

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5754137

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JODY AKANA	07/11/2019
MOLLY ANDERSON	07/11/2019
BARTLEY K. ANDRE	07/11/2019
SHOTA AOYAGI	07/11/2019
ANTHONY MICHAEL ASHCROFT	07/10/2019
MARINE C. BATAILLE	09/17/2019
JEREMY BATAILLOU	07/29/2019
MARKUS DIEBEL	07/18/2019
M. EVANS HANKEY	07/18/2019
JULIAN HOENIG	08/29/2019
RICHARD P. HOWARTH	07/18/2019
JONATHAN P. IVE	07/22/2019
JULIAN JAEDE	07/15/2019
DUNCAN ROBERT KERR	07/11/2019
PETER RUSSELL-CLARKE	07/16/2019
BENJAMIN ANDREW SHAFFER	07/18/2019
MIKAEL SILVANTO	09/09/2019
SUNG-HO TAN	07/18/2019
CLEMENT TISSANDIER	07/10/2019
EUGENE ANTONY WHANG	07/10/2019
RICO ZÖRKENDÖRFER	09/10/2019
<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>	

Property Type	Number
Application Number:	29676128

**CORRESPONDENCE DATA**

**Fax Number:** (202)371-2540  
**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:** 2023712600  
**Email:** abenavides@sternekessler.com, rbadman@sternekessler.com  
**Correspondent Name:** STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.  
**Address Line 1:** 1100 NEW YORK AVENUE, N.W.  
**Address Line 4:** WASHINGTON, D.C. 20005

<b>ATTORNEY DOCKET NUMBER:</b>	3607.3240000(P41531US1)
<b>NAME OF SUBMITTER:</b>	CHARLES D. HAMMOND
<b>SIGNATURE:</b>	/Charles D. Hammond #73,287/
<b>DATE SIGNED:</b>	10/04/2019

**Total Attachments: 42**

- source=3607.3240000 - Executed Assignments#page1.tif
- source=3607.3240000 - Executed Assignments#page2.tif
- source=3607.3240000 - Executed Assignments#page3.tif
- source=3607.3240000 - Executed Assignments#page4.tif
- source=3607.3240000 - Executed Assignments#page5.tif
- source=3607.3240000 - Executed Assignments#page6.tif
- source=3607.3240000 - Executed Assignments#page7.tif
- source=3607.3240000 - Executed Assignments#page8.tif
- source=3607.3240000 - Executed Assignments#page9.tif
- source=3607.3240000 - Executed Assignments#page10.tif
- source=3607.3240000 - Executed Assignments#page11.tif
- source=3607.3240000 - Executed Assignments#page12.tif
- source=3607.3240000 - Executed Assignments#page13.tif
- source=3607.3240000 - Executed Assignments#page14.tif
- source=3607.3240000 - Executed Assignments#page15.tif
- source=3607.3240000 - Executed Assignments#page16.tif
- source=3607.3240000 - Executed Assignments#page17.tif
- source=3607.3240000 - Executed Assignments#page18.tif
- source=3607.3240000 - Executed Assignments#page19.tif
- source=3607.3240000 - Executed Assignments#page20.tif
- source=3607.3240000 - Executed Assignments#page21.tif
- source=3607.3240000 - Executed Assignments#page22.tif
- source=3607.3240000 - Executed Assignments#page23.tif
- source=3607.3240000 - Executed Assignments#page24.tif
- source=3607.3240000 - Executed Assignments#page25.tif
- source=3607.3240000 - Executed Assignments#page26.tif
- source=3607.3240000 - Executed Assignments#page27.tif
- source=3607.3240000 - Executed Assignments#page28.tif

source=3607.3240000 - Executed Assignments#page29.tif  
source=3607.3240000 - Executed Assignments#page30.tif  
source=3607.3240000 - Executed Assignments#page31.tif  
source=3607.3240000 - Executed Assignments#page32.tif  
source=3607.3240000 - Executed Assignments#page33.tif  
source=3607.3240000 - Executed Assignments#page34.tif  
source=3607.3240000 - Executed Assignments#page35.tif  
source=3607.3240000 - Executed Assignments#page36.tif  
source=3607.3240000 - Executed Assignments#page37.tif  
source=3607.3240000 - Executed Assignments#page38.tif  
source=3607.3240000 - Executed Assignments#page39.tif  
source=3607.3240000 - Executed Assignments#page40.tif  
source=3607.3240000 - Executed Assignments#page41.tif  
source=3607.3240000 - Executed Assignments#page42.tif

