505964471 03/12/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
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PITCHAYA SITTHI-AMORN	01/31/2020
WOJCIECH MATUSIK	05/30/2018
SZU-PO WANG	09/09/2017
PIOTR K. DIDYK	10/18/2017
WILLIAM T. FREEMAN	03/23/2018
FREDERIC DURAND	03/23/2018

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16725448

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DATE SIGNED:	03/12/2020

505964471 REEL: 052098 FRAME: 0161

Total Attachments: 11 source=00502331003Assignment#page1.tif source=00502331003Assignment#page2.tif source=00502331003Assignment#page3.tif source=00502331003Assignment#page4.tif source=00502331003Assignment#page5.tif source=00502331003Assignment#page6.tif source=00502331003Assignment#page7.tif source=00502331003Assignment#page8.tif source=00502331003Assignment#page9.tif source=00502331003Assignment#page10.tif source=00502331003Assignment#page11.tif

PATENT REEL: 052098 FRAME: 0162

Joint

ASSIGNMENT

WHEREAS, we, Wojciech Matusik, Piotr K. Didyk, William T. Freeman,
Petr Kellnhofer, Pitchaya Sitthi-Amorn, Frederic Durand and Szu-Po Wang, have invented a certain improvement in 3dtv At Home: Eulerian-Lagrangian Stereo-To-Multi-View
Conversion described in an application for Patent,

	the specification of which is about to be filed in the United States Patent Office (use for utility (37 CFR § 1.53(b)) and design filings only);
	is about to be filed in the United States Patent Office as a Provisional Application;
\boxtimes	the specification of which is United States Application No. 16/000,662, filed June 5, 2018;
	the specification of which is a Patent Cooperation Treaty Application, International Application No. [], filed [], which designates the United States of America [and is assigned United States Application No. []];
	which was patented under United States Patent No. [].

WHEREAS, Massachusetts Institute of Technology (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139 desires to confirm its interest therein in accordance with agreements duly entered into with us:

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for any and all related provisional and nonprovisional, international and national phase applications, including any and all substitution, reissue, divisional, continuation, and continuation-in-part applications, and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest

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therein; we hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation, continuation-in-part applications, and all related provisional and nonprovisional, international and national phase applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

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Inventor		Date	
	William T. Freeman		
Witness Signature			
Print Witness Name_			
With an Cinneton			
Print Witness Name_		***************************************	
Inventor_	KILD.	Date	12/20/2019
	Petr Kellnhofer		`
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	The state of the s		
Witness Signature			
Print Witness Name_	RYAN SPICER	•••••	
Inventor		Date	
	Pitchaya Sitthi-Amorn	***************************************	
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Print Witness Name Soropon Ponsone Mai		

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Inventor	Date
	Prederic Durand Date
Witness Signature	
Witness Signature	
Inventor	Date
	Szu-Po Wang
Witness Signature	
Witness Signature	

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned Wojciech Matusik of 7 Holmes Road, Lexington, MA 02420, Szu-Po Wang of 542 Grant Avenue, San Francisco, CA 94108, Piotr K. Didyk of Schlossbergstrasse 9, Homburg, Germany 66424, William T. Freeman of 16 Half Moon Hill, Acton, MA 01720, and Frederic Durand of 17 Kingston Street, Somerville, MA 02144 hereby

Sells, assigns and transfers to Massachusetts Institute of Technology, having a place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, its successors, assigns and legal representatives, all hereinafter referred to as the ASSIGNEE, his/her entire right, title and interest for the United States and all foreign countries; in and to any and all inventions which are disclosed in the application for United States Letters Patent "3DTV at Home: Eulerian-Lagrangian Stereo-to-Multi-view Conversion", filed June 5, 2017 and given serial number 62/515193 (Attorney Docket No.: 19670.123727) in and to said application and all divisional, continuing, substitute, renewal, reissue, reexamination or other application for Letters Patent which has been or shall be filed in the United States or any foreign country on any of said inventions, and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said inventions including the right to apply for patent rights in each foreign country and all rights to priority.

Agrees that said ASSIGNEE may apply for and receive Letters Patent for said inventions in its own name and when requested, without charge to but at the expense of said ASSIGNEE, agrees to carry out in good faith the intent and purpose of this Assignment by executing all divisional, continuing, substitute, renewal, reissue, reexamination and all other patent applications on any and all said inventions; by executing all rightful declarations, oaths, assignments and other papers; by communicating to said ASSIGNEE all facts known to him/her relating to said inventions and the history thereof, and generally by doing everything possible which said ASSIGNEE shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said ASSIGNEE. Each of the undersigned also hereby appoints ASSIGNEE as its common agent for purposes of prosecuting international patent applications and any material patent applications for which such common agency is recognized.

Hereby requests the Director of the United States Patent and Trademark Office and non-U.S. patent authorities to issue said Letters Patent to said ASSIGNEE.

Covenants with said ASSIGNEE that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by him/her, and that full right to convey the same as herein expressed is possessed by him/her.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

Page 1 of 6

5/30/2018		
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	international designation of the second	19670.123727
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		19670.123727	
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Witness Address: (6 14-16 / 14-10)	n Vrtl Actori	11072	
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