHAPTICS IP TWO LIMITED	US	14/616,603		Systems and Methods Of Providing Haptic-like Feedback In Three- dimensional (3d) Sensory Space

Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description	
ULTRAHAPTICS IP TWO LIMITED	US	14/616,612		Systems and Methods Of Determining	
ULTRAHAPTICS IP TWO LIMITED	US	62/007,885		Systems and Methods Of Interacting With A Virtual Grid In A Three- dimensional (3d) Sensory Space	
ULTRAHAPTICS IP TWO LIMITED	US	14/625,632		Systems and Methods of Interacting with	
ULTRAHAPTICS IP TWO LIMITED	US	15/832,697		Systems and Methods of Interacting with a Virtual Grid in a Three-dimensional (3D) Sensory Space	
ULTRAHAPTICS IP TWO LIMITED	US	62/003,298		Systems and Methods Of Gestural Interaction In A Pervasive Computing Environment	
ULTRAHAPTICS IP TWO LIMITED	US	14/625,635		Systems and Methods of Gestural	
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US2015/ 032705		Systems and Methods of Gestural Interaction in a Pervasive Computing Environment	
ULTRAHAPTICS IP TWO LIMITED	DE	11 2015 002 463.8		Systems and Methods of Gestural Interaction in a Pervasive Computing Environment	
ULTRAHAPTICS IP TWO LIMITED	CN	20158004159 4.3		Systems and Methods of Gestural Interaction in a Pervasive Computing Environment	
ULTRAHAPTICS IP TWO LIMITED	US	61/924,193		Initializing Orientation In Space for	
ULTRAHAPTICS IP TWO LIMITED	US	14/590,983	9,659,403	Initializing Orientation In Space for Predictive Information for Free Space Gesture Control and Communication	
ULTRAHAPTICS IP TWO LIMITED	US	61/767,997		Adjusting Motion Capture Based On The Distance Between Tracked Objects	

Patents	Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description		
ULTRAHAPTICS IP TWO LIMITED	US	14/187,186	9,558,555	Adjusting Motion Capture Based On The Distance Between Tracked Objects		
ULTRAHAPTICS IP TWO LIMITED	US	15/385,580	9,762,792	Adjusting Motion Capture Based On The		
ULTRAHAPTICS IP TWO LIMITED	US	15/699,931	9,986,153	Adjusting Motion Capture Based On The Distance Between Tracked Objects		
ULTRAHAPTICS IP TWO LIMITED	US	15/989,092		Adjusting Motion Capture Based On The Distance Between Tracked Objects		
ULTRAHAPTICS IP TWO LIMITED	US	61/768,727		Display Control With Gesture- selectable Control Paradigms		
ULTRAHAPTICS IP TWO LIMITED	US	14/190,072		Display Control With Gesture- selectable		
ULTRAHAPTICS IP TWO LIMITED	US	61/927,919		Object Detection and Tracking for Providing A Virtual Device Experience		
ULTRAHAPTICS IP TWO LIMITED	US	14/598,149	9,613,262	Object Detection and Tracking for Providing A Virtual Device Experience		
ULTRAHAPTICS IP TWO LIMITED	US	61/938,635		Drift Cancelation for Portable Object Detection and Tracking		
ULTRAHAPTICS IP TWO LIMITED	US	14/620,093	10,007,32	Drift Cancelation for Portable Object		
ULTRAHAPTICS IP TWO LIMITED	US	14/620,182		Systems and Methods of Integrating Real Three-dimensional (3D) Space Sensing with Virtual Reality/Augmented Reality Head Mounted Devices		
ULTRAHAPTICS IP TWO LIMITED	US	14/620,183		Systems and Methods of Interacting with Virtual Reality and Augmented Reality Environments Using Free-		

Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description	
				form In-air Gestures	
ULTRAHAPTICS IP TWO LIMITED	US	16/016,292		Drift Cancelation for Portable Object Detection and Tracking	
ULTRAHAPTICS IP TWO LIMITED	US	61/773,246		Motion-capture Apparatus With Light-	
ULTRAHAPTICS IP TWO LIMITED	US	14/198,392		Motion-capture Apparatus With Light- source Form Factor	
ULTRAHAPTICS IP TWO LIMITED	US	61/792,087		Dynamic User Interactions for Display Control	
ULTRAHAPTICS IP TWO LIMITED	US	14/214,336	9,766,709	Dynamic User Interactions for Display Control	
ULTRAHAPTICS IP TWO LIMITED	US	15/696,084		Dynamic User Interactions for Display	
ULTRAHAPTICS IP TWO LIMITED	US	61/791,151		Determining The Position Of A Computer Screen	
ULTRAHAPTICS IP TWO LIMITED	US	14/214,584	9,625,995	Identifying An Object In A Field Of View	
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US2014/ 029892		Identifying An Object In A Field Of View	
ULTRAHAPTICS IP TWO LIMITED	US	15/457,943		Identifying An Object In A Field Of View	
ULTRAHAPTICS IP TWO LIMITED	US	61/792,354		Resource-responsive Motion Capture	
ULTRAHAPTICS IP TWO LIMITED	US	14/214,569	9,733,715	Resource-responsive Motion Capture	
ULTRAHAPTICS IP TWO LIMITED	US	15/641,128		Resource-responsive Motion Capture	
ULTRAHAPTICS IP TWO LIMITED	US	61/792,551		Determining The Relative Locations Of	
ULTRAHAPTICS	US	14/214,677	10,037,47	Determining The Relative Locations	

Patents	Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description		
IP TWO LIMITED			4	Of Multiple Motion-tracking Devices		
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US14/30 013		Determining The Relative Locations Of Multiple Motion-tracking Devices		
ULTRAHAPTICS IP TWO LIMITED	US	16/022,638		Determining The Relative Locations Of Multiple Motion-tracking Devices		
ULTRAHAPTICS IP TWO LIMITED	US	61/952,843		Biometric Aware Object Detection and		
ULTRAHAPTICS IP TWO LIMITED	US	14/658,064	9,679,197	Biometric Aware Object Detection and Tracking		
ULTRAHAPTICS IP TWO LIMITED	US	15/611,784		Biometric Aware Object Detection and Tracking		
ULTRAHAPTICS IP TWO LIMITED	US	61/791,067		Reducing Latency In Motion-capture Systems		
ULTRAHAPTICS IP TWO LIMITED	US	[Closed]		Reducing Latency In Motion-capture		
ULTRAHAPTICS IP TWO LIMITED	US	61/816,487		Non-tactile Interface Systems and Methods		
ULTRAHAPTICS IP TWO LIMITED	US	14/262,691	9,916,009	Non-Tactile Interface Systems and Methods		
ULTRAHAPTICS IP TWO LIMITED	US	15/917,066		Non-Tactile Interface Systems and Methods		
ULTRAHAPTICS IP TWO LIMITED	US	61/824,666		Systems and Methods for Providing		
ULTRAHAPTICS IP TWO LIMITED	US	14/281,804	9,747,696	Systems and Methods for Providing Normalized Parameters Of Motions Of Objects In Three-dimensional Space		
ULTRAHAPTICS IP TWO LIMITED	US	61/824,691		Cursor Mode Switching		
ULTRAHAPTICS IP TWO LIMITED	US	14/281,817	9,436,288	Cursor Mode Switching		

Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description		
ULTRAHAPTICS IP TWO LIMITED	US	15/213,899	9,552,075	Cursor Mode Switching		
ULTRAHAPTICS IP TWO LIMITED	US	15/411,909	9,927,880	Cursor Mode Switching		
ULTRAHAPTICS IP TWO LIMITED	US	15/933,199		Cursor Mode Switching		
ULTRAHAPTICS IP TWO LIMITED	US	61/824,674		Dynamic Cursors		
ULTRAHAPTICS IP TWO LIMITED	US	14/281,825		Dynamic Interactive Objects		
ULTRAHAPTICS IP TWO LIMITED	US	61/837,975		Tunable Operational Parameters In Motion-capture and Touchless Interface Operation		
ULTRAHAPTICS IP TWO LIMITED	US	14/311,166		Tunable Operational Parameters In Motion-capture and Touchless Interface Operation		
ULTRAHAPTICS IP TWO LIMITED	US	61/981,162		Safety for Wearable Virtual Reality Devices Via Object Detection and Tracking		
ULTRAHAPTICS IP TWO LIMITED	US	14/690,296	9,754,167	Safety for Wearable Virtual Reality Devices Via Object Detection and Tracking		
ULTRAHAPTICS IP TWO LIMITED	US	15/693,365	10,043,32	Safety for Wearable Virtual Reality Devices Via Object Detection and Tracking		
ULTRAHAPTICS IP TWO LIMITED	US	16/055,012		Safety for Wearable Virtual Reality Devices Via Object Detection and Tracking		
ULTRAHAPTICS IP TWO LIMITED	US	62/005,981		Vehicle Motion Sensory Control		
ULTRAHAPTICS IP TWO LIMITED	US	14/725,510	9,868,449	Recognizing In-Air Gestures of a Control Object to Control a Vehicular		

Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description	
				Control System	
ULTRAHAPTICS IP TWO LIMITED	US	61/991,337		Adapter for Attaching A Motion Capture Device To A Head Mounted Display	
ULTRAHAPTICS IP TWO LIMITED	US	14/708,021		Adapter for Attaching a Motion Capture	
ULTRAHAPTICS IP TWO LIMITED	US	14/708,184		Mounts for Attaching a Motion Capture Device to a Head Mounted Display	
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US2015/ 030040		Mounts for Attaching a Motion Capture Device to a Head Mounted Display	
ULTRAHAPTICS IP TWO LIMITED	US	29/492,103	D756,443	Motion Capture Device Attachment Adapter	
ULTRAHAPTICS IP TWO LIMITED	US	14/286,165	9,648,300	Calibration Of Multi-camera Devices	
ULTRAHAPTICS IP TWO LIMITED	US	61/996,778		Systems and Methods Of Tracking Moving Hands and Recognizing Gestural Interactions	
ULTRAHAPTICS IP TWO LIMITED	US	14/712,699	9,785,247	Systems and Methods Of Tracking Moving Hands and Recognizing Gestural Interactions	
ULTRAHAPTICS IP TWO LIMITED	US	15/728,242	9,983,686	Systems and Methods Of Tracking Moving Hands and Recognizing Gestural Interactions	
ULTRAHAPTICS IP TWO LIMITED	US	15/989,090		Systems and Methods Of Tracking Moving Hands and Recognizing Gestural Interactions	
ULTRAHAPTICS IP TWO LIMITED	US	62/035,008		Augmented Reality With Motion Sensing	
ULTRAHAPTICS IP TWO LIMITED	CN	20142045353 64	ZL201420 4535364	Augmented Reality With Motion Sensing	

Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description	
ULTRAHAPTICS IP TWO LIMITED	JP	2014-164597		Augmented Reality With Motion Sensing	
ULTRAHAPTICS IP TWO LIMITED	KR	[Closed]		Industrial Use Motion Sensory Device	
ULTRAHAPTICS IP TWO LIMITED	DE	20201410372 9.2	20201410 3729.2	Augmented Reality With Motion Sensing	
ULTRAHAPTICS IP TWO LIMITED	US	14/821,499		Augmented Reality With Motion Sensing	
ULTRAHAPTICS IP TWO LIMITED	US	61/856,976		Filtering Motion Using Frenet-serret Frames	
ULTRAHAPTICS IP TWO LIMITED	US	14/338,136	9,857,876	Non-linear Motion Capture Using Frenet- serret Frames	
ULTRAHAPTICS IP TWO LIMITED	US	61/857,414		3D Object Definition Using Curved Surfaces	
ULTRAHAPTICS IP TWO LIMITED	US	[Closed]		3D Object Definition Using Curved	
ULTRAHAPTICS IP TWO LIMITED	US	61/857,399		Data Classifiers for Gestures	
ULTRAHAPTICS IP TWO LIMITED	US	14/339,367		Systems and Methods Of Interpreting Complex Gestures	
ULTRAHAPTICS IP TWO LIMITED	US	62/001,044		Wearable Augmented Reality Devices With Object Detection and Tracking	
ULTRAHAPTICS IP TWO LIMITED	US	14/718,002	9,741,169	Wearable Augmented Reality Devices With Object Detection and Tracking	
ULTRAHAPTICS IP TWO LIMITED	US	15/681,251		Wearable Augmented Reality Devices	
ULTRAHAPTICS IP TWO LIMITED	US	62/008,438		Initializing Predictive Information for Free Space Gesture Control and Communication	