**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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

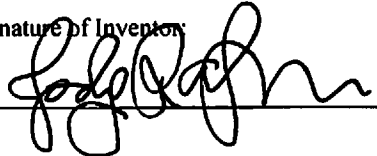
The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1. 7/11/19	✓ 	Jody AKANA
2. / /	✓ _____	Molly ANDERSON
3. / /	✓ _____	Bartley K. ANDRE
4. / /	✓ _____	Shota AOYAGI
5. / /	✓ _____	Anthony Michael ASHCROFT
6. / /	✓ _____	Marine C. BATAILLE
7. / /	✓ _____	Jeremy BATAILLOU
8. / /	✓ _____	Markus DIEBEL
9. / /	✓ _____	M. Evans HANKEY
10. / /	✓ _____	Julian HOENIG
11. / /	✓ _____	Richard P. HOWARTH
12. / /	✓ _____	Jonathan P. IVE
13. / /	✓ _____	Julian JAEDE
14. / /	✓ _____	Duncan Robert KERR
15. / /	✓ _____	Peter RUSSELL-CLARKE
16. / /	✓ _____	Benjamin Andrew SHAFFER
17. / /	✓ _____	Mikael SILVANTO
18. / /	✓ _____	Sung-Ho TAN
19. / /	✓ _____	Clement TISSANDIER
20. / /	✓ _____	Eugene Antony WHANG
21. / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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:
1.    / /	✓ _____	Jody AKANA
2.    7 / 11 / 18	✓ <u>Molly Anderson</u>	Molly ANDERSON
3.    / /	✓ _____	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    / /	✓ _____	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    / /	✓ _____	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   / /	✓ _____	Jonathan P. IVE
13.   / /	✓ _____	Julian JAEDE
14.   / /	✓ _____	Duncan Robert KERR
15.   / /	✓ _____	Peter RUSSELL-CLARKE
16.   / /	✓ _____	Benjamin Andrew SHAFFER
17.   / /	✓ _____	Mikael SILVANTO
18.   / /	✓ _____	Sung-Ho TAN
19.   / /	✓ _____	Clement TISSANDIER
20.   / /	✓ _____	Eugene Antony WHANG
21.   / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

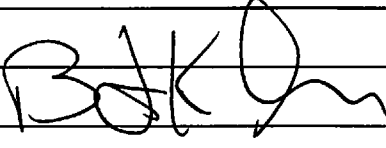
The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) 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:
1.    / /	✓ _____	Jody AKANA
2.    / /	✓ _____	Molly ANDERSON
3.    7/14/19	✓ 	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    / /	✓ _____	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    / /	✓ _____	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   / /	✓ _____	Jonathan P. IVE
13.   / /	✓ _____	Julian JAEDE
14.   / /	✓ _____	Duncan Robert KERR
15.   / /	✓ _____	Peter RUSSELL-CLARKE
16.   / /	✓ _____	Benjamin Andrew SHAFFER
17.   / /	✓ _____	Mikael SILVANTO
18.   / /	✓ _____	Sung-Ho TAN
19.   / /	✓ _____	Clement TISSANDIER
20.   / /	✓ _____	Eugene Antony WHANG
21.   / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.



