503081946 12/02/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3128551

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZHEN LIU	11/05/2014
BOBBY CHIU CHUN MAK	11/13/2014
MICHAEL TIMOTHY FISCHER	12/01/2014
YET LUONG HUYNH	11/17/2014
CHEN LIU	12/01/2014
XIN PENG	11/12/2014
JOE ZHU	11/12/2014
JINGMEI JESSICA LI	11/11/2014
CHUNYI LIU	11/05/2014

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:	14557318

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: 4257079382

Email: usdocket@microsoft.com

ASSAL MEFTAHI Correspondent Name:

Address Line 1: ONE MICROSOFT WAY

Address Line 2: PATENT DOCKETING GROUP DEPT Address Line 4: REDMOND, WASHINGTON 98052

ATTORNEY DOCKET NUMBER: 355247.02

MICHAEL B. DODD NAME OF SUBMITTER:

REEL: 034307 FRAME: 0104 503081946

PAIENI

SIGNATURE:	/Michael B. Dodd/
DATE SIGNED:	12/02/2014
Total Attachments: 18	
source=355247-02-Assignment#page1.t	if
source=355247-02-Assignment#page2.t	if
source=355247-02-Assignment#page3.t	if
source=355247-02-Assignment#page4.t	if
source=355247-02-Assignment#page5.t	if
source=355247-02-Assignment#page6.t	if
source=355247-02-Assignment#page7.t	if
source=355247-02-Assignment#page8.t	if
source=355247-02-Assignment#page9.t	if
source=355247-02-Assignment#page10	.tif
source=355247-02-Assignment#page11	.tif
source=355247-02-Assignment#page12	.tif
source=355247-02-Assignment#page13	.tif
source=355247-02-Assignment#page14	.tif
source=355247-02-Assignment#page15	.tif
source=355247-02-Assignment#page16	.tif

source=355247-02-Assignment#page17.tif source=355247-02-Assignment#page18.tif

PATENT REEL: 034307 FRAME: 0105

I Zhen Liu ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "MANAGING DATA-DRIVEN SERVICES" ("APPLICATION"), which: will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on December 1, 2014 and given No. 14/557,318 Application by the Office U.S. Patent 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 Corporation, a Washington Corporation, 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 in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")): ASSIGNOR hereby authorizes. and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known; Application No. Filing Date Office

Page 1 of 2

MS Docket No.: 355247.02

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

Zhen Liu

Printed Name in English

Date

Printed Name in Native Language

MS Docket No.: <u>355247.02</u>

MS Docket No.: 355247.02 I Bobby Chiu Chun Mak ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "MANAGING DATA-DRIVEN SERVICES" ("APPLICATION"), which: ASSIGNOR hereby authorizes, and requests, \boxtimes will be filed. ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on December 1, 2014 and given 14/557,318 following No. by the Application Office U.S. Patent Office this APPLICATION's Application No., filing date, and Office, when known; was filed on _____ and was given Application No ______ by the following Office n n, Microsoft Corporation, a Washington Corporation, 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 in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")): requests, ASSIGNEE'S LEGAL authorizes. and hereby ASSIGNOR REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known; Office Application No. Filing Date

			Ä,	
Page	}	of	2	

MS Docket No.: <u>355247.02</u>

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

Bobby Chiu Chun Mak

Printed Name in English

Date

Printed Name in Native Language

I <u>Mic</u> ł	nael Timothy Fisch	<u>er</u> ("ASSIGNOR") am the o	riginal inventor or an origina
joint invento	r of subject matte	er ("INVENTION") disclose	d and/or claimed in a paten
application e	ntitled " <u>MANAGINC</u>	<u>G DATA-DRIVEN SERVICES"</u>	' ("APPLICATION"), which:
\boxtimes	will be filed.	ASSIGNOR hereby auth	orizes, and requests,
	ASSIGNEE'S legal	representatives, of the Lav	w and Corporate Affairs
	Department, Micro	osoft Corporation, One Mi	icrosoft Way, Redmond,
	Washington 9805	2 (ASSIGNEE'S LEGAL REPR	ESENTATIVES), to insert
		eses (filed on <u>Decembe</u>	
		o. <u>14/557,318</u>	-
		nt Office	•
		iling date, and Office, whe	
	was filed on	and was given	Application
	No	by the following Office	2
	" <u> </u>	".	
successors a entire and ex (and all oth applications,	nd assigns ("ASSIO xclusive rights, titl ner applications a	GNEE"), is entitled to, and le and interest in the INV and patents derived the	n, on behalf of itself and its is desirous of acquiring, the ENTION and the APPLICATION erefrom, such as continuing es, and all foreign countries
	•	•	uests, ASSIGNEE'S LEGAL
		· ·	g date, and Office into the
		TION DERIVATIVES after th	
Application N	10.	Filing Date	Office
	l l		

MS Docket No.: <u>355247.02</u>

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);

	2014 - 171
	<u> </u>
Inventor's Signature	Date
Michael Timothy Fischer	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Yet Luong Huynh ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "MANAGING DATA-DRIVEN SERVICES" ("APPLICATION"), which: will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on December 1, 2014 and given Application . No. 14/557,318 by the Office U.S. Patent 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 Corporation, a Washington Corporation, 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 in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")): **ASSIGNOR** hereby authorizes. and requests. ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known; Application No. Filing Date Office