Patents	Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description		
ULTRAHAPTICS IP TWO LIMITED	US	14/732,616	9,646,201	Three Dimensional (3D) Modeling of a Complex Control Object		
ULTRAHAPTICS IP TWO LIMITED	US	15/588,138	9,886,097	Three Dimensional (3D) Modeling of a Complex Control Object		
ULTRAHAPTICS IP TWO LIMITED	US	15/888,965		Three Dimensional (3D) Modeling of a		
ULTRAHAPTICS IP TWO LIMITED	US	62/017,805		Integrated Gestural Interaction and Multi- user Collaboration In Immersive Virtual Reality Environments		
ULTRAHAPTICS IP TWO LIMITED	US	14/751,056	10,007,35	Integrated Gestural Interaction and Multi- User Collaboration in Immersive Virtual Reality Environments		
ULTRAHAPTICS IP TWO LIMITED	US	16/016,463		Integrated Gestural Interaction and Multi- User Collaboration in Immersive Virtual Reality Environments		
ULTRAHAPTICS IP TWO LIMITED	US	61/864,097		User Interactions for Contactless Display Control		
ULTRAHAPTICS IP TWO LIMITED	US	14/457,015		Systems and Methods Of Free-space Gestural Interaction		
ULTRAHAPTICS IP TWO LIMITED	US	14/476,694		Systems and Methods Of Free-space Gestural Interaction		
ULTRAHAPTICS IP TWO LIMITED	US	62/038,112		Automotive and Industrial Motion Sensory		
ULTRAHAPTICS IP TWO LIMITED	CN	20142052113 24	ZL 20142052 11324	Automotive and Industrial Motion Sensory Device		
ULTRAHAPTICS IP TWO LIMITED	JP	2014-004691	3194297	Automotive and Industrial Motion Sensory Device		
ULTRAHAPTICS	DE	20 2014 104	20 2014	Automotive and Industrial Motion		

Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description	
IP TWO LIMITED		297.0	104 297.0	Sensory Device	
ULTRAHAPTICS IP TWO LIMITED	US	14/826,102		Automotive and Industrial Motion Sensory Device	
ULTRAHAPTICS IP TWO LIMITED	US	14/154,730	9,501,152	Free-space User Interface and Control Using Virtual Constructs	
ULTRAHAPTICS IP TWO LIMITED	US	15/358,104	10,042,43	Free-space User Interface and Control Using Virtual Constructs	
ULTRAHAPTICS IP TWO LIMITED	US	16/054,891		Free-space User Interface and Control	
ULTRAHAPTICS IP TWO LIMITED	US	62/094,015		User Interface for Integrated Gestural Interaction and Multi-user Collaboration In Immersive Virtual Reality Environments	
ULTRAHAPTICS IP TWO LIMITED	US	14/626,820		User Interface for Integrated Gestural Interaction and Multi-user Collaboration In Immersive Virtual Reality Environments	
ULTRAHAPTICS IP TWO LIMITED	US	62/104,675		Mode Switching for Integrated Gestural Interaction and Multi-user Collaboration In Immersive Virtual Reality Environments	
ULTRAHAPTICS IP TWO LIMITED	US	14/997,454		Mode Switching for Integrated Gestural	
ULTRAHAPTICS IP TWO LIMITED	US	62/107,345		Systems and Methods Of Interacting With A Virtual Object	
ULTRAHAPTICS IP TWO LIMITED	US	14/626,683	9,767,613	Systems and Methods Of Interacting With A Virtual Object	
ULTRAHAPTICS IP TWO LIMITED	US	15/678,896	9,911,240	Systems and Methods Of Interacting With A Virtual Object	
ULTRAHAPTICS IP TWO LIMITED	US	62/111,090		Free-form Interaction Modality for	
ULTRAHAPTICS	US	62/116,366		Systems and Methods of Creating a	

Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description	
IP TWO LIMITED				Realistic Grab Experience in Virtual Reality/Augmented Reality Environments	
ULTRAHAPTICS IP TWO LIMITED	US	14/626,898	9,696,795	Systems and Methods of Creating a Realistic Grab Experience in Virtual Reality/Augmented Reality Environments	
ULTRAHAPTICS IP TWO LIMITED	PC	PCT/US2016/ 017632		Systems and Methods of Creating a Realistic Grab Experience in Virtual Reality/Augmented Reality Environments	
ULTRAHAPTICS IP TWO LIMITED	US	15/587,173		Systems and Methods of Creating a	
ULTRAHAPTICS IP TWO LIMITED	CN	20168001813 6.2		Systems and Methods of Creating a Realistic Grab Experience in Virtual Reality/Augmented Reality Environments	
ULTRAHAPTICS IP TWO LIMITED	US	62/116,368		Systems and Methods of Interacting with Virtual Reality/Augmented Reality Environment using Virtual and Real Objects	
ULTRAHAPTICS IP TWO LIMITED	US	14/626,904		Systems and Methods of Interacting with Virtual Reality/Augmented Reality Environment using Virtual and Real Objects	
ULTRAHAPTICS IP TWO LIMITED	US	62/133,250		Adjusting Frame Rates to Achieve	
ULTRAHAPTICS IP TWO LIMITED	US	61/811,415		Systems and Methods for Tracking Occluded Objects in Three- Dimensional Space	
ULTRAHAPTICS IP TWO LIMITED	US	14/250,758		Systems and Methods for Tracking Occluded Objects in Three- Dimensional Space	
ULTRAHAPTICS IP TWO LIMITED	US	14/280,018	9,679,215	Systems and Methods for Machine Control	

Patents	Patents						
Proprietor/ADP number	Territory	Application number	Patent number	Description			
ULTRAHAPTICS IP TWO LIMITED	US	15/392,920	9,778,752	Systems and Methods for Machine			
ULTRAHAPTICS IP TWO LIMITED	US	15/696,086		Systems and Methods for Machine Control			
ULTRAHAPTICS IP TWO LIMITED	US	13/952,226		Object Detection and Tracking			
ULTRAHAPTICS IP TWO LIMITED	US	14/155,722	9,459,697	Dynamic, Free-Space User Interactions for Machine Control			
ULTRAHAPTICS IP TWO LIMITED	US	15/279,363		Dynamic, Free-Space User Interactions			
ULTRAHAPTICS IP TWO LIMITED	US	62/215,701		Systems and Methods of Rerendering Image Hands to Create a Realistic Grab Experience in Virtual Reality/Augmented Reality Environments			
ULTRAHAPTICS IP TWO LIMITED	US	15/256,446		Systems and Methods of Rerendering Image Hands to Create a Realistic Grab Experience in Virtual Reality/Augmented Reality Environments			
ULTRAHAPTICS IP TWO LIMITED	US	62/296,561		Image Based Tracking			
ULTRAHAPTICS IP TWO LIMITED	US	62/335,497		Machine Learning Based Gesture Recognition			
ULTRAHAPTICS IP TWO LIMITED	US	62/335,534		Hand Pose Estimation for Machine			
ULTRAHAPTICS IP TWO LIMITED	US	62/335,542		Hand Initialization for Machine Learning Based Gesture Recognition			
ULTRAHAPTICS IP TWO LIMITED	US	62/335,545		Data Simulation Machine Learning Based Gesture Recognition			
ULTRAHAPTICS IP TWO LIMITED	US	15/432,869		Machine Learning Based Gesture Recognition			

