# 504762889 02/05/2018

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT		
NATURE OF CONVEYANCE: ASSIGNMENT		
CONVEYING PARTY DATA		
	Name	Execution Date
JODY AKANA		01/02/2018
MOLLY ANDERSON		12/04/2017
BARTLEY K. ANDRE		01/05/2018
SHOTA AOYAGI		01/05/2018
ANTHONY MICHAEL ASHCROF	Т	12/06/2017
MARINE C. BATAILLE		01/08/2018
JEREMY BATAILLOU		12/15/2017
DANIELE DE IULIIS		12/04/2017
MARKUS DIEBEL		12/04/2017
M. EVANS HANKEY		01/19/2018
JULIAN HOENIG		12/05/2017
RICHARD P. HOWARTH	CHARD P. HOWARTH 12/04/2017	
JONATHAN P. IVE 0		01/05/2018
JULIAN JAEDE		12/04/2017
DUNCAN ROBERT KERR		12/06/2017
PETER RUSSELL-CLARKE		12/05/2017
BENJAMIN ANDREW SHAFFER		12/04/2017
MIKAEL SILVANTO		12/05/2017
CHRISTOPHER J. STRINGER		12/06/2017
JOE SUNG HO TAN		12/04/2017
CLEMENT TISSANDIER		12/04/2017
EUGENE ANTONY WHANG 12/05/20		12/05/2017
RICO ZÖRKENDÖRFER 12/04/2017		12/04/2017

## **RECEIVING PARTY DATA**

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

Property Type	Number
pplication Number:	29615344
ORRESPONDENCE DATA	
ax Number:	(202)371-2540
Correspondence will be sent to	the e-mail address first; if that is unsuccessful, it
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	STERNE KESSLER GOLDSTEIN & FOX PLLC
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TORNEY DOCKET NUMBER:	3607.1960000
AME OF SUBMITTER:	CHARLES D. HAMMOND
GNATURE:	/Charles D. Hammond #73,287/
TE SIGNED:	02/05/2018
tal Attachments: 46	
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	Date:	Signature of Inveptor:	Name:
1.	11218	· Jode V. Am	Jody AKANA
2.		<u>v</u>	Molly ANDERSON
3.		<u>v</u>	Bartley K. ANDRE
4	1 1	٧	Shota AOYAGI

Sterne Kessler Goldstein Fox

	Date:	Signature of Inventor:	Name:
5.		<u>√</u>	Anthony Michael ASHCROFT
б.		<u>v</u>	Marine C. BATAILLE
7.		<u>\</u>	Jeremy BATAILLOU
8.		√	Daniele DE IULIIS
9.		٧	Markus DIEBEL
10.	/	<u>v</u>	M. Evans HANKEY
11.	_/ /	<u>vi</u>	Julian HOENIG
12.		<u>v</u>	Richard P. HOWARTH
13.		٧	Jonathan P. IVE
14.	_ / _ /	<u> </u>	Julian JAEDE
15.		<u>vi</u>	Duncan Robert KERR
16.	/_/	<u>vi</u>	Peter RUSSELL-CLARKE
17.	_/_/	<u>vi</u>	Benjamin Andrew SHAFFER
18.	/	<u>v</u>	Mikael SILVANTO
19.	/	<u>√</u>	Christopher J. STRINGER
20.		<u>√</u>	Joe Sung Ho TAN
21.	/	<u>N</u>	Clement TISSANDIER
22.	/	<u>N</u> <sup>1</sup>	Eugene Antony WHANG
23.		<u>√</u>	Rico ZÖRKENDÖRFER



4.

Sterne, Kessler, Goldstein & Fox P.L.L.C. Appl. No. 29/615,344 Atty. Docket No. 3607.1960000(P32380US4)

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IN WITNESS WHEREOF, executed by the undersigned inventors on the dates opposite the undersigned names.

