PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4479610

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SCOTT WOLTMAN	10/28/2015
STEVEN JOHN ROBBINS	11/05/2015
R. ANDREW WALL	10/29/2015
TUOMAS VALLIUS	10/27/2015
TAPANI LEVOLA	11/10/2015
PASI KOSTAMO	10/30/2015

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:	14936973

CORRESPONDENCE DATA

Fax Number: (415)489-4150

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: 415-489-4100

Email: hkim@vierramagen.com, usdocket@microsoft.com

Correspondent Name: JEFFREY R. KURIN

Address Line 1: 575 MARKET STREET, SUITE 3750 Address Line 4: SAN FRANCISCO, CALIFORNIA 94105

ATTORNEY DOCKET NUMBER:	MSFT-01874US0
NAME OF SUBMITTER:	JEFFREY R. KURIN
SIGNATURE:	/Jeffrey R. Kurin/
DATE SIGNED:	06/27/2017

Total Attachments: 12

PATENT REEL: 042826 FRAME: 0047

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PATENT REEL: 042826 FRAME: 0048

	PATEN	r assignment	Docket No.:	<u>358115.01</u>
l	Scott Wol	tman	("ASSIGNOR	") am the
and/or clain	ned in a patent	al joint inventor of si	ibject matter ("INVENTION " <u>WAVEGUIDE_GRATINGS_T</u>	l") disclosed
⊠	will be filed.	ASSIGNOR hereb	y authorizes, and requ	iests,
	LLC, One Micros	oft Way, Redmond, \ NTATIVES), to inse	crosoft Technology Licen Vashington 98052 (ASSIGI It here in parentheses Dication No. <u>14/936,973</u>	NEE'S (filed
			<u>s Patent and Trademark O</u> filing date, and Office, ^s	
	was filed on	and was	given Application	
	No	by the followin	g Office	
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to insert the	Application No.		ASSIGNEE'S LEGAL REPRES	
Application	No.	Filing Date	Office	

PATENT ASSIGNMENT

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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).

141	10/28/15
Inventor's Signature	Date
Scott Woltman	
Printed Name in English	Printed Name in Native Language
	(if other than English)

Docket No.: 358115.01

PATENT ASSIGNMENT Docket No.: 358115.01 _____ ("ASSIGNOR") am the I _____ Steven John Robbins original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "WAVEGUIDE GRATINGS TO IMPROVE INTENSITY DISTRIBUTIONS" ("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 **November 10, 2015** and given Application No. **14/936,973** by the following Office US – United States Patent and Trademark 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")); 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
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to Ol	5th Nov 2015
Inventor's Signature	Date
Steven John Robbins	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT Docket No.: 358115.01 R. Andrew Wall _____ ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "WAVEGUIDE GRATINGS TO IMPROVE INTENSITY DISTRIBUTIONS" ("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 November 10, 2015 and given Application No. 14/936,973 the following Office <u>US - United States Patent and Trademark Office</u>) 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")); 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

PATENT ASSIGNMENT

Docket No.: 358115.01

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F. Mr. Wew	10(29/14
Inventor's Signature	Date
R. Andrew Wall	
Printed Name in English	Printed Name in Native Language (if other than English)

	PATENT A	SSIGNMENT	Docket No.:	358115.01
inventor or a claimed in a	an original joint inve	entor of subject matter ("IN entitled " <u>WAVEGUIDE GRAT</u> e, which:	NVENTION") discl	osed and/or
X	ASSIGNEE'S legal r LLC, One Microsoft LEGAL REPRESENTA on November 10, 20 the following Office	ASSIGNOR hereby autho epresentative, Microsoft Way, Redmond, Washingt ATIVES), to insert here and given Application US – United States Patent Application Application Application Solution	Technology Licen on 98052 (ASSIG in parentheses No. 14/936,973 and Trademark C	nsing, NEE'S (filed by Office)
		and was given A by the following Office	pplication	
behalf of itse of acquiring priority, in the derived there United States	elf and its successors, the entire and exc ne INVENTION and the efrom, such as cont s, its territories, and	ensing, LLC, a Washington and assigns ("ASSIGNEE"), clusive rights, title and in ne APPLICATION (and all o inuing applications, in wh all foreign countries ("APF	is entitled to, and terest, including ther applications iole or in part, in PLICATION DERIVA	d is desirous the right of and patents and for the ATIVES"));
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PATENT ASSIGNMENT Docket No.: 358115.01

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Tama Vallan	09,20,4 2015	
Inventor's Signature	Date	
Tuomas Vallius		
Printed Name in English	Printed Name in Native Language (if other than English)	

PATENT ASSIGNMENT Docket No.: 358115.01 I ______ ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "WAVEGUIDE GRATINGS TO IMPROVE INTENSITY DISTRIBUTIONS" ("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 November 10, 2015 and given Application No. 14/936,973 by the following Office US – United States Patent and Trademark 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")); 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; Filing Date Office Application No.

358115.01

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2 2	16.16.2015	
Inventor's Signature	Date	
Tapani Levola		
Printed Name in English	Printed Name in Native Language	
	(if other than English)	

PATENT ASSIGNMENT Docket No.: 358115.01 _____ ("ASSIGNOR") am the original I Pasi Kostamo inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "WAVEGUIDE GRATINGS TO IMPROVE INTENSITY DISTRIBUTIONS" ("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 **November 10, 2015** and given Application No. **14/936,973** by the following Office US – United States Patent and Trademark 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")); 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; Filing Date Office Application No.

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D 7.A	in an News
Pat /C	30.10.2015
Inventor's Signature	Date
Pasi Kostamo	
Printed Name in English	Printed Name in Native Language
	(if other than English)