# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4028854

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MOHAMMAD B. VAHID FAR	08/23/2016
HOPIL BAE	08/23/2016
HYUNWOO NHO	08/23/2016
XIANG LU	08/18/2016

## **RECEIVING PARTY DATA**

Name:	APPLE INC.
Street Address:	1 INFINITE LOOP
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

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

Property Type	Number
Application Number:	15249283

## **CORRESPONDENCE DATA**

Fax Number: (408)720-8383

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: 408-720-8300

Email: Leslie\_Rogan@bstz.com

APPLE INC./BSTZ BLAKELY SOKOLOFF TAYLOR **Correspondent Name:** 

1279 OAKMEAD PARKWAY Address Line 1:

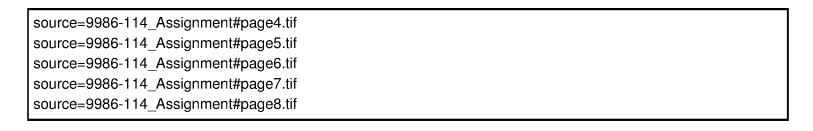
Address Line 4: SUNNYVALE, CALIFORNIA 94085-4040

ATTORNEY DOCKET NUMBER:	9986.114
NAME OF SUBMITTER:	JEREMY A. SCHWEIGERT
SIGNATURE:	/Jeremy A. Schweigert/
DATE SIGNED:	08/29/2016

## **Total Attachments: 8**

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> **PATENT REEL: 039569 FRAME: 0478** 503982198



PATENT REEL: 039569 FRAME: 0479

ASSIGNMENT OF PATENT APPLICATION	Attorney Docket No.: 009986.114
For good and valuable consideration, the receipt and	sufficiency of which is hereby
acknowledged, I/we, the undersigned,Mohammad B. Vah	iid Far, Hopil Bae,
Hyunwoo Nho, and Xiang Lu	9
hereby sell, assign, and transfer to Apple Inc.	
a <u>corporation</u> of <u>Calif</u> (Type of Assignee: e.g., corporation, company, partnership, university, e	fornia ,
having a principal place of business at 1 Infinite Loop, C	upertino, CA, 95014,
("Assignee"), and its successors, assigns, and legal represents the United States and all foreign countries, in and to any and disclosed in the application (provisional or non-provisional) non-provisional application may have a declaration executed concurrently herewith and which application (provisional or	all inventions or improvements that are for the United States patent which for the by the undersigned prior hereto or
A DIGITAL ARCHITECTURE WITH MERGED N SIGNALS FOR A DISPLA	
said patent application also identified as follows (when know	vn):
[I/we hereby authorize an attorney or agent for said A number and filing date of said patent application who	
United States Patent Application Number 15/249,283	filed_August 26, 2016,
and in and to said application (provisional or non-provisional provisional applications, utility applications, design applications applications, continued prosecution applications, continuation applications, renewal applications, reissue applications, reexa applications that have been or shall be filed in the United State inventions or improvements; and in and to all original patents certificates, and extensions, that have been or shall be issued countries on said inventions or improvements; and in and to a filing of said United States application;	ions, divisional applications, continuation on-in-part applications, substitute aminations, extensions, and all other patent ates and all foreign countries on any of said is, reissued patents, reexamination in the United States and all foreign

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or

Rev. 1/08/2010

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:

08/23/2016, 20	Valud
Date	Name: Mohammad B. Vahid Far
. 20	
Date	Name: Hopil Bae
+460	
, 20	
Date	Name: Hyunwoo Nho
, 20	
Date	Name: Xiang Lu

Assignment Document Return Address:
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
1279 Oakmead Parkway
Sunnyvale, CA 94085-4040
(408) 720-8300

ASSIGNMENT OF PATENT APPLICATION	Attorney Döcket No.: 009986,114
For good and valuable consideration, the receipt and	sufficiency of which is hereby
acknowledged, I/we, the undersigned, Mohammad B. Va	hid Far, Hopil Bae,
TT	
hereby sell, assign, and transfer to Apple Inc.	
a corporation of Cal	
(Type of Assignee: e.g., corporation, company, partnership, university,	etc.)
having a principal place of business at1 Infinite Loop, (	Cupertino, CA, 95014
disclosed in the application (provisional or non-provisional non-provisional application may have a declaration execute concurrently herewith and which application (provisional or A DIGITAL ARCHITECTURE WITH MERGED SIGNALS FOR A DISPL	d by the undersigned prior hereto or r non-provisional) is entitled  NON-LINEAR EMISSION CLOCK
said patent application also identified as follows (when kno  [I/we hereby authorize an attorney or agent for said number and filing date of said patent application when the said patent application also identified as follows (when known is said patent application also identified as follows).	Assignee to insert below the application
United States Patent Application Number 15/249,283	filed August 26, 2016
and in and to said application (provisional or non-provision provisional applications, utility applications, design applica applications, continued prosecution applications, continuati applications, renewal applications, reissue applications, rees applications that have been or shall be filed in the United St inventions or improvements; and in and to all original pater certificates, and extensions, that have been or shall be issue countries on said inventions or improvements; and in and to filing of said United States application;	tions, divisional applications, continuation on-in-part applications, substitute xaminations, extensions, and all other patent tates and all foreign countries on any of said als, reissued patents, reexamination d in the United States and all foreign
agree that said Assignee may apply for and receive	a patent or patents for said inventions or vithout charge to, but at the expense of, said

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or

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Date	Name: Mohammad B. Vahid Far
8/23 ,20	16 AND
Date	Name: Hopil Bae
, 20	
Date	Name: <u>Hyunwoo</u> Nho

Name: Xiang Lu

Each Inventor: Please Sign and Date Below:

Date

Assignment Document Return Address:
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
1279 Oakmead Parkway
Sunnyvale, CA 94085-4040
(408) 720-8300

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For good and valuable consideration, the receipt and	sufficiency of which is hereby
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Hyunwoo Nho, and Xiang Lu	9
hereby sell, assign, and transfer to Apple Inc.	
a <u>corporation</u> of <u>Calif</u>	fornia ,
(Type of Assignee: e.g., corporation, company, partnership, university, e	,
having a principal place of business at 1 Infinite Loop, C	upertino, CA, 95014,
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said patent application also identified as follows (when know	vn):
[I/we hereby authorize an attorney or agent for said a number and filing date of said patent application who	
United States Patent Application Number 15/249,283	filed_ August 26, 2016,
and in and to said application (provisional or non-provisional provisional applications, utility applications, design applications applications, continued prosecution applications, continuation applications, renewal applications, reissue applications, reexapplications that have been or shall be filed in the United Sta	ions, divisional applications, continuation on-in-part applications, substitute aminations, extensions, and all other patent

ıt d inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

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Each Inventor: Please Sign and Date Below:

8/23,2016

Date

Name: Mohammad B. Vahid Far

<u>8/23, 20 16</u>

Date

Name: Hopil Bae

8/23, 2016

Name: Hyunwoo Nho

\_\_\_\_\_, 20\_\_\_\_

Name: Xiang Lu

Assignment Document Return Address:
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
1279 Oakmead Parkway
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PATENT REEL: 039569 FRAME: 0486

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Each Inventor:	Please	Sion and	Date	Relaw.
WARREST TORA PERESTA P	A 24.48346	CANCEL STREET	L. CINC	APERU W

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Date	Name: Mohammad B. Vahid Far
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Date	Name: Hopil Bae
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Date	Name: Hyunwoo Nho
08/18 .20	16 Krz
Deta	NIVII

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RECORDED: 08/29/2016