

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT4996563

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SUNG HEE PARK	04/24/2018
JAEWON SHIN	04/24/2018
ERIK NORDEN	04/20/2018
CHRISTOPHER MILLS	04/26/2018
SEUNGJIN LEE	06/06/2018
LIRAN FISHEL	06/06/2018
FERNANDO MUJICA	05/04/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	APPLE INC.
<b>Street Address:</b>	ONE APPLE PARK WAY
<b>City:</b>	CUPERTINO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95014
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15971882
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(650)938-5200
<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>	6503357762
<b>Email:</b>	cdiez@fenwick.com
<b>Correspondent Name:</b>	ALAN XIANG
<b>Address Line 1:</b>	FENWICK & WEST LLP
<b>Address Line 2:</b>	801 CALIFORNIA STREET
<b>Address Line 4:</b>	MOUNTAIN VIEW, CALIFORNIA 94041
<b>ATTORNEY DOCKET NUMBER:</b>	32685-39143/US
<b>NAME OF SUBMITTER:</b>	ALAN XIANG, REG. NO. 71,089
<b>SIGNATURE:</b>	/Alan Xiang/
<b>DATE SIGNED:</b>	06/07/2018

PATENT

**Total Attachments: 6**

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## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to Apple Inc., a California Corporation, having a place of business at One Apple Park Way, Cupertino, CA 95014 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional or non-provisional application filed under 35 U.S.C. § 111, design application filed under 35 U.S.C. § 171, Registered Community Designs, international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION"), and any patents issuing thereon ("PATENT RIGHTS"):

- Application No. 15/971,882, entitled "Scalable Neural Network Processing Engine," filed on May 4, 2018.

2. The entire worldwide right, title, and interest in and to:  
(a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto that have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) that may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

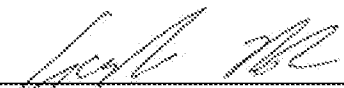
Title:	Scalable Neural Network Processing Engine		
Filed:	May 4, 2018	Attorney Docket #:	32685-39143/US
Application #:	15/971,882	Client Ref #:	P37181US1

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or other authority for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Name and Signature

Date of Signature  
(REQUIRED)

  
Sung Hee Park

4/24/2018

Name and Signature

Date of Signature  
(REQUIRED)

  
Jaewon Shin

4 / 24 / 2018

Name and Signature

Date of Signature  
(REQUIRED)

Erik Norden

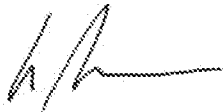
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Name and Signature



\_\_\_\_\_  
Erik Norden

Date of Signature  
(REQUIRED)

04/20/2018

\_\_\_\_\_

Name and Signature

\_\_\_\_\_  
Christopher Mills

Date of Signature  
(REQUIRED)

\_\_\_\_\_

Name and Signature

\_\_\_\_\_  
Seungjin Lee

Date of Signature  
(REQUIRED)

\_\_\_\_\_

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Name and Signature

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Christopher Mills

4/26/2018

Name and Signature

Date of Signature  
(REQUIRED)

Seungjin Lee

Name and Signature

Date of Signature  
(REQUIRED)

Liran Fishel

Name and Signature

Date of Signature  
(REQUIRED)

Fernando Mujica

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Name and Signature

Date of Signature  
(REQUIRED)

Christopher Mills

\_\_\_\_\_

Name and Signature

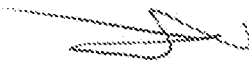
Date of Signature  
(REQUIRED)

  
Seungjin Lee

6/6/18

Name and Signature

Date of Signature  
(REQUIRED)

  
Liran Fishel

6/6/18

Name and Signature

Date of Signature  
(REQUIRED)

Fernando Mujica

\_\_\_\_\_

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Date of Signature  
(REQUIRED)

Liran Fishel

Name and Signature

Date of Signature  
(REQUIRED)

FERNANDO MUJICA

  
Fernando Mujica

May 4, 2018