504476722 07/27/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
MICROSOFT CORPORATION	06/30/2017

RECEIVING PARTY DATA

Name:	MICROSOFT TECHNOLOGY LICENSING, LLC		
Street Address:	ONE MICROSOFT WAY		
City:	REDMOND		
State/Country:	WASHINGTON		
Postal Code:	98052		

PROPERTY NUMBERS Total: 9

Property Type	Number
Patent Number:	8488839
Patent Number:	8059915
Patent Number:	7920748
Patent Number:	7903899
Patent Number:	8364698
Patent Number:	8364660
Patent Number:	9508011
Patent Number:	8379915
Patent Number:	9031974

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NAME OF SUBMITTER:	BIANCA ZHANG
SIGNATURE:	/Bianca Zhang/

PATENT REEL: 043117 FRAME: 0985

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DATE SIGNED: 07/27/2017

Total Attachments: 3
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PATENT REEL: 043117 FRAME: 0986

ASSIGNMENT OF PATENTS AND APPLICATIONS

1. <u>ASSIGNMENT</u>

Microsoft Corporation, a corporation organized under the laws of Washington ("ASSIGNOR"), hereby sells, assigns, transfers, and conveys to

Microsoft Technology Licensing, LLC, a limited liability company organized under the laws of Washington ("ASSIGNEE"),

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Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor assigns and transfers to the Assignee and the Assignee's legal representatives, successors and assigns, its full and exclusive rights in and to the Intellectual Property in the U.S. and every foreign country, and its entire right, title, and interest in and to the Intellectual Property and related applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the Intellectual Property.

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ASSIGNMENT OF PATENTS AND APPLICATIONS

- (2) ASSIGNOR grants to ASSIGNEE and its agents authority and power to insert on this instrument any further identification necessary or desirable for purposes of recordation in the Patent and Trademark Office of any country.
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- (4) This assignment will become effective on the date when both ASSIGNOR and ASSIGNEE have signed it.

ASSIGNOR		1/1	
June 30, 2017 [Date]	Signature of[Keith	R. Dolliver, Assistan	for ASSIGNOR t Secretary]
<u>ASSIGNEE</u>			
June 30, 2017 [Date]	Signature of(Bei	njamin Ø. Orndorff, S	for ASSIGNEE. Secretary

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ASSIGNMENT OF PATENTS AND APPLICATIONS

EXHIBIT A

	G con Principles		Filing Date	
United States Of America	8488839	11/687341	16 Mar 2007	Computer program and apparatus for motion-based object extraction and tracking in video
United States Of America	8059915	11/984670	20 Nov 2007	Apparatus for and method of robust motion estimation using line averages
United States Of America	7920748	11/802498	23 May 2007	Apparatus and software for geometric coarsening and segmenting of still images
United States Of America	7903899	11/802499	23 May 2007	Method of geometric coarsening and segmenting of still images
United States Of America	8364698	12/502202	13 Jul 2009	Apparatus and software system for and method of performing a visual-relevance-rank subsequent search
United States Of America	8364660	12/502206	13 Jul 2009	Apparatus and software system for and method of performing a visual-relevance-rank subsequent search
United States Of America	9508011	13/104793	10 May 2011	VIDEO VISUAL AND AUDIO QUERY
United States Of America	8379915	11/687261	16 Mar 2007	Method of performing motion-based object extraction and tracking in video
United States Of America	9031974	13/619550	14 Sep 2012	APPARATUS AND SOFTWARE SYSTEM FOR AND METHOD OF PERFORMING A VISUAL- RELEVANCE-RANK SUBSEQUENT SEARCH

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