506024137 04/21/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6070852

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date					
INTEL IP CORPORATION	11/27/2019					

RECEIVING PARTY DATA

Name:	INTEL CORPORATION
Street Address:	2200 MISSION COLLEGE BOULEVARD
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	16153584
Application Number:	15202264
Application Number:	14316180

CORRESPONDENCE DATA

Fax Number: (216)579-6073

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: 216-579-6073

Email: cgilmore@pearne.com

Correspondent Name: JOHN P. MURTAUGH/PEARNE & GORDON LLP

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Address Line 2: SUITE 1200

Address Line 4: CLEVELAND, OHIO 44114-3108

ATTORNEY DOCKET NUMBER:	BRAQ-J1045
NAME OF SUBMITTER:	JOHN P. MURTAUGH
SIGNATURE:	/johnpmurtaugh/
DATE SIGNED:	04/21/2020

Total Attachments: 11

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State of California Secretary of State

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acting in the carrier agreement active en call	de	Notary Public, State of California											
pears the seal est revêtu du scear / está revestido de	u / timbre de	Kathryn Frances Hall , Notary Public, State of California											
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a t à/en	Sacramento	o, California	6. the le/eldla	28th day of February 2020									
by par/por	Secretary o	Secretary of State, State of California											
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De Voll

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE §1189

A notary public or other officer completing this cer who signed the document to which this certificate or validity of that document.	
State of California) County of Santa Clara)	
On February 24, 2020 before me, Kathryn France Leticia R. Block, who proved to me on the basis of whose name(s) is/are subscribed to the within inst he/she/the/y executed the same in his/her/the/ir aut signature(s) on the instrument the person(s), or that acted, executed the instrument.	f satisfactory evidence to be the person(s) trument and acknowledged to me that thorized capacity(ies), and that by his/her/their
KATHRYN FRANCES HALL Notery Public - California Santa Clara County Commission # 2304880	I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.
My Comm. Expires Oct 10, 2023	Signature Juthy Frances Wal
OPTION Though this section is optional, completing this infor fraudulent reattachment of this form to an uninter-	formation can deter alteration of the document
Description of the attached document	
Title or Type of Document:	
Document Date: Number of Pages: Capacity(ies) Claimed by Signer(s)	ther Than Named Above:
Signer's Name:	Signer's Name:
Signer's Name: ☐ Corporate Officer – Title(s):	Signer's Name: ☐ Corporate Officer – Title(s):
☐ Partner - ☐ Limited ☐ General	□ Partner - □ Limited □ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator ☐ Other:	☐ Trustee ☐ Guardian or Conservator ☐ Other:
Signer is Representing:	Signer is Representing:

STATEMENT OF TRUE COPY

I, Leticia R. Block, hereby state that the attached document is a true copy of the original assignment executed by and between and Apple Inc. and Intel Corporation.

Leticia R. Block
Date: 02-24-2020

PATENT ASSIGNMENT

This PATENT ASSIGNMENT, dated as of November 27, 2019 (this "Assignment"), is by and between Intel Corporation, a Delaware corporation, with an address at 2200 Mission College Boulevard, Santa Clara, CA 95014 (the "Assignee"), and Intel IP Corporation, a Delaware corporation, with an address at 2200 Mission College Boulevard, Santa Clara, CA 95014 (the "Assignor"). Each of the Assignee and the Assignor are referred to herein as a "Party."

RECITALS

WHEREAS, the patents and patent applications set forth on <u>Schedule 1</u> attached hereto (the "<u>Transferred Patents</u>") are registered in the name of Assignor;

WHEREAS, the Assignce and Apple Inc. are parties to that certain Master Asset Purchase Agreement, dated as of July 25, 2019 (as it may be amended from time to time) (the "Purchase Agreement"), pursuant to which the Assignce has agreed to assign, transfer and convey to Apple Inc. all of the Assignce's and certain of its affiliates' (including Assignor's) right, title, and interest in and to certain patents and patent applications (including the Transferred Patents); and

WHEREAS, in furtherance of such ultimate assignment to Apple Inc., the Assignor has agreed to assign, transfer and convey to the Assignee all of the Assignor's right, title, and interest in and to the Transferred Patents, and the Assignee has agreed to purchase the Transferred Patents.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual promises and conditions hereinafter set forth, and for other good and valuable consideration (including the payment by Assignee to Assignor of the sum of USD \$100.00), the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, do hereby agree as follows:

- 1. Conveyance and Acceptance. The Assignor bereby sells, assigns, transfers, conveys and delivers to the Assignee, and the Assignee hereby purchases, all of the Assignor's right, title and interest in and to the Transferred Patents, along with any and all rights to sue and recover for past, present and future infringement, misappropriation, misuse or violation with respect to the Transferred Patents, together with all rights under international treaties relating to the Transferred Patents. The foregoing rights include the right to claim priority to the Transferred Patents.
- 2. <u>Acknowledgement</u>. To the extent that <u>Schedule 1</u> hereto contains any typographical or administrative error, but it is clear which patent or patent application was intended to be included in the sale, assignment, transfer and conveyance under this Assignment, Assignor and Assignee each acknowledge and agree that the intended patent or patent application is hereby sold, assigned, transferred and conveyed, along with all other rights, privileges and claims enumerated above with respect to such intended patent or patent application.

