

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6360690

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
INTERNATIONAL BUSINESS MACHINES CORPORATION	10/09/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SAMSUNG ELECTRONICS CO., LTD.
<b>Street Address:</b>	129 SAMSUNG-RO (MAETAN-DONG), YEONGTONG-GU, GYEONGGI-DO
<b>City:</b>	SUWON-SI
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	16677
<b>PROPERTY NUMBERS Total: 20</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14657628
Application Number:	14804829
Application Number:	15264081
Application Number:	16032567
Application Number:	16294231
Application Number:	15346841
Application Number:	15802975
Application Number:	15411034
Application Number:	16007687
Application Number:	16569246
Application Number:	15797774
Application Number:	16395024
Application Number:	16395084
Application Number:	15186448
Application Number:	15237459
Application Number:	15591834
Application Number:	14980554
Application Number:	15168959
Application Number:	16282628
Application Number:	16569191

**CORRESPONDENCE DATA****Fax Number:**

*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:** 2024290020**Email:** pto@nsiplaw.com**Correspondent Name:** NSIP LAW**Address Line 1:** P.O. BOX 65745**Address Line 4:** WASHINGTON, D.C. 20035

<b>ATTORNEY DOCKET NUMBER:</b>	M00055.0006
<b>NAME OF SUBMITTER:</b>	CHARLES Y. PARK
<b>SIGNATURE:</b>	/Charles Y. Park/
<b>DATE SIGNED:</b>	10/21/2020

**Total Attachments: 3**

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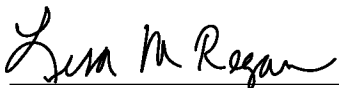
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Recordable Patent Assignment and Reservation

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and subject to the reservations stated in the Patent Assignment Agreement Reference No. L200504 between the Parties with an effective time and date of 11:59pm United States Eastern Time on September 21, 2020 ("Effective Time & Date") ("Patent Assignment Agreement"), International Business Machines Corporation, a New York corporation having a place of business at 1 New Orchard Road, Armonk, New York (hereinafter "ASSIGNOR"), hereby grants and assigns to Samsung Electronics Co., Ltd., a Korean corporation having a place of business at 129 Samsung-ro (Maetan-dong), Yeongtong-gu, Suwon-si, Gyeonggi-do 16677, Republic of Korea (hereinafter "ASSIGNEE"), all of ASSIGNOR's right, title and interest in and to the United States Letters Patents identified in Exhibit A, attached hereto, and all rights pursuant to 35 U.S.C. § 154 and any and all Letters Patent issuing therefrom (hereinafter, collectively, "ASSIGNED PATENTS"), to have and to hold the same, unto ASSIGNEE for its own use and enjoyment and for the use and enjoyment of its successors and assigns, including all past, present, and future causes of action and claims for damages and injunctive relief for infringement of any of the Assigned Patents and the sole right to sue therefor under such Assigned Patents, for the full term or terms of all such ASSIGNED PATENTS, subject to all rights granted under the ASSIGNED PATENTS to third parties prior to said Effective Time & Date.

ASSIGNOR hereby reserves and retains, for the benefit of itself and its subsidiaries and its and their successors and assigns, the rights and licenses set forth in the Patent Assignment Agreement.

IN WITNESS WHEREOF, ASSIGNOR has caused this Patent Assignment and Reservation to be duly signed on its behalf.

Signature: 

Date: Oct. 9, 2020

Name: Lisa M. Regan

Title: Vice President, Finance and Operations for IBM Research and Intellectual Property

## Exhibit A

### US Patents

IBM Docket Number	Country	Patent Number	Application Number	Filing Date	Issue Date
CH920140059US1	US	9990580	14/657628	3/13/2015	6/5/2018
CH920140059US2	US	9996793	14/804829	7/21/2015	6/12/2018
CH920160059US1	US	10650307	15/264081	9/13/2016	5/12/2020
JP920160086US02	US	10297321	16/032567	7/11/2018	5/21/2019
JP920160086US03	US	10446231	16/294231	3/6/2019	10/15/2019
JP920160086US1	US	10090047	15/346841	11/9/2016	10/2/2018
JP920160094US02	US	10289950	15/802975	11/3/2017	5/14/2019
JP920160094US1	US	10339444	15/411034	1/20/2017	7/2/2019
P201800966US01	US	10454025	16/007687	6/13/2018	10/22/2019
P201800966US02	US	10720575	16/569246	9/12/2019	7/21/2020
YOR820162758US01	US	10319818	15/797774	10/30/2017	6/11/2019
YOR820162758US02	US	10686039	16/395024	4/25/2019	6/16/2020
YOR820162758US03	US	10686040	16/395084	4/25/2019	6/16/2020
YOR920160436US1	US	10713562	15/186448	6/18/2016	7/14/2020
YOR920160561US1	US	10423877	15/237459	8/15/2016	9/24/2019
YOR920170160US1	US	9934838	15/591834	5/10/2017	4/3/2018

**US Patent Applications**

<b>IBM Docket Number</b>	<b>Country</b>	<b>Application Number</b>	<b>Filing Date</b>	<b>Published Application Number</b>
JP920150166US1	US	14/980554	12/28/2015	20170185889
JP920160004US1	US	15/168959	5/31/2016	20170344885
JP920160094US03	US	16/282628	2/22/2019	20190188558
P201800966US03	US	16/569191	9/12/2019	20200006645

**END OF EXHIBIT A**