	Date:	Signature of Inventor:	N
1.		<u>v</u>	Jo
2.	12,4,17	Marlem	M
3.		<u><u>v</u></u>	В
			e



Shota AOYAGI

Sterne Kessler Goldstein Fox	
ONIN2IGIII LAX	

	Date:	Signature of Inventor:	Name:
5.		٧	Anthony Michael ASHCROFT
6.		<u>vi</u>	Marine C. BATAILLE
7.		<u>√</u>	Jeremy BATAILLOU
8.	/	√	Daniele DE IULIIS
9.	/	√	Markus DIEBEL
10.	/	<u>vi</u>	M. Evans HANKEY
11.		<u>×</u>	Julian HOENIG
12.		<u>vi</u>	Richard P. HOWARTH
13.		<u>v</u>	Jonathan P. IVE
14.		<u>v</u>	Julian JAEDE
15.	_/_/_	٧	Duncan Robert KERR
16.		٧	Peter RUSSELL-CLARKE
17.		Ń	Benjamin Andrew SHAFFER
18.	<u> </u>	<u>v</u>	Mikaci SILVANTO
19.		√	Christopher J. STRINGER
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21.	/	<u>vi</u>	Clement TISSANDIER
22.		<u>N</u>	Eugene Antony WHANG
23.		<u>vi</u>	Rico ZÖRKENDÖRFER



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Jody AKANA Molly ANDERSON

Bartley K. ANDRE

Shota AOYAGI

Sterne Kessler Goldstein Fox

	Date:	Signature of Inventor:	Name:
5.		<u>\</u>	Anthony Michael ASHCROFT
6.		<u>v</u>	Marine C. BATAILLE
7.		<u>√</u>	Jeremy BATAILLOU
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18.		<u>√</u>	Mikaci SILVANTO
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22.	_ / _/	<u>v</u>	Eugene Antony WHANG
23.	_/_/_	<u>vi</u>	Rico ZÖRKENDÖRFER

🛈 Sterne Kessler Goldstein Fox

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2.		<u>√</u>	Molly ANDERSON
3.		<u>v</u>	Bartley K. ANDRE
4.	1.5.18	青和 新大	Shota AOYAGI

•,	Sterne Kessler	
	Goldstein Fox	

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	Date:	Signature of Inventor:	Name:
1.		V	Jody AKANA
2.	_1_1	<u>√</u>	Molly ANDERSON
3.		<u>vi</u>	Bartley K. ANDRE
4.	1_1	٧	Shota AOYAGI

Sterne Kessler Goldstein Fox

	Date:	Signature of Inventor:	Name:
5.	12.106117	× g	Anthony Michael ASHCROFT
6.		<u>si</u>	Marine C. BATAILLE
7.		v <sup>1</sup>	Jeremy BATAILLOU
8.	_ / _/	<u>√</u>	Daniele DE IULIIS
9.	_ / _/	<u>V</u>	Markus DIEBEL
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21.	_/_/	<u>vi</u>	Clement TISSANDIER
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23.		<u>V</u>	Rico ZÖRKENDÖRFER



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3.		<u>v</u>	Bartley K. ANDRE
4.	1	V	Shota AOYAGI



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Sterne Kessler	
Goldstein Fox	

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2.	_ / _/	<u>vi</u>	Molly ANDERSON
3.	11	<u>√</u>	Bartley K. ANDRE
4.	_/_/	V	Shota AOYAGI



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8.	12,4,17	· Clife Alt	Daniele DE IULIIS
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Sterne Kessler Goldstein Fox

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Sterne Kessler **Goldstein Fox** 

Name: Signature of Inventor: Date: Anthony Michael ASHCROFT V 5. 11 Marine C. BATAILLE 6. 11 Jeremy BATAILLOU 7. 1 1\_\_\_\_ Daniele DE IULIIS 8. 11 Markus DIEBEL 9. 11 1,1918 M. Evans HANKEY 10. Julian HOENIG 11. 11 Richard P. HOWARTH 12. 11 Jonathan P. IVE 13. 1 1 Julian JAEDE 14. 11 Duncan Robert KERR 15. 1 1\_ V Peter RUSSELL-CLARKE 16. 11\_ Benjamin Andrew SHAFFER 17. 11 Mikacl SILVANTO 18. 1\_1\_ Christopher J. STRINGER 19. 11 Joe Sung Ho TAN 20. 11 Clement TISSANDIER 21. 1 1 Eugene Antony WHANG 22. 11 Rico ZÖRKENDÖRFER 23. 1\_1\_ Ý

Sterne, Kessler, Goldstein & Fox P.L.L.C. Appl. No. 29/615,344 Atty. Docket No. 3607.1960000(P32380US4)

