505789075 11/22/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FINBARR DUGGAN	06/07/2016
DAVID GROCHOCKI JR.	06/06/2016
JEFF WEST	06/07/2016

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:	16693096

CORRESPONDENCE DATA

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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.

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MICROSOFT CORPORATION **Correspondent Name:**

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

ATTORNEY DOCKET NUMBER:	359536-US-CNT
NAME OF SUBMITTER:	CATHERINE POLANCE
SIGNATURE:	/Catherine Polance/
DATE SIGNED:	11/22/2019

Total Attachments: 6

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PATENT REEL: 051093 FRAME: 0097

EPAS ID: PAT5835903

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PATENT REEL: 051093 FRAME: 0098

PATENT ASSIGNMENT MS Docket No.: 359536.02

l <u>Finb</u>	<u>arr Duggan</u> ("ASSIC	GNOR") am the original i	nventor or an original joint
inventor of	subject matter ("I	NVENTION") disclosed a	nd/or claimed in a patent
application e	ntitled " <u>MAP NOTES</u>	" ("APPLICATION"), which:	
\boxtimes	will be filed.	ASSIGNOR hereby autho	rizes, and requests,
	ASSIGNEE'S legal r	epresentative, Microsoft	Technology Licensing,
	LLC, One Microsoft	Way, Redmond, Washingt	on 98052 (ASSIGNEE'S
	LEGAL REPRESENTA	TIVES), to insert here in pa	arentheses (filed on
	June 7, 2016	_ and given Application N	_{D.} 15/176,066 by
	the following Offic	e U.S. Patent and Trademark	Office) this
	APPLICATION'S App	olication No., filing date, ar	nd Office, when known;
	was filed on	and was given A	pplication No
		fice "	
	,		,
Micros	oft Technology Lice	ensing, LLC, a Washington	limited liability company, on
behalf of itse	If and its successors	and assigns ("ASSIGNEE"),	is entitled to, and is desirous
of acquiring,	the entire and exc	clusive rights, title and in	terest, including the right of
priority, in th	e INVENTION and ti	he APPLICATION (and all o	ther applications and patents
derived there	from, such as cont	inuing applications, in wh	ole or in part, in and for the
United States	, its territories, and	all foreign countries ("APF	PLICATION DERIVATIVES"));
ASSIGN	NOR hereby authoris	zes, and requests, ASSIGN	EE'S LEGAL REPRESENTATIVES
to insert the	Application No., fi	ling date, and Office into	the following table for any
APPLICATION	DERIVATIVES after	they are known;	
Application	No.	Filing Date	Office
16/693,096		November 22, 2019	U.S. Patent and Trademark Office

PATENT ASSIGNMENT

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, 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).

Inventor's Signature

Finbarr Duggan

Printed Name in English

Printed Name in Native Language (if other than English)

MS Docket No.: 359536.02

PATENT ASSIGNMENT MS Docket No.: 359536.02

I <u>David Grochocki Jr.</u> ("A	SSIGNOR") am the origina	al inventor or an original joint
inventor of subject matter ("INVENTION") disclosed	and/or claimed in a patent
application entitled "MAP NOTE		•
NAMES AND ASSESSMENT OF THE PROPERTY OF THE PR	ASSIGNOR hereby auth	
•	representative, Microsoft	tier r
,	ft Way, Redmond, Washing	· ·
	ATIVES), to insert here in $ $,
	and given Application N	
	ce U.S. Patent and Tradema	
APPLICATION'S A	application No., filing da	ate, and Office, when
known;		
was filed on	and was given	Application No
by the following C	Office "	".
,		,
Microsoft Technology Lie	censing, LLC, a Washingto	n limited liability company, on
behalf of itself and its succe	-	•
	_	
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, suc		• •
	<u> </u>	•
for the United States, its territories, and all foreign countries ("APPLICATION		
DERIVATIVES"));		
ASSICNOD harehy	authorized and regi	uests, ASSIGNEE'S LEGAL
REPRESENTATIVES to insert the		
following table for any APPLICA		
Application No.	Filing Date	Office
16/693,096	November 22, 2019	U.S. Patent and Trademark Office
10/030,030	14040111001 22, 2010	Sign atom and mademain chies

PATENT ASSIGNMENT

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, 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).

Vaid Geodescli V.	6/6/2016
Inventor's Signature	Date
David Grochocki Jr.	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 359536.02

PATENT.	ASSIGNMENT	MS Docket No.: <u>359536.02</u>
subject matter ("INVENTION") o	lisclosed and/or claimed	
LLC, One Microso LEGAL REPRESENT June 7, 2016	representative, Microsoft ft Way, Redmond, Washing ATIVES), to Insert here in p and given Application N ceU.S. Patent and Trademan	oton 98052 (ASSIGNEE'S parentheses (filed on by
APPLICATION's A	application No., filing da	ite, and Office, when
was filed on	and was given	Application No
by the following (Office "	M.
Microsoft Technology Lipbehalf of Itself and its succe desirous of acquiring, the entiright of priority, in the INVENTI patents derived therefrom, sucfor the United States, its DERIVATIVES"));	ssors and assigns ("ASSK re and exclusive rights, ti ON and the APPLICATION (h as continuing applicatio	tle and interest, including the (and all other applications and ns, in whole or in part, in and
REPRESENTATIVES to insert t		g date, and Office into the
following table for any APPLICA Application No.	Filing Date	Office
16/693,096	November 22, 2019	U.S. Patent and Trademark 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, 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).

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	6/7/16
Inventor's Signature	Date
Jeff West	
Printed Name in English	Printed Name in Native Language
	(if other than English)