#### 504803180 03/05/2018

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4849912

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
DONGJOO SHIN	02/09/2018
JINMOOK LEE	02/28/2018
JINSU LEE	02/28/2018
JU HYOUNG LEE	02/28/2018

#### **RECEIVING PARTY DATA**

Name:	UX FACTORY CO., LTD.
Street Address:	(DUNSAN-DONG) 301, 3F, 166, MUNJEONG-RO, SEO-GU
City:	DAEJEON
State/Country:	KOREA, REPUBLIC OF
Postal Code:	35250
Name:	DONGJOO SHIN
Street Address:	206-1604, 177, ANYANGCHEONSEO-RO, MANAN-GU
City:	ANYANG-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	14038

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15888102

#### **CORRESPONDENCE DATA**

Fax Number: (866)613-4037

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: 7033506181

Email: mail@revolutioniplaw.com **Correspondent Name:** REVOLUTION IP, PLLC

Address Line 1: 1940 DUKE ST. SUITE 200 Address Line 2:

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: 2460-031

> **PATENT** REEL: 045101 FRAME: 0140

504803180

NAME OF SUBMITTER:	HYUN YONG LEE	
SIGNATURE:	/Hyun Yong Lee/	
<b>DATE SIGNED:</b> 03/05/2018		
Total Attachments: 8		
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PATENT REEL: 045101 FRAME: 0141

Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

#### ASSIGNMENT SERVING AS DECLARATION PER 37 C.F.R. § 1.63(e)

Title	of
Inve	ntion

HETEROGENEOUS PROCESSOR ARCHITECTURE FOR INTEGRATING CNN AND RNN INTO SINGLE HIGH-PERFORMANCE, LOW-POWER CHIP

As	а	below	named	inventor	and	Assignor,		declare	that:
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This assignment and declaration are directed to:

☐ Th	attached	application,	Of
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United States application or PCT international application number 15/888,102 filed on February 5, 2018

The above-identified Application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the Application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Whereas, Assignor has invented certain new and useful processes, machines, articles of manufacture, compositions of matter, and/or improvements thereof ("invention") disclosed in the Application,

Whereas, Assignor desires to convey all rights, titles, and interests in and to the same to:

#### UX FACTORY CO., LTD.

(Dunsan-dong) 301, 3F, 166, Munjeong-ro, Seo-gu, Daejeon 35250, Republic of Korea; and

#### Dongjoo Shin

206-1604, 177, Anyangcheonseo-ro, Manan-gu, Anyang-si, Gyeonggi-do 14038, Republic of Korea

UX FACTORY CO., LTD. & Dongjoo Shin herein further referred to as ("Assignee").

Inventor's and Assignor's Name:

Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or Inventor's certificates and related rights heretofore or hereafter filed for the Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.

Assignor hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Assignor further covenants that Assignee will, upon Assignee's request, be provided promptly with all pertinent facts and documents relating to the Invention, Patent, Application and any patents granted thereon, as may be known and accessible to Assignor, and Assignor will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to Assignee or Assignee's legal representative any and all papers, instruments or affidavits required to apply for, protect, obtain, maintain, issue, defend and enforce the Application, Patent, Invention, whether in the US or any and all foreign countries and any patents granted thereon and/or for obtaining any reissue or reissues of any patent which may be granted for the invention and perform such further acts which may be necessary or desirable to carry out the intent of this agreement as the Assignee thereof shall hereafter require and prepare at assignee's expense.

IN WITNESS WHEREOF, Inventor and Assignor has hereunto set hand and seal.

Address:	206-1604, 177, Anyangcheoriseo-ro, Manan-gu, Anyang-si, Gyeonggi-do 14038, Republic of Korea
Inventor's and Assignor's Signature:	<del>L</del>
Date:	09, Feb., 2018

Dongjoo Shin

Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

#### ASSIGNMENT SERVING AS DECLARATION PER 37 C.F.R. § 1.63(e)

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HETEROGENEOUS PROCESSOR ARCHITECTURE FOR INTEGRATING CNN AND RNN INTO SINGLE HIGH-PERFORMANCE, LOW-POWER CHIP

Asap	elow named inventor and Assignor, I declare that:
This a	ssignment and declaration are directed to:
	The attached application, or
$\boxtimes$	United States application or PCT international application number
	15/888,102 filed on February 5, 2018

The above-identified Application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the Application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Whereas, Assignor has invented certain new and useful processes, machines, articles of manufacture, compositions of matter, and/or improvements thereof ("Invention") disclosed in the Application,

Whereas, Assignor desires to convey all rights, titles, and interests in and to the same to:

#### UX FACTORY CO., LTD.

(Dunsan-dong) 301, 3F, 166, Munjeong-ro, Seo-gu, Daejeon 35250, Republic of Korea; and

#### Dongjoo Shin

206-1604, 177, Anyangcheonseo-ro, Manan-gu, Anyang-si, Gyeonggi-do 14038, Republic of Korea

**UX FACTORY CO., LTD.** & **Dongjoo Shi**n herein further referred to as ("Assignee").

Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or inventor's certificates and related rights heretofore or hereafter filed for the Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.

