504668086 12/01/2017 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4714808

UBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ			
		Name		Execution Date
MICHAEL FREEDMAN				10/30/2017
CHETAN NAYAK				10/29/2017
ROMAN LUTCHYN				10/28/2017
TORSTEN KARZIG			10/30/2017	
PARSA BONDERSON				10/30/2017
RECEIVING PARTY DA	ТА			
Name:	MICRO	DSOFT TECHNOLOGY LICENSING,	LLC	
Street Address:		/ICROSOFT WAY		
City:	REDM	OND		
State/Country:	WASH	WASHINGTON		
Postal Code:	98052			
PROPERTY NUMBERS	Total: 1	1		
Property Type		Number		
Application Number:	15636376			
CORRESPONDENCE D Fax Number:	AIA	(503)595-5301		
	e sent te	o the e-mail address first; if that is	unsucces	sful. it will be sent
using a fax number, if µ		d; if that is unsuccessful, it will be		
Phone:		503 595 5300		
Email:	iris.rasanen@klarquist.com			
Correspondent Name:	PATRICK M. BIBLE, KLARQUIST SPARKMAN, LLP			
Address Line 1:	121 SW SALMON STREET, SUITE 1600			
Address Line 2: Address Line 4:	ONE WORLD TRADE CENTER PORTLAND, OREGON 97204			
AUUIESS LIIIE 4.		FURILAND, UNEGUN 9/204		
ATTORNEY DOCKET NU	JMBER:	3382-97623-02		
NAME OF SUBMITTER:		PATRICK M. BIBLE		
SIGNATURE:		/Patrick M. Bible/		
DATE SIGNED:	12/01/2017			
Fotal Attachments: 10				

source=3382-97623-02 - Assignment#page1.tif source=3382-97623-02 - Assignment#page2.tif source=3382-97623-02 - Assignment#page3.tif source=3382-97623-02 - Assignment#page4.tif source=3382-97623-02 - Assignment#page5.tif source=3382-97623-02 - Assignment#page6.tif source=3382-97623-02 - Assignment#page7.tif source=3382-97623-02 - Assignment#page8.tif source=3382-97623-02 - Assignment#page9.tif source=3382-97623-02 - Assignment#page10.tif

I, Michael Freedman ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "QUANTUM COMPUTING DEVICES WITH MAJORANA HEXON QUBITS" ("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES) to insert here in parentheses (filed on ______, and given Application No. ______ by the following Office: United States Patent and Trademark Office) this APPLICATION's Application No. filing date, and Office, when known;

was filed on June 28, 2017, and was given Application No. <u>15/636,376</u> by the following Office "United States Patent and Trademark 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

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

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	10/30/2017 Date
Michael Freedman Printed Name in English	Printed Name in Native Language (if other than English)

I, Chetan Nayak ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "QUANTUM COMPUTING DEVICES WITH MAJORANA HEXON QUBITS" ("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES) to insert here in parentheses (filed on ______, and given Application No. ______ by the following Office: United States Patent and Trademark Office) this APPLICATION's Application No. filing date, and Office, when known;

was filed on June 28, 2017, and was given Application No. <u>15/636,376</u> by the following Office "United States Patent and Trademark 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

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

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

Chetan Nayak Printed Name in English

Printed Name in Native Language (if other than English)

10/29

I, Roman Lutchyn ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "QUANTUM COMPUTING DEVICES WITH MAJORANA HEXON QUBITS" ("APPLICATION"), which:

- will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES) to insert here in parentheses (filed on ______, and given Application No. ______ by the following Office: United States Patent and Trademark Office) this APPLICATION's Application No. filing date, and Office, when known;
- was filed on June 28, 2017, and was given Application No. <u>15/636,376</u> by the following Office "United States Patent and Trademark 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

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

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

Roman Lutchyn Printed Name in English

10/28/2017 Date Роман Лутенн

Printed Name in Native Language (if other than English)

I, Torsten Karzig ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "QUANTUM COMPUTING DEVICES WITH MAJORANA HEXON QUBITS" ("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES) to insert here in parentheses (filed on ______, and given Application No. ______ by the following Office: United States Patent and Trademark Office) this APPLICATION's Application No. filing date, and Office, when known;

was filed on June 28, 2017, and was given Application No. <u>15/636,376</u> by the following Office "United States Patent and Trademark 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

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

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).

Torstin lang	10 / 30 / 2017 Date
Torsten Karzig	
Printed Name in English	Printed Name in Native Language (if other than English)

I, Parsa Bonderson ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "QUANTUM COMPUTING DEVICES WITH MAJORANA HEXON QUBITS" ("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES) to insert here in parentheses (filed on ______, and given Application No. ______ by the following Office: United States Patent and Trademark Office) this APPLICATION's Application No. filing date, and Office, when known;

was filed on June 28, 2017, and was given Application No. 15/636,376 by the following Office "United States Patent and Trademark 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

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

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).

Kaisa 1200

Inventor's Signature

<u>Parsa Bonderson</u> Printed Name in English October 30, 2017

Date

Printed Name in Native Language (if other than English)