Page 1 of 2

PATENT REEL: 034307 FRAME: 0112

MS Docket No.: 355247.02

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

Yet Luong Huynh

Printed Name in English

Date

Printed Name in Native Language

MS Docket No.: 355247.02

I <u>Chen Liu</u> ("ASSIGNOR") subject matter ("INVENTION") d " <u>MANAGING DATA-DRIVEN SER</u>	isclosed and/or claimed i	
ASSIGNEE'S legal of Department, Micro Washington 9805. here in parenth Application No Office <u>U.S. Pater</u>	ASSIGNOR hereby authorepresentatives, of the Law osoft Corporation, One Miles (ASSIGNEE'S LEGAL REPRESES (filed on December 14/557,318 ont Office on Office, when the December 18 of the December 19 of the	w and Corporate Affairs icrosoft Way, Redmond, ESENTATIVES), to insert er 1, 2014 and given by the following this APPLICATION's
\square was filed on	and was given	Application
	by the following Office	
«		-
Microsoft Corporation, a successors and assigns ("ASSIC entire and exclusive rights, titl (and all other applications a applications, in and for the U ("APPLICATION DERIVATIVES"));	GNEE"), is entitled to, and e and interest in the INV and patents derived the	ENTION and the APPLICATION erefrom, such as continuing
ASSIGNOR hereby	authorizes, and requ	uests, ASSIGNEE'S LEGAL
REPRESENTATIVES to insert the		
following table for any APPLICA		
Application No.	Filing Date	Office

MS Docket No.: 355247.02

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);

Chen La	2014-12-01
Inventor's Signature	Date
Chen Liu	ŻIĘ.
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Xin Peng ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "MANAGING DATA-DRIVEN SERVICES" ("APPLICATION"), which:
will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on December 1, 2014 and given Application No. 14/557,318 by the following Office U.S. Patent Office) this APPLICATION'S Application No., filing date, and Office, when known;
was filed on and was given Application
Noby the following Office
Microsoft Corporation, a Washington Corporation, 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 in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));
ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL
REPRESENTATIVES to insert the Application No., filing date, and Office into the
following table for any APPLICATION DERIVATIVES after they are known:

	APPLICATION DERIVATIVES : Filing Date		
<u> </u>			
			A
		:	

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);

	11/12/2014
Inventor's Signature	Date
Xin Peng	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>Joe Zhu</u> ("ASSIGNOR") subject matter ("INVENTION") d " <u>MANAGING DATA-DRIVEN SER</u>	isclosed and/or claimed i	• • •
ASSIGNEE'S legal Department, Micr Washington 9805 here in parenth Application No	ASSIGNOR hereby authorepresentatives, of the Latosoft Corporation, One M2 (ASSIGNEE'S LEGAL REPReses (filed on <u>Decembers</u>). 14/557,318 ont Office	w and Corporate Affairs icrosoft Way, Redmond, RESENTATIVES), to insert er 1, 2014 and given by the following this APPLICATION's
No	and was given by the following Offic ";	
Microsoft Corporation, successors and assigns ("ASSIGE entire and exclusive rights, title (and all other applications applications, in and for the U"APPLICATION DERIVATIVES"));	GNEE"), is entitled to, and le and interest in the INV and patents derived the	ENTION and the APPLICATION erefrom, such as continuing
ASSIGNOR hereby REPRESENTATIVES to insert to following table for any APPLICA	he Application No., filin	
Application No.	Filing Date	Office

MS Docket No.: 355247.02

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);

Toe Zhio	2014.11.12
Inventor's Signature	Date
Joe Zhu	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT MS Docket No.: 355247.02 I Jingmei Jessica Li ("ASSICNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "MANAGING DATA-DRIVEN SERVICES" ("APPLICATION"), which: will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on December 1, 2014 and given 14/557,318 Application No. by the following Office U.S. Patent Office Application No., filing date, and Office, when known; was filed on ______ and was given Application No ______ by the following Office Microsoft Corporation, a Washington Corporation, 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 in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")): ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known; Application No. Filing Date Office

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);

MS Docket No.: 355247.02

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 Date

Jingmei Jessica Li

Printed Name in English Printed Name in Native Language

of subject matt		osed and/or cla	or or an original joint invento imed in a patent application TON"), which:
ASS Dep Wa her App Off	SIGNEE'S legal represen partment, Microsoft Co shington 98052 (ASSIG e in parentheses (fi plication No. <u>14</u>	tatives, of the Lav rporation, One M NEE'S LEGAL REPR led on <u>Decemb</u> /557,318) this APPLICATION's
☐ was	s filed on	and was given	Application
	by th		
		".	
successors and entire and exclu (and all other	assigns ("ASSIGNEE"), i sive rights, title and ir applications and pat and for the United S	s entitled to, and nterest in the INV ents derived the	n, on behalf of itself and its I is desirous of acquiring, the ENTION and the APPLICATION erefrom, such as continuing ies, and all foreign countries
ASSIGNOR	R hereby authoriz	es. and regi	uests, ASSIGNEE'S LEGAI
	•	•	g date, and Office into the
following table fo	or any APPLICATION DE	RIVATIVES after th	ney are known;
Application No.	Filing D	ate	Office

MS Docket No.: <u>355247.02</u>

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):

Chung. Low	2014-11-07
Inventor's Signature	Date
Chunyi Liu	刘备被
Printed Name in English	Printed Name in Native Language
	(if other than English)