Page 2 of 2



#### ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the undersigned inventors: Jody AKANA, Molly ANDERSON, Bartley K. ANDRE, Shota AOYAGI, Anthony Michael ASHCROFT, Marine C. BATAILLE, Jeremy BATAILLOU, Daniele DE IULIIS, Markus DIEBEL, M. Evans HANKEY, Julian HOENIG, Richard P. HOWARTH, Jonathan P. IVE, Julian JAEDE, Duncan Robert KERR, Peter RUSSELL-CLARKE, Benjamin Andrew SHAFFER, Mikael SILVANTO, Christopher J. STRINGER, Joe Sung Ho TAN, Clement TISSANDIER, Eugene Antony WHANG and Rico ZÖRKENDÖRFER, the undersigned hereby sell and assign to Apple Inc., a corporation formed under the laws of the State of California, whose mailing address is 1 Infinite Loop, Cupertino, CA 95014 (hereafter referred to as the Assignee), his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

(a) in the invention(s) known as **ELECTRONIC DEVICE** for which an application(s) for patent in the United States of America has been executed by the undersigned and has a filing date or a 371(c) date of August 28, 2017 (also known as United States Application No. 29/615,344), in any and all applications thereon, in any and all Letters Patent(s) therefor, and

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	Date:	Signature of Inventor:	Name:
1.		<u>v</u>	Jody ΛΚΛΝΛ
2.		<u>√</u>	Molly ANDERSON
3.		<u>v</u>	Bartley K. ANDRE
4.	1 1	√	Shota AOYAGI

Sterne Kessler Goldstein Fox

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5.		√	Anthony Michael ASHCROFT
6.	_1_1_	<u>v</u>	Marine C. BATAILLE
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11.	12,5,17	×	Julian HOENIG
12.		<u>v</u>	Richard P. HOWARTH
13.		v <sup>i</sup>	Jonathan P. IVE
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20.		<u>vi</u>	Joe Sung Ho TAN
21.		<u>vi</u>	Clement TISSANDIER
22.	_/_/	<u>v</u>	Eugene Antony WHANG
23.		<u>vi</u>	Rico ZÖRKENDÖRFER



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2.		<u>√</u>	Molly ANDERSON
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4.	1 1	٧	Shota AOYAGI

Sterne Kessler Goldstein Fox

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Ì1.	_/_/_	<u>×                                    </u>	Julian HOENIG
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1.		<u>vi</u>	Jody AKANA
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4.		√	Shota AOYAGI

Sterne Kessler Goldstein Fox

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1.	_ / _ /	<u>v</u>	Jody AKANA
2,		<u>√</u>	Molly ANDERSON
3.		<u>v</u>	Bartley K. ANDRE
4.	<u> </u>	٧	Shota AOYAGI

Sterne Kessler Goldstein Fox

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12.		<u>v</u>	Richard P. HOWARTH
13.		×	Jonathan P. IVE
14.	12,04,2017	1 Junia Jula	Julian JAEDE
15.	_/ /	√	Duncan Robert KERR
16.		<u>vi</u>	Peter RUSSELL-CLARKE
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19.		V	Christopher J. STRINGER
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22,	<u> </u>	<u>×</u>	Eugene Antony WHANG
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2 ° •	Sterne Kessler	
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1.		<u>√</u>	Jody AKANA
2.		<u>√</u>	Molly ANDERSON
3.		<u>v</u>	Bartley K. ANDRE
4.	_1_1	V	Shota AOYAGI

Sterne Kessler Goldstein Fox

	Date:	Signature of Inventor:	Name:
5.		√	Anthony Michael ASHCROFT
6.	11	<u>v</u>	Marine C. BATAILLE
7.		<u><u>v</u></u>	Jeremy BATAILLOU
8.		<u>√</u>	Daniele DE IULIIS
9.	_/_/_	<u>v</u>	Markus DIEBEL
10.	<u> </u>	<u>v</u>	M. Evans HANKEY
11.		<u>√</u>	Julian HOENIG
12.	_/_/_	<u>V</u>	Richard P. HOWARTH
13.		٧	Jonathan P. IVE
14.		<u>vi</u>	Julian JAEDE
15.		<u>×</u>	Duncan Robert KERR
16.	12-15-117	fthall-Ch	Peter RUSSELL-CLARKE
17.		V.	Benjamin Andrew SHAFFER
18.		<u>1</u>	Mikacl SILVANTO
19.		<u>√</u>	Christopher J. STRINGER
20.		<u>√</u>	Joe Sung Ho TAN
21.		<u>vi</u>	Clement TISSANDIER
22.		٧	Eugene Antony WHANG
23.		<u>vi</u>	Rico ZÖRKENDÖRFER