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- Recordation. The Assignor hereby authorizes the Commissioner of Patents and Trademarks in the United States Patent and Trademark Office, and the corresponding entities or agencies in any applicable foreign countries or multinational authorities, to record Assignee as the assignee and owner of the Transferred Patents and to deliver to the Assignee, and to the Assignee's attorneys, agents, successors or assigns, all official documents and communications as may be warranted by this Assignment.
- 4. <u>Disclaimer of Representations and Warranties</u>. THE ASSIGNEE UNDERSTANDS AND AGREES THAT THE ASSIGNOR MAKES NO REPRESENTATIONS OR WARRANTIES IN ANY WAY PURSUANT TO OR IN CONNECTION WITH THIS ASSIGNMENT.
- 5. Governing Law. This Assignment, and all claims or causes of action based upon, arising out of, or related to this Assignment or the transactions contemplated hereby, shall be governed by and construed in accordance with the laws of the State of Delaware applicable to contracts executed and to be performed wholly within such State and without reference to the choice-of-law principles that would result in the application of the laws of a different jurisdiction.
- 6. <u>Counterparts</u>. This Assignment may be executed in multiple counterparts, and by any of the Parties in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same Assignment. Delivery of an executed counterpart of a signature page to this Assignment by .pdf, .tif, .gif or similar attachment to electronic mail shall be as effective as delivery of a manually executed counterpart of this Assignment.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have each caused this Assignment to be duly executed as of the date first written above.

Intel IP Corporation, Assignor

Name: TiffahyDoon Silva

Title: Secretary

[Signature Page to Intercompany Patent Assignment]

PATENT 2052453 FRAME

CIVIL CODE § 1189

CALIFORNIA ACKNOWLEDGMENT A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. State of California

County of Santa Classe

On Navember 27,2019 before me. Olha To

Here Ins State of California personally appeared ... Name(s) of Signe(ls) who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(les), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. OCHA TORACENKO factory Public - Coliforni WITNESS my hand and official seal. Sonta Clara County Commission # 219/659 Continue Expenses May 18, 2021 Signature (Signature of Notary Public Place Notary Seal and/or Stamp Above - OPTIONAL -Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document. Description of Attached Document Title or Type of Document: Document Date: ______Number of Pages: _____ Signer(s) Other Than Named Above: Capacity(les) Claimed by Signer(s) Signer's Name: D Corporate Officer - Title(s): U Corporate Officer - Title(s): D Partner - D Limited D General ☐ Partner - ☐ Limited ☐ General D Attorney in Fact

O Attorney in Fact

CI Guardian or Conservator CI Trustee

g Individual

Signer is Representing:

O Other:

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Signer is Representing:

☐ Individual

□ Trustee

D Other:

(3) Guardian or Conservator

AGREED TO AND ACCEPTED:

Intel Corporation, Assignee

By: Office Silva

Title: Assistant Corporate Secretary

[Signature Page to Intercompany Patent Assignment]

ALIFORNIA ACKNOWLEDGMENT CIVIL CODE § 1189 A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. State of California State of California County of Santa Clara On NOVEMBER 7, 2019 before me. Olla Tolialente, wotawy public personally appeared Name(a) of Signer(a) who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(les), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing OLNA TOXALINGO Notary Public - California paragraph is true and correct. Sama Clara County Commission # 2197619 My Comm. Expires May 18, 2021 WITNESS my hand and official seal. Signature (Place Notary Seal and/or Stamp Above Signature of Notary Public OPTIONAL Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document. **Description of Attached Document** Title or Type of Document: Document Date: Number of Pages: Signer(s) Other Than Named Above:

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Signer is Representing: Signer is Representing:

Signer's Name: D Corporate Officer - Title(s): (3 Corporate Officer - Title(s):

U Attorney in Fact

☐ Guardian or Conservator ☐ Trustee

O Other:

□ Parlner - □ Limited □ General

D Individual D Attorney in Fact

☐ Guardian or Conservator

Capacity(ies) Claimed by Signer(s)

☐ Partner — ☐ Limited ☐ General

Signer's Name;

O Individual

D Trustee

Other:

Schedule 1 TRANSFERRED PATENTS

PATENT REEL: 052453 FRAME: 0682

PARTNERSHIP PROJECT (3GPP) SYSTEMS	TRANSMISSION OF PHYSICAL BROADCAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROAD CAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROAD CAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROAD CAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROAD CAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROAD CAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROADCAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROAD CAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROADCAST CHANNEL (PBCH) CONTENTS	TRANSMISSION: OF PHYSICAL BROADCAST CHANNEL (PBCH) CONTENTS	TRANSMISSION OF PHYSICAL BROAD CAST CHANNEL (PBCH) CONTENTS	DELIVERY OF TARGETED MEDIA CONTENT	USER EQUIPMENT DISTRIBUTION INFORMATION COLLECTION																								
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				1/19/16	2/17/16			9/2/16					1/28/16	2/14/16					10/12/17	2/16/16	11/22/17	3/15/16	1/21/16	9/7/16	2/15/16	6/24/19	2/17/16				8/29/17	1/5/16	3/15/18	12/16/15	8/22/16	1/5/16	1/8/16
7/27/16	7/27/16	7/27/16	7/27/16	7/27/16	4/6/16	3/19/15	3/26/15	6/30/17	7/27/16	7/27/16	7/27/16	7/27/16	7/27/16	3/30/16	2/14/19	10/27/16	3/19/15	3/26/15	10/24/17	3/29/16	3/29/18	11/24/16		6/30/17	7/27/16	9/27/19	4/6/16	9/21/17	3/19/15	2/12/15	9/8/17	3/28/16	7/26/18	11/4/16	6/23/17	6/15/16	3/9/16

PATENT REEL: 052453 FRAME: 0683

RECORDED: 04/21/2020