

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5385078

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
NORTHROP GRUMMAN SYSTEMS CORPORATION	02/14/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MICROSOFT CORPORATION
<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>
Application Number:	16120882
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>Email:</b>	usdocket@microsoft.com
<b>Correspondent Name:</b>	MICROSOFT CORPORATION
<b>Address Line 1:</b>	ONE MICROSOFT WAY
<b>Address Line 4:</b>	REDMOND, WASHINGTON 98052
<b>ATTORNEY DOCKET NUMBER:</b>	405043-US-NP
<b>NAME OF SUBMITTER:</b>	KATHERINE WILSON
<b>SIGNATURE:</b>	/Katherine Wilson/
<b>DATE SIGNED:</b>	02/21/2019
<b>Total Attachments: 2</b>	
source=Assignment-NGC-to-MSA#page1.tif	
source=Assignment-NGC-to-MSA#page2.tif	

## ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the acceptance of which is hereby acknowledged by Northrop Grumman Systems Corporation, a Delaware corporation, having its principal place of business at 2980 Fairview Park Drive, Falls Church, VA 22042-4511 ("**Assignor**"), does hereby sell, assign, transfer, and convey unto Microsoft Corporation, having an office at One Microsoft Way, Redmond, Washington 98052 ("**Assignee**"), all of Assignor's right, title, and interest in and to the following (collectively, the "**Assigned Patent Rights**");

(a) the patent applications listed in the table below (the "**Patent Applications**");

Patent Application No.	Country	Filing Date	Title of Patent Application
16/130,370	United States	September 13, 2018	RECIPROCAL QUANTUM LOGIC BASED CIRCUITS FOR AN A-AND-NOT-B GATE
16/120,882	United States	September 4, 2018	SUPERCONDUCTING MEMORY WITH JOSEPHSON PHASE-BASED TORQUE
16/137,731	United States	September 21, 2018	SUPERCONDUCTING CIRCUITS FOR AN A-AND-NOT-B GATE HAVING AN EXCLUSIVE-OR GATE AND AN AND GATE
16/210,121	United States	December 5, 2018	SUPERCONDUCTING CIRCUITS AND METHODS FOR LATCHING DATA
16/210,130	United States	December 5, 2018	SUPERCONDUCTING CIRCUIT AND METHOD FOR DETECTING A RISING EDGE OF AN INPUT SIGNAL
16/205,363	United States	November 30, 2018	SUPERCONDUCTING SWITCH HAVING A PERSISTENT AND A NON-PERSISTENT STATE
16/241,333	United States	January 7, 2019	CAPACITIVELY COUPLED SUPERCONDUCTING INTEGRATED CIRCUITS POWERED USING ALTERNATING CURRENT CLOCK SIGNALS

(b) any and all reissues, reexaminations, extensions, continuations, continuing prosecution application, patents and applications claiming priority to or from the Patent Applications, requests for continuing examinations, divisions, and registrations of any of the Patent Applications, and any foreign counterparts to any of the foregoing; and

(c) causes of action and enforcement rights of any kind under, or on account of, any patents issuing from the Patent Applications, including, without limitation, all causes of action, enforcement rights and all other rights to seek and obtain any other remedies of any kind for past, current and future infringement.

Assignor hereby authorizes the respective patent office or governmental agency in each

jurisdiction to issue any and all future patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Assigned Patent Rights in the name of Assignee, as the Assignee to the entire interest therein. This Assignment of Patent Rights will inure for the benefit of any permitted successors or assigns of Assignee.

Assignor will, at the reasonable request of Assignee, do all things necessary and proper, to confirm the assignment to Assignee of the Assigned Patent Rights pursuant to this Assignment of Patent Rights, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist Assignee in obtaining and perfecting the Assigned Patent Rights.

IN WITNESS WHEREOF this Assignment of Patent Rights is executed on Feb. 14, 2019.

**ASSIGNOR:**

Northrop Grumman Systems Corporation

By: Thomas M. Blasey

Name: Thomas M. Blasey

Title: Authorized Officer