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1.		<u>√</u>	Jody ΛΚΛΝΛ
2.		<u>vi</u>	Molly ANDERSON
3.		<u>vi</u>	Bartley K. ANDRE
4.	1_1_	<u>vi</u>	Shota AOYAGI
Sterne Kessler Goldstein Fox

	Date:	Signature of Inventor:	Name:
5.		<u>V</u>	Anthony Michael ASHCROFT
6.		<u>Ý</u>	Marine C. BATAILLE
7.	<u> </u>	<u>×</u>	Jeremy BATAILLOU
8.		<u>v</u>	Daniele DE IULIIS
9.	1. 1	<u>v</u>	Markus DIEBEL
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14.		<u>v</u>	Julian JAEDE
15.		<u>v</u>	Dunean Robert KERR
16.	1.1	<u>vi</u>	Peter RUSSELL-CLARKE
17.	12,4,17	V P	Benjamin Andrew SHAFFER
18.	1.1	<u>v</u>	Mikael SILVANTO
19.	1_1	<u><u>v</u><sup>1</sup></u>	Christopher J. STRINGER
20.		<u>√</u>	Joe Sung Ho TAN
21.		<u>×</u>	Clement TISSANDIER
22.		<u>v</u>	Eugene Antony WHANG
23.		<u><u>v</u></u>	Rico ZÖRKENDÖRFER



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2.		<u>vi</u>	Molly ANDERSON
3.	<u> </u>	<u>v</u>	Bartley K. ANDRE
4.	1 1	N	Shota AOYAGI

PATENT REEL: 045248 FRAME: 0076

Sterne Kessler Goldstein Fox

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5.		٧	Anthony Michael ASHCROFT
6.		<u>v</u>	Marine C. BATAILLE
7.		√	Jeremy BATAILLOU
8.		<u>v</u>	Daniele DE IULIIS
9.		√	Markus DIEBEL
10.		<u>v.</u>	M. Evans HANKEY
11.		<u>vi</u>	Julian HOENIG
12.		<u><u>v</u></u>	Richard P. HOWARTH
13.		<u>vi</u>	Jonathan P. IVE
14.		<u> </u>	Julian JAEDE
15.		<u>V</u>	Duncan Robert KERR
16.		۷	Poter RUSSELL-CLARKE
17.		V (A)	Benjamin Andrew SHAFFER
18.	12,5,17	v MR	Mikael SILVANTO
19.		<u>vi</u>	Christopher J. STRINGER
20.	_/_/	<u>v</u>	Joe Sung Ho TAN
21.		<u>v</u>	Clement TISSANDIER
22.		ý	Eugene Antony WHANG
23.		<u>v</u>	Rico ZÖRKENDÖRFER



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	Date:	Signature of Inventor;	Name:
1.	<u> </u>	st	Jody AKANA
2.		<u>√</u>	Molly ANDERSON
3.	<u> </u>	V	Bartley K. ANDRE
4.		<u> </u>	Shota AOYAGI

Sterne Kessler Goldstein Fox			Sterne, Kessler, Goldstein & Fox P.L.L.C. Appl. No. 29/615,344 Atty. Docket No. 3607.1960000(P32380US4)
	Date:	Signature of Inventor:	Name:
5.		<u>y</u>	Anthony Michael ASHCROFT
6.		<u>V</u>	Marine C. BATAILLE
7.		V	Jeremy BATAILLOU
8.		<u>N</u>	Daniele DE IULIIS
9.		<u>×</u>	Markus DIEBEL
10.	<u> </u>	<u>\</u>	M. Evans HANKEY
11.		<u>V</u>	Julian HOENIG
12.		<u>v</u>	Richard P. HOWARTH
13.		<u>ył</u>	Jonathan P. IVE
14.	/	N <sup>1</sup>	Julian JAEDE
15.		<u>v</u>	Duncan Robert KERR
16.		ć.	Peter RUSSELL-CLARKE
17.		xi	Benjamin Andrew SHAFFER
18.		<u>x</u>	Mikael SILVANTO
19.	12/6/2017	×-CZ	Christopher J. STRINGER
20.		<u>(</u>	Joe Sung Ho TAN
21.	<u> </u>	Ĵ	Clement TISSANDIER
22.	<u> </u>	<u>√</u>	Eugene Antony WHANG
23.		<u>vi</u>	Rico ZÖRKENDÖRFER
		Page 2 of 2	



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Sterne Kessler Goldstein Fox

