# 504167534 01/06/2017

# **PATENT ASSIGNMENT COVER SHEET**

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4214211

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
STEFFEN VIKEN VALVAG	12/30/2016
AMUND KRONEN JOHANSEN	12/29/2016
DAG STEINNES EIDESEN	01/05/2017
AGE KVALNES	01/02/2017
TOR KREUTZER	01/04/2017
JAN-OVE ALMLI KARLBERG	12/30/2016
PETER DAHLE HEEN	01/06/2017

### **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:	15399975

### **CORRESPONDENCE DATA**

**Fax Number:** (865)380-5999

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:** 612-332-5300

**Email:** usdocket@microsoft.com

**Correspondent Name:** MERCHANT & GOULD (MICROSOFT)

Address Line 1: P.O. BOX 2903

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ATTORNEY DOCKET NUMBER:	14917.3004USU1/400523USNP
NAME OF SUBMITTER:	CHRISTOPHER J. LEONARD
SIGNATURE:	/Christopher J. Leonard/
DATE SIGNED:	01/06/2017

PATENT 504167534 REEL: 040874 FRAME: 0845

# Total Attachments: 14 source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page1.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page2.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page3.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page4.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page5.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page6.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page7.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page8.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page9.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page10.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page11.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page12.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page13.tif source=2017-01-26\_Ex\_Assignments\_ALL\_14917-3004usu1#page13.tif

PATENT REEL: 040874 FRAME: 0846

# PATENT ASSIGNMENT

I <u>Steffen Viken Valvåg</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "UTILIZATION OF PROBABILISTIC CHARACTERISTICS FOR REDUCTION OF GRAPH DATABASE TRAVERSALS" ("APPLICATION"), which:

$\boxtimes$	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
	January 6, 2017 and given Application No. 15/399,975 by
	the following Office <u>US - United States Patent and Trademark</u>
	Office) this APPLICATION's Application No., filing date, and Office,
	when known;
	was filed on and was given Application No.
	by the following Office " <u>United States Patent and Trademark</u> <u>Office</u> ";

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
		3222134407-57 - 2011-101-2011-2011-2011-2011-2011-201

Page 2 of 2

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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"));

Supply Inventor's Signature	30 12 2016 Date
Steffen Viken Valvåg	
Printed Name in English	Printed Name in Native Language
	(if other than English)

### PATENT ASSIGNMENT

I <u>Amund Kronen Johansen</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "UTILIZATION OF PROBABILISTIC CHARACTERISTICS FOR REDUCTION OF GRAPH DATABASE TRAVERSALS" ("APPLICATION"), which:

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Amy John	29/12 2016
Inventor's Signature	Date
Amund Kronen Johansen	
Printed Name in English	Printed Name in Native Language
	(if other than English)

### PATENT ASSIGNMENT

I Dag Steinnes Eidesen ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "UTILIZATION OF PROBABILISTIC CHARACTERISTICS FOR REDUCTION OF GRAPH DATABASE TRAVERSALS" ("APPLICATION"), which:

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by the following Office "United States Patent and Trademark
Office";
Microsoft Technology Licencing LLC a Weekington Limited linking
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
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following table for any APPLICATION DERIVATIVES after they are known;

Office

Page 1 of 2

Filing Date

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Darsbeier	5/4-2017
Inventor's Signature	Date
Dag Steinnes Eidesen	
Printed Name in English	Printed Name in Native Language (if other than English)

### PATENT ASSIGNMENT

I <u>Åge Kvalnes</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "UTILIZATION OF PROBABILISTIC CHARACTERISTICS FOR REDUCTION OF GRAPH DATABASE TRAVERSALS" ("APPLICATION"), which:

$\boxtimes$	will	be	filed.	ASSIGNOR	hereby	authorize	s, and	reque	sts,
	ASSI	GNEE	E'S legal	representat	ive, Micr	osoft Tech	nology	Licensi	ng,
	LLC,	One	Microso	ft Way, Redr	nond, Wa	shington 9	98052 (/	ASSIGNE	E'5
	LEGA	AL RI	EPRESEN <sup>-</sup>	TATIVES), to	insert h	ere in par	enthese	s (filed	on
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	by th	ne fo	llowing (	Office " <u>Unite</u>	d States I	Patent and	<u>Tradem</u>	<u>ark</u>	
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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"));

Ace 16 serves	
Me Kraines	6/07/4
Inventor's Signature	Date
Åge Kvalnes	
Printed Name in English	Printed Name in Native Language
	(if other than English)

### PATENT ASSIGNMENT

I <u>Tor Kreutzer</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "UTILIZATION OF PROBABILISTIC CHARACTERISTICS FOR REDUCTION OF GRAPH DATABASE TRAVERSALS" ("APPLICATION"), which:

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	•

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Application No.	Filing Date	Office
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Tow Kyhre Inventor's Signature	4/1 2017 Date
Tor Kreutzer	
Printed Name in English	Printed Name in Native Language (if other than English)

### PATENT ASSIGNMENT

I Jan-Ove Almli Karlberg ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "UTILIZATION OF PROBABILISTIC CHARACTERISTICS FOR REDUCTION OF GRAPH DATABASE TRAVERSALS" ("APPLICATION"), which:

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	when known;	
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ld	by the following Office "United States Patent and Tradem:	
	by the following office difficult states fatent and states.	
	Office":	

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Application No.	Filing Date	Office	
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Jm-Ox A. Kalbery	30.12.2016
Inventor's Signature	Date
Jan-Ove Almli Karlberg	
Printed Name in English	Printed Name in Native Language
	(if other than English)

# PATENT ASSIGNMENT

l <u>Pete</u>	<u>r Dahle I</u>	<u>Heen</u> ("A	SSIGNO	R") ar	n the origin	nal inv	/entor	or an	origina	al joint
inventor of	subject	matter	("INVEN	TION'	) disclosed	l and	/or c	laimed	in a	patent
application	entitled	"UTILIZA	ATION	OF	PROBABILI	STIC	CHA	RACTER	USTICS	FOR
REDUCTION	OF GRA	<b>NPH DAT</b>	ABASE	TRAV	ERSALS" (".	APPLIC	CATIO	N"), whi	ch:	

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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	6.1.2017 Date
Peter Dahle Heen	
Printed Name in English	Printed Name in Native Language
	(if other than English)

Page 2 of 2

**PATENT** 

REEL: 040874 FRAME: 0860