504482082 07/31/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4528784

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
JONATHAN CHRISTEN		04/27/2015
JOHN CHARLES HOWARD		04/24/2015
MARCUS TANNER		04/24/2015
BEN SUGDEN		04/24/2015
ROBERT C. MEMMOTT		04/24/2015
KENNETH CHARLES OUELLETT	E	04/24/2015
ALEX KIPMAN		04/24/2015
TODD ALAN OMOTANI		04/24/2015
JAMES T. REICHERT JR.		04/24/2015
		i.

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14698514

CORRESPONDENCE DATA

Fax Number: (425)936-7329 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. Phone: 425-707-9382 Email: usdocket@microsoft.com MICROSOFT CORPORATION Correspondent Name: Address Line 1: ONE MICROSOFT WAY Address Line 4: REDMOND, NORTH CAROLINA 98052 ATTORNEY DOCKET NUMBER: 356790.01 (WHG15306)

CATHERINE POLANCE

PATENT REEL: 043149 FRAME: 0523

NAME OF SUBMITTER:

SIGNATURE:	/Catherine Polance/
DATE SIGNED:	07/31/2017
Total Attachments: 18	
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I Jonathan Christen ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "PRODUCING AND CONSUMING METADATA WITHIN MULTI-DIMENSIONAL DATA" ("APPLICATION"), which:

> ☑ will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative, Microsoft Technology Licensing, LLC., One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on <u>April 28, 2015</u> and given Application No. <u>14/698,514</u> by the following Office ______) this APPLICATION's Application No., filing date, and Office, when known;

was filed on ______ and was given Application
No ______ by the following Office
"_____";

Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

Application No.	Filing Date	Office

PATENT ASSIGNMENT MS Docket No. WHG15306

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, <u>ASSIGNOR's</u> entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("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).

Invertor's Signature

Jonathan Christen Printed Name in English 4/27/15

Date

Printed Name in Native Language (if other than English) I John Charles Howard ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "PRODUCING AND CONSUMING METADATA WITHIN MULTI-DIMENSIONAL DATA" ("APPLICATION"), which:

> ☑ will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative, Microsoft Technology Licensing, LLC., One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on <u>April 28, 2015</u> and given Application No. <u>14/698,514</u> by the following Office ______) this APPLICATION's Application No., filing date, and Office, when known;

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Application No.	Filing Date	Office

A. C. Han	4.24.2015
Inventor's Signature	Date
John Charles Howard	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>Marcus Tanner</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>PRODUCING AND CONSUMING METADATA WITHIN MULTI-DIMENSIONAL DATA</u>" ("APPLICATION"), which:

> ☑ will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative, Microsoft Technology Licensing, LLC., One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on <u>April 28, 2015</u> and given Application No. <u>14/698,514</u> by the following Office ______) this APPLICATION's Application No., filing date, and Office, when known;

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M	4/24/15	
Inventor's Signature	Date	
Marcus Tanner		
Printed Name in English	Printed Name in Native Language	
	(if other than English)	

Page 2 of 2

PATENT REEL: 043149 FRAME: 0530 I <u>Ben Sugden</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>PRODUCING AND CONSUMING METADATA WITHIN MULTI-DIMENSIONAL DATA</u>" ("APPLICATION"), which:

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Application No.	Filing Date	Office

bventor's Signature Date Ben Sugden Printed Name in English Printed Name in Native Language (if other than English)

I <u>Robert C. Memmott</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>PRODUCING AND CONSUMING METADATA WITHIN MULTI-</u><u>DIMENSIONAL DATA</u>" ("APPLICATION"), which:

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Application No.	Filing Date	Office

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MAD C MUSZ

Inventor's Signature

24/2015

Date

Robert C. Memmott Printed Name in English

Printed Name in Native Language (if other than English)

Page 2 of 2

PATENT REEL: 043149 FRAME: 0534 I <u>Kenneth Charles Ouellette</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>PRODUCING AND CONSUMING METADATA WITHIN MULTI-</u><u>DIMENSIONAL DATA</u>" ("APPLICATION"), which:

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Application No.	Filing Date	Office

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Inventor's Signature

Kenneth Charles Ouellette Printed Name in English

Printed Name in Native Language (if other than English)

> PATENT REEL: 043149 FRAME: 0536

Page 2 of 2

I <u>Alex Kipman</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>PRODUCING AND CONSUMING METADATA WITHIN MULTI-DIMENSIONAL DATA</u>" ("APPLICATION"), which:

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Application No.	Filing Date	Office

	4-24-2015	
Inventor's Signature	Date	
Alex Kipman		
Printed Name in English	Printed Name in Native Language	
	(if other than English)	

I <u>Todd Alan Omotani</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>PRODUCING AND CONSUMING METADATA WITHIN MULTI-</u><u>DIMENSIONAL DATA</u>" ("APPLICATION"), which:

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Application No.	Filing Date	Office

ònatur Invente

Todd Alan Omotani Printed Name in English

Printed Name in Native Language (if other than English)

I James T. Reichert, Jr. ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "PRODUCING AND CONSUMING METADATA WITHIN MULTI-DIMENSIONAL DATA" ("APPLICATION"), which:

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Invèntor's Sidnature Date James T. Reichert, Jr.

Printed Name in English

Printed Name in Native Language (if other than English)

PATENT REEL: 043149 FRAME: 0542

Page 2 of 2

RECORDED: 07/31/2017