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13,		N.	Jonathan P. IVE
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17.		<u>v</u>	Benjamin Andrew SHAFFER
18.		<u>ví</u>	Mikael SILVANTO
19.		1 7 2	Christopher J. STRINGER
20.	12.4.17	× 472	Joe Sung Ho TAN
21.	1_1	<u>√</u>	Clement TISSANDIER
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1.	_ / _ /	٧	Jody AKANA
2.		٧	Molly ANDERSON
3.		<u>v</u>	Bartley K. ANDRE
4.	1.1	٧	Shota AOYAGI

PATENT REEL: 045248 FRAME: 0082



	Date:	Signature of Inventor:	Name:
5.		<u>√</u>	Anthony Michael ASHCROFT
6.		<u>v</u>	Marine C. BATAILLE
7.		<u>\</u>	Jeremy BATAILLOU
8,	_/ /	٨	Daniele DE IULIIS
9.	_/_/_	√	Markus DIEBEL
10.		<u>vi</u>	M. Evans HANKEY
11.	_/_/_	<u>×</u>	Julian HOENIG
12.		<u>v</u>	Richard P. HOWARTH
13.		<u>vi</u>	Jonathan P. IVE
14.		<u>vi</u>	Julian JAEDE
15.		<u>v</u>	Duncan Robert KERR
16.		<u>vi</u>	Poter RUSSELL-CLARKE
17.		٧	Benjamin Andrew SHAFFER
18.	<u>//</u>	<u>v</u>	Mikael SILVANTO
19.		٧	Christopher J. STRINGER
20.	_ / _/	V	Joe Sung Ho TAN
21.	12,04,17	v E.	Clement TISSANDIER
22.	_/_/	<u><u>v</u></u>	Eugene Antony WHANG
23.		<u>V</u>	Rico ZÖRKENDÖRFER



#### ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the undersigned inventors: Jody AKANA, Molly ANDERSON, Bartley K. ANDRE, Shota AOYAGI, Anthony Michael ASHCROFT, Marine C. BATAILLE, Jeremy BATAILLOU, Daniele DE IULIIS, Markus DIEBEL, M. Evans HANKEY, Julian HOENIG, Richard P. HOWARTH, Jonathan P. IVE, Julian JAEDE, Duncan Robert KERR, Peter RUSSELL-CLARKE, Benjamin Andrew SHAFFER, Mikael SILVANTO, Christopher J. STRINGER, Joe Sung Ho TAN, Clement TISSANDIER, Eugene Antony WHANG and Rico ZÖRKENDÖRFER, the undersigned hereby sell and assign to Apple Inc., a corporation formed under the laws of the State of California, whose mailing address is 1 Infinite Loop, Cupertino, CA 95014 (hereafter referred to as the Assignec), his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

(a) in the invention(s) known as **ELECTRONIC DEVICE** for which an application(s) for patent in the United States of America has been executed by the undersigned and has a filing date or a 371(c) date of August 28, 2017 (also known as United States Application No. 29/615,344), in any and all applications thereon, in any and all Letters Patent(s) therefor, and

(b) in any and all application(s) that claim the benefit of the patent application listed above in part (a), including nonprovisional applications, continuing (continuation, divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all invention(s) described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the undersigned inventors had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant the patent practitioners associated with CUSTOMER NUMBER 63975 the power to insert in 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 for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned inventors on the dates opposite the undersigned names.

	Date:	Signature of Inventor:	Name:
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2.		٧	Molly ANDERSON
3.		<u>v</u>	Bartley K. ANDRE
4.	1 1	V	Shota AOYAGI

Sterne Kessler Goldstein Fox

	Date:	Signature of Inventor:	Name:
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18.	<u> </u>	<u>vi</u>	Mikael SILVANTO
19.		<u>√</u>	Christopher J. STRINGER
20.	<u> </u>	<u>√</u>	Joe Sung Ho TAN
21.		V RIA P	Clement TISSANDIER
22.	12,05,17	21-3	Eugene Antony WHANG
23.		<u>vi</u>	Rico ZÖRKENDÖRFER



# ASSIGNMENT

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3.		<u>√</u>	Bartley K. ANDRE
4.	<u> </u>	<u>vi</u>	Shota AOYAGI

PATENT REEL: 045248 FRAME: 0086



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20.		V	Joe Sung Ho TAN
21.		<u>√</u>	Clement TISSANDIER
22.		<u>v</u>	Eugene Antony WHANG
23.	12A,77	v have been a second se	Rico ZÖRKENDÖRFER
		Page 2 of 2	

**RECORDED: 02/05/2018**