Assignor hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Assignor further covenants that Assignee will, upon Assignee's request, be provided promptly with all pertinent facts and documents relating to the Invention, Patent, Application and any patents granted thereon, as may be known and accessible to Assignor, and Assignor will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to Assignee or Assignee's legal representative any and all papers, instruments or affidavits required to apply for, protect, obtain, maintain, issue, defend and enforce the Application, Patent, Invention, whether in the US or any and all foreign countries and any patents granted thereon and/or for obtaining any reissue or reissues of any patent which may be granted for the invention and perform such further acts which may be necessary or desirable to carry out the intent of this agreement as the Assignee thereof shall hereafter require and prepare at assignee's expense.

IN WITNESS WHEREOF, Inventor and Assignor has hereunto set hand and seal.

Inventor's and Assignor's Name:

Address:

102-1201, 130, Dongseo 1-ro, Seosan-si, Chungcheongnam-do 31999, Republic of Korea

Inventor's and Assignor's Signature:

Date:

3inmook Lee

102-1201, 130, Dongseo 1-ro, Seosan-si, Chungcheongnam-do 31999, Republic of Korea

### Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

#### ASSIGNMENT SERVING AS DECLARATION PER 37 C.F.R. § 1.63(e)

Title	of
inve	ntion:

HETEROGENEOUS PROCESSOR ARCHITECTURE FOR INTEGRATING CNN AND RNN INTO SINGLE HIGH-PERFORMANCE, LOW-POWER CHIP

As a below named inventor and Assignor, I declare that:

This assignment and declaration are directed to:

٢	]	The	attached	application,	or

☑ United States application or PCT international application number 15/888,102 filed on February 5, 2018

The above-identified Application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the Application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Whereas, Assignor has invented certain new and useful processes, machines, articles of manufacture, compositions of matter, and/or improvements thereof ("Invention") disclosed in the Application,

Whereas, Assignor desires to convey all rights, titles, and interests in and to the same to:

#### UX FACTORY CO., LTD.

(Dunsan-dong) 301, 3F, 166, Munjeong-ro, Seo-gu, Daejeon 35250, Republic of Korea; and

#### Dongjoo Shin

206-1604, 177, Anyangcheonseo-ro, Manan-gu, Anyang-si, Gyeonggi-do 14038, Republic of Korea

UX FACTORY CO., LTD. & Dongjoo Shin herein further referred to as ("Assignee").

Inventor's and Assignor's Name:

Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or Inventor's certificates and related rights heretofore or hereafter filed for the Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.

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IN WITNESS WHEREOF, Inventor and Assignor has hereunto set hand and seal.

Address:

107-1202, 31, Wolseo-ro, Dalseo-gu, Daegu 42782, Republic of Korea

Inventor's and Assignor's Signature:

Jinsu Lee

-2/2-

Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

#### ASSIGNMENT SERVING AS DECLARATION PER 37 C.F.R. § 1.63(e)

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į	ivei	ntion	,

HETEROGENEOUS PROCESSOR ARCHITECTURE FOR INTEGRATING CNN AND RNN INTO SINGLE HIGH-PERFORMANCE, LOW-POWER CHIP

As a below named inventor and Assignor, I declare that:

This assignment and declaration are directed to:

The	attached	application,	or

☑ United States application or PCT international application number 15/888,102 filed on February 5, 2018

The above-identified Application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the Application.

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#### UX FACTORY CO., LTD.

(Dunsan-dong) 301, 3F, 166, Munjeong-ro, Seo-gu, Daejeon 35250, Republic of Korea; and

### Dongjoo Shin

206-1604, 177, Anyangcheonseo-ro, Manan-gu, Anyang-si, Gyeonggi-do 14038, Republic of Korea

UX FACTORY CO., LTD. & Dongjoo Shin herein further referred to as ("Assignee").

Inventor's and Assignor's Name:

Attorney Docket No.: 2460-031 Client Docket No.: 181003-US

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or Inventor's certificates and related rights heretofore or hereafter filed for the Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.

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IN WITNESS WHEREOF, Inventor and Assignor has hereunto set hand and seal.

Address:	102-703, 11, Chilgokjungang-daero 95-gil, Buk-gu, Daegu 41443, Republic of Korea
Inventor's and Assignor's Signature:	0 2/1
Date:	28.2,2018

LEE, Ju Hyoung

-2/2-