

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4714819

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MATTHEW HASTINGS	10/30/2017
TORSTEN KARZIG	10/30/2017
PARSA BONDERSON	10/30/2017
MICHAEL FREEDMAN	10/30/2017
ROMAN LUTCHYN	10/28/2017
CHETAN NAYAK	10/29/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MICROSOFT TECHNOLOGY LICENSING, LLC
<b>Street Address:</b>	ONE MICROSOFT WAY
<b>City:</b>	REDMOND
<b>State/Country:</b>	WASHINGTON
<b>Postal Code:</b>	98052
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15636457
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(503)595-5301
<i>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.</i>	
<b>Phone:</b>	503 595 5300
<b>Email:</b>	iris.rasanen@klarquist.com
<b>Correspondent Name:</b>	PATRICK M. BIBLE, KLARQUIST SPARKMAN, LLP
<b>Address Line 1:</b>	121 SW SALMON STREET, SUITE 1600
<b>Address Line 2:</b>	ONE WORLD TRADE CENTER
<b>Address Line 4:</b>	PORTLAND, OREGON 97204
<b>ATTORNEY DOCKET NUMBER:</b>	3382-97656-02
<b>NAME OF SUBMITTER:</b>	PATRICK M. BIBLE
<b>SIGNATURE:</b>	/Patrick M. Bible/
<b>DATE SIGNED:</b>	12/01/2017

**Total Attachments: 12**

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source=3382-97656-02 - Assignment#page12.tif

**PATENT ASSIGNMENT**

I, Matthew Hastings ("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 METHODS AND DEVICES FOR MAJORANA TETRON 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. 15/636,457 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"));

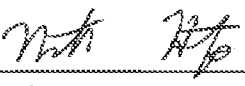
ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;

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

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	<u>10/30/17</u> _____ Date
<u>Matthew Hastings</u> _____ Printed Name in English	_____ Printed Name in Native Language (if other than English)

**PATENT ASSIGNMENT**

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 METHODS AND DEVICES FOR MAJORANA TETRON QUBITS” (“APPLICATION”), which:

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### PATENT ASSIGNMENT

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 METHODS AND DEVICES FOR MAJORANA TETRON QUBITS” (“APPLICATION”), which:

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	October 30, 2017
_____ Inventor's Signature	_____ Date
<u>Parsa Bonderson</u>	_____
Printed Name in English	Printed Name in Native Language (if other than English)



**PATENT ASSIGNMENT**

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 METHODS AND DEVICES FOR MAJORANA TETRON QUBITS” (“APPLICATION”), which:

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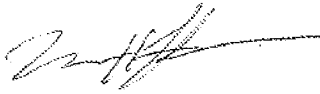
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	10/30/2017
_____ Inventor's Signature	_____ Date
Michael Freedman	_____
_____ Printed Name in English	_____ Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

I, Roman Lutchny ("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 METHODS AND DEVICES FOR MAJORANA TETRON QUBITS" ("APPLICATION"), which:

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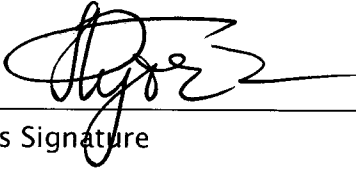
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	<u>10/28/2017</u>
Inventor's Signature	Date
<u>Roman Lutchyn</u>	<u>Роман Лутчин</u>
Printed Name in English	Printed Name in Native Language (if other than English)

**PATENT ASSIGNMENT**

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 METHODS AND DEVICES FOR MAJORANA TETRON QUBITS” (“APPLICATION”), which:

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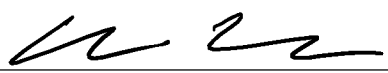
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 _____ Inventor's Signature	<u>10/29/17</u> _____ Date
<u>Chetan Nayak</u> _____ Printed Name in English	_____ Printed Name in Native Language (if other than English)