505888109 01/29/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5934867

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
POHSIANG HSU	06/25/2013
CHIH-LUNG LIN	04/07/2003
MING-CHIEH LEE	07/15/2013
THOMAS W. HOLCOMB	04/07/2003
SRIDHAR SRINIVASAN	06/24/2013

RECEIVING PARTY DATA

Name:	MICROSOFT CORPORATION
Street Address:	ONE MICROSOFT WAY
City:	REDMOND
State/Country:	WASHINGTON
Postal Code:	98052

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16775107

CORRESPONDENCE DATA

Fax Number: (503)595-5301

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Address Line 2: ONE WORLD TRADE CENTER
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ATTORNEY DOCKET NUMBER:	3382-62598-15
NAME OF SUBMITTER:	KYLE B. RINEHART
SIGNATURE:	/Kyle B. Rinehart/
DATE SIGNED:	01/29/2020
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Total Attachments: 9

PATENT REEL: 051654 FRAME: 0727

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PATENT REEL: 051654 FRAME: 0728

PATENT ASSIGNMENT

I, Pohsiang Hsu ("ASSIGN inventor of subject matter ("INV application entitled "VIDEO COE SWITCHING AND SUB-BLOCK TR	ENTION") disclosed an DING / DECODING WITI	d/or claimed in a patent H MOTION RESOLUTION	nt
legal representa Street, Suite 160 customer numb insert here in pa No. <u>13/943,665</u> I	itives, of Klarquist Spa 20, Portland, OR 9720 er 26119, (ASSIGNEE'S arentheses (filed on $\frac{7}{2}$ by the following Office ce) this APPLICATION's	rizes, and requests, ASSK rkman, LLP, 121 SW Salm 4, who are associated with LEGAL REPRESENTATIVE (16/2013), and given Appl E: United States Patent and Application No. filing da	non th S) to ication d
		Application No	
Microsoft Corporation, a successors and assigns ("ASSIGI entire and exclusive rights, title (and all other applications and papplications, in and for the Unit ("APPLICATION DERIVATIVES"));	NEE"), is entitled to, an and interest in the IN' patents derived therefr	d is desirous of acquiring VENTION and the APPLICATION, such as continuing	g, the ATION
ASSIGNOR hereby author to insert the Application No., fil APPLICATION DERIVATIVES after	ing date, and Office in		
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Page 1 of 2

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR'S entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES):

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

Orlin Han	6/25/2013	
inventor's Signature	Date	
Pohsiang Hsu		
Printed Name in English	Printed Name in Native Lang	uage (if
	other than English)	

PATENT ASSIGNMENT

I, Ming-Chieh Lee ("ASSIG inventor of subject matter ("INVE	NOR"), am the original inv :NTION") disclosed and/or	
application entitled "VIDEO COD		•
SWITCHING AND SUB-BLOCK TR	*	
legal representa Street, Suite 160 customer numbe insert here in pa No. <u>13/943,665</u> b	tives, of Klarquist Sparkmand, OR 97204, wher 26119, (ASSIGNEE'S LEG rentheses (filed on 7/16/20) or the following Office: United this APPLICATION's App	no are associated with AL REPRESENTATIVES) to 113 , and given Application
	and was given App fice "United States Patent a	
Microsoft Corporation, a successors and assigns ("ASSIGN entire and exclusive rights, title (and all other applications and papplications, in and for the Unite ("APPLICATION DERIVATIVES"));	and interest in the INVENT atents derived therefrom,	desirous of acquiring, the TON and the APPLICATION such as continuing
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to insert the Application No., fili APPLICATION DERIVATIVES after	ng date, and Office into th	
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Page 1 of 2

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR'S entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

Inventor's Signature

Ming-Chieh Lee

Printed Name in English

Date _

Printed Name in Native Language (if

other than English)

PATENT ASSIGNMENT

inventor of subject matter application entitled "VIDEC SWITCHING AND SUB-BLO Will be file legal representations of the subject	("INVENTION") disclosed CODING / DECODING WOLLD CODING / DECODING WOLLD CODING WOLLD CODING WOLLD CODING WITH CODING WITH CODING	ITH MOTION RESOLUTION	nt N SIGNEE'S Ilmon with VES) to oplication and
		ven Application No Patent and Trademark Of	
successors and assigns ("a entire and exclusive rights (and all other applications applications, in and for th ("APPLICATION DERIVATIV	ASSIGNEE"), is entitled to, i, title and interest in the and patents derived there United States, its territors"); uthorizes, and requests, io., filing date, and Office	INVENTION and the APPL refrom, such as continuin ories, and all foreign coun	ing, the ICATION 9 tries SENTATIVES
Application No.	Filing Date	Office	

Page 1 of 2

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR'S entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

Addis	6/24/2013
Inventor's Signature	Date
Sridhar Srinivasan	
Printed Name in English	Printed Name in Native Language (if other than English)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial Number	
Filing Date	
Inventorship	Holcomb et al.
Amicant	Microsoft Corporation
Attorney's Docket No.	
MS Docket No.	
THE STIRBLOCK TRANSFORM CODING OF PRE	DICTION RESIDUALS

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

Thomas W. Holcomb 20405 S.E. 28th Avenue Bothell, WA 98012

Chih-Lung Lin 17209 N.E. 95th Street Redmond, WA 98052

Assignee:

Microsoft Corporation Corporation in the State of Washington One Microsoft Way Redmond, WA 98052

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "SUB-BLOCK TRANSFORM CODING OF PREDICTION RESIDUALS," as described and claimed in the specification forming part of an application for United States letters patent referenced above;

WHEREAS, Microsoft Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at One Microsoft Way, Redmond, WA 98052, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

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PATENT REEL: 051654 FRAME: 0736 4/7/2003

Thomas W. Holcomb

4(7/2003)

Chih-Lung Lin