505397599 03/27/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5444393

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NIKHIL TELETIA	01/30/2014
VINITHA REDDY GANKIDI	01/30/2014
ALAN D. HALVERSON	01/31/2014
JIGNESH M. PATEL	01/30/2014

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:	15650827

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 MICROSOFT CORPORATION **Correspondent Name:** Address Line 1: ONE MICROSOFT WAY

Address Line 4: **REDMOND, WASHINGTON 98052**

ATTORNEY DOCKET NUMBER: 340913-US-CNT NAME OF SUBMITTER: **HEIDI LAUMAN SIGNATURE:** /HEIDI LAUMAN/ **DATE SIGNED:** 03/27/2019

Total Attachments: 8

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PATENT REEL: 048719 FRAME: 0349 505397599

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PATENT REEL: 048719 FRAME: 0350

	PATENT A	ASSIGNMENT	MS Docket No.: 340913.0
inventor of	subject matter ("INVENTION") disclosed	nventor or an original join and/or claimed in a paten PLIT INDEX" ("APPLICATION"
	ASSIGNEE'S legal in Department, Micro Washington 9805 here in parenth Application No. 14	ASSIGNOR hereby authorepresentatives, of the Lavosoft Corporation, One Mi (ASSIGNEE'S LEGAL REPReses (filed on January 31 / 170,493 by the following date, and Office, whe	v and Corporate Affairs crosoft Way, Redmond, ESENTATIVES), to insert , 2014 and given wing Office <u>US – United</u> this APPLICATION's
		and was given by the following Office ";	
successors a entire and e INVENTION therefrom, s	ind assigns ("ASSIO exclusive rights, ti and the APPLICAT uch as continuing	ONEE"), is entitled to, and tle and interest, including TON (and all other appl	n, on behalf of itself and it is desirous of acquiring, th g the right of priority, in th ications and patents derive in part, in and for the Unite TON DERIVATIVES"));
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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).

Vished Fertia	01/30/2014
Inventor's Signature	Date
Nikhil Teletia	निरिग्ल टैजीटचा
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT MS Docket No.: 340913.01

joint inventor of subject	matter ("INVENTION")	n the original inventor or an disclosed and/or claimed in a WITH SPLIT INDEX" ("APPLICA	paten
ASSIGNEE'S Department Washington here in pa Application States Pate	legal representatives, of Microsoft Corporation, 98052 (ASSIGNEE'S LEG rentheses (filed on J No. 14/170,493 by t	oy authorizes, and requests of the Law and Corporate Affair one Microsoft Way, Redmond AL REPRESENTATIVES), to insertanuary 31, 2014 and given the following Office US – United Office) this APPLICATION ice, when known;	s , t n <u>d</u>
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successors and assigns (entire and exclusive righed in the APF therefrom, such as continuates, its territories, and ASSIGNOR hereles	"ASSIGNEE"), is entitled its, title and interest, its call other and all other applications, in wall foreign countries ("Aby authorizes, and sert the Application N	rporation, on behalf of itself to, and is desirous of acquiring the right of priority, her applications and patents whole or in part, in and for the PPLICATION DERIVATIVES")); I requests, ASSIGNEE'S o., filing date, and Office in after they are known:	ing, the , in the derived United
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DATENIT A COLCAIMENT

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).

Vinitha	Jan 30, 2014
Inventor's Signature	Date
Vinitha Reddy Gankidi	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT MS Docket No.: 340913.01

inventor of subject matter	("INVENTION") disc	original inventor or an original jo losed and/or claimed in a pat WITH SPLIT INDEX" ("APPLICATION	ent
ASSIGNEE'S leg Department, M Washington 98 here in parer Application No. States Patent	al representatives, of icrosoft Corporation, 052 (ASSIGNEE'S LEGA atheses (filed on <u>Ja</u> by th	y authorizes, and requests, the Law and Corporate Affairs One Microsoft Way, Redmond, AL REPRESENTATIVES), to insert anuary 31, 2014 and given the following Office US - United Office) this APPLICATION's te, when known;	
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successors and assigns ("AS entire and exclusive rights, INVENTION and the APPLIC	SIGNEE"), is entitled to title and interest, in ATION (and all other of applications, in wh	poration, on behalf of itself and to, and is desirous of acquiring, including the right of priority, in applications and patents deripole or in part, in and for the Unipplication DERIVATIVES"));	the the vec
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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

Alan D. Halverson

Printed Name in English

Printed Name in Native Language

(if other than English)

PATENT ASSIGNMENT MS Docket No.: 340913.01

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l Jignesh M. Patel ("ASS inventor of subject matter (application entitled "EXTERNA which:	"INVENTION") disclosed	•
ASSIGNEE'S legal of Department, Microby Washington 9805 here in parenth Application No. 14 States Patent Application No., fi	ASSIGNOR hereby authorepresentatives, of the Law osoft Corporation, One Mice (ASSIGNEE'S LEGAL REPRESES (filed on January 32 July 170,493 by the following date, and Office, whe and was given and was given	v and Corporate Affairs crosoft Way, Redmond, ESENTATIVES), to insert 1,2014 and given wing Office US – United this APPLICATION's n known;
	by the following Office	
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Microsoft Corporation, successors and assigns ("ASSICentire and exclusive rights, titelling and the APPLICAT therefrom, such as continuing States, its territories, and all for	GNEE"), is entitled to, and tle and interest, including TON (and all other appl applications, in whole or	g the right of priority, in the ications and patents derived in part, in and for the United
ASSIGNOR hereby	authorizes, and requ	uests, ASSIGNEE'S LEGAL
REPRESENTATIVES to insert the	ne Application No., filing	g date, and Office into the
following table for any APPLICA	TION DERIVATIVES after th	ney are known;
Application No.	Filing Date	Office

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).

Quille.	January 30, 2014	
Inventor's Signature	Date	
Jignesh M. Patel		
Printed Name in English	Printed Name in Native Language	
	(if other than English)	

RECORDED: 03/27/2019