Patents	Patents					
Proprietor/ADP number	Territory	Application number	Patent number	Description		
ULTRAHAPTICS IP TWO LIMITED	US	15/432,872		Hand Pose Estimation for Machine Learning Based Gesture Recognition		
ULTRAHAPTICS IP TWO LIMITED	US	15/432,876		Hand Initialization for Machine Learning		
ULTRAHAPTICS IP TWO LIMITED	US	[Closed]		Network Chain Object Classifier		
ULTRAHAPTICS IP TWO LIMITED	US	15/605,852		Interaction Engine for Creating a Realistic Experience in Virtual Reality/Augmented Reality Environments		
ULTRAHAPTICS IP TWO LIMITED	US	61/871,790		Predictive Information for Free Space Gesture Control and Communication		
ULTRAHAPTICS IP TWO LIMITED	US	14/474,068	9,721,383	Predictive Information for Free Space Gesture Control and Communication		
ULTRAHAPTICS IP TWO LIMITED	US	15/664,959	9,934,609	Predictive Information for Free Space		
ULTRAHAPTICS IP TWO LIMITED	US	15/942,296		Predictive Information for Free Space Gesture Control and Communication		
ULTRAHAPTICS IP TWO LIMITED	US	62/676,908		Throwable Interface for Augmented Reality and Virtual Reality Environments		
ULTRAHAPTICS IP TWO LIMITED	US	[Unfiled]		METHOD AND APPARATUS FOR CORRECTING GEOMETRIC AND OPTICAL ABERRATIONS IN AUGMENTED REALITY		

Part 5C – Designs and Design Patents			
Proprietor/ADP number	Territory	Design / Design patent number	Apparent status
ULTRAHAPTICS IP TWO LIMITED	EU	002119107-0001	Design Lapsed

ULTRAHAPTICS IP TWO LIMITED	US	D726727	Registered
ULTRAHAPTICS IP TWO LIMITED	US	D756443	Registered

SCHEDULE B

To Plain English Intellectual Property Security Agreement Between ULTRAHAPTICS IP TWO LIMITED, as You (Grantor) and LMI LIQUIDATING CO., LLC, as Us (Grantee)

TRADEMARKS AND TRADEMARK APPLICATIONS

Trade marks					
Proprietor/ADP number	TM number	Jurisdiction/ apparent status	Classes	Mark text	
Trade mark registr	Trade mark registrations				
ULTRAHAPTICS IP TWO LIMITED	12041018	EU Registered	9	LEAP MOTION	
ULTRAHAPTICS IP TWO LIMITED	1175915	WO (EU) Removed from the register	9	AIRSPACE	
ULTRAHAPTICS IP TWO LIMITED	1178550	WO (EU, AU, CH, CN, IL, IN, IS, JP, KR, LI, MX, NO, NZ, PH, RU, SG, TR, UA, VN)	9, 35, 42	AIRSPACE	
ULTRAHAPTICS IP TWO LIMITED	TMA94783	CA Registered	35, 42	AIRSPACE	
ULTRAHAPTICS IP TWO LIMITED	TMA10067 21	CA Registered	9	LEAP MOTION	
ULTRAHAPTICS IP TWO LIMITED	259248	IL Registered	9	LEAP MOTION	
ULTRAHAPTICS IP TWO LIMITED	259884	IL Registered	9, 35, 42	AIRSPACE	

IP Security Agreement (UK Buyer)

Trade marks				
Proprietor/ADP number	TM number	Jurisdiction/ apparent status	Classes	Mark text
ULTRAHAPTICS IP TWO LIMITED	4832231	US Registered	9	LEAP MOTION
ULTRAHAPTICS IP TWO LIMITED	4764948	US Registered	35, 42	AIRSPACE
ULTRAHAPTICS IP TWO LIMITED	1174699	WO (AU, CH, GE, IL, IN, IS, KG, LI, MX, NO, NZ, PH, RU, SG, TJ, TM, TR, UA, VN)	9	LEAP MOTION
Trade mark applications				
ULTRAHAPTICS IP TWO LIMITED	906597706	BR Filed	9	LEAP MOTION
ULTRAHAPTICS IP TWO LIMITED	85863252	US Ended	9	AIRSPACE

SCHEDULE C

To Plain English Intellectual Property Security Agreement Between ULTRAHAPTICS IP TWO LIMITED, as You (Grantor) And LMI LIQUIDATING CO., LLC, as Us (Grantee)

COPYRIGHTS AND COPYRIGHT APPLICATIONS

Copyright	Filing Date	Reg. Date	Reg. No.

IP Security Agreement (UK Buyer)