### 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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

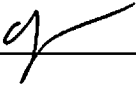
The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.    /   /	✓ _____	Jody AKANA
2.    /   /	✓ _____	Molly ANDERSON
3.    /   /	✓ _____	Bartley K. ANDRE
4.    /   /	✓ _____	Shota AOYAGI
5.    07 10 14	✓ 	Anthony Michael ASHCROFT
6.    /   /	✓ _____	Marine C. BATAILLE
7.    /   /	✓ _____	Jeremy BATAILLOU
8.    /   /	✓ _____	Markus DIEBEL
9.    /   /	✓ _____	M. Evans HANKEY
10.   /   /	✓ _____	Julian HOENIG
11.   /   /	✓ _____	Richard P. HOWARTH
12.   /   /	✓ _____	Jonathan P. IVE
13.   /   /	✓ _____	Julian JAEDE
14.   /   /	✓ _____	Duncan Robert KERR
15.   /   /	✓ _____	Peter RUSSELL-CLARKE
16.   /   /	✓ _____	Benjamin Andrew SHAFFER
17.   /   /	✓ _____	Mikael SILVANTO
18.   /   /	✓ _____	Sung-Ho TAN
19.   /   /	✓ _____	Clement TISSANDIER
20.   /   /	✓ _____	Eugene Antony WHANG
21.   /   /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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:
1. / /		Jody AKANA
2. / /		Molly ANDERSON
3. / /		Bartley K. ANDRE
4. / /		Shota AOYAGI
5. / /		Anthony Michael ASHCROFT
6. 09 / 17 / 13		Marine C. BATAILLE
7. / /		Jeremy BATAILLOU
8. / /		Markus DIEBEL
9. / /		M. Evans HANKEY
10. / /		Julian HOENIG
11. / /		Richard P. HOWARTH
12. / /		Jonathan P. IVE
13. / /		Julian JAEDE
14. / /		Duncan Robert KERR
15. / /		Peter RUSSELL-CLARKE
16. / /		Benjamin Andrew SHAFER
17. / /		Mikael SILVANTO
18. / /		Sung-Ho TAN
19. / /		Clement TISSANDER
20. / /		Eugene Antony WHEANG
21. / /		Rico ZÜRRENDORFER

**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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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:
1.    / /	✓ _____	Jody AKANA
2.    / /	✓ _____	Molly ANDERSON
3.    / /	✓ _____	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    07/29/19	✓ <del>_____</del>	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    / /	✓ _____	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   / /	✓ _____	Jonathan P. IVE
13.   / /	✓ _____	Julian JAEDE
14.   / /	✓ _____	Duncan Robert KERR
15.   / /	✓ _____	Peter RUSSELL-CLARKE
16.   / /	✓ _____	Benjamin Andrew SHAFFER
17.   / /	✓ _____	Mikael SILVANTO
18.   / /	✓ _____	Sung-Ho TAN
19.   / /	✓ _____	Clement TISSANDIER
20.   / /	✓ _____	Eugene Antony WHANG
21.   / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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:
1.    /   /	✓ _____	Jody AKANA
2.    /   /	✓ _____	Molly ANDERSON
3.    /   /	✓ _____	Bartley K. ANDRE
4.    /   /	✓ _____	Shota AOYAGI
5.    /   /	✓ _____	Anthony Michael ASHCROFT
6.    /   /	✓ _____	Marine C. BATAILLE
7.    /   /	✓ _____	Jeremy BATAILLOU
8.    2/18/19	✓ 	Markus DIEBEL
9.    /   /	✓ _____	M. Evans HANKEY
10.   /   /	✓ _____	Julian HOENIG
11.   /   /	✓ _____	Richard P. HOWARTH
12.   /   /	✓ _____	Jonathan P. IVE
13.   /   /	✓ _____	Julian JAEDE
14.   /   /	✓ _____	Duncan Robert KERR
15.   /   /	✓ _____	Peter RUSSELL-CLARKE
16.   /   /	✓ _____	Benjamin Andrew SHAFFER
17.   /   /	✓ _____	Mikael SILVANTO
18.   /   /	✓ _____	Sung-Ho TAN
19.   /   /	✓ _____	Clement TISSANDIER
20.   /   /	✓ _____	Eugene Antony WHANG
21.   /   /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

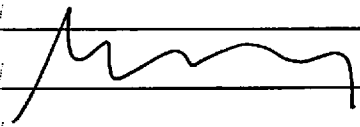
The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.    / /	✓ _____	Jody AKANA
2.    / /	✓ _____	Molly ANDERSON
3.    / /	✓ _____	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    / /	✓ _____	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    2 11 27 17	✓ 	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   / /	✓ _____	Jonathan P. IVE
13.   / /	✓ _____	Julian JAEDE
14.   / /	✓ _____	Duncan Robert KERR
15.   / /	✓ _____	Peter RUSSELL-CLARKE
16.   / /	✓ _____	Benjamin Andrew SHAFFER
17.   / /	✓ _____	Mikael SILVANTO
18.   / /	✓ _____	Sung-Ho TAN
19.   / /	✓ _____	Clement TISSANDIER
20.   / /	✓ _____	Eugene Antony WHANG
21.   / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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:
1.    /    /    /	✓ _____	Jody AKANA
2.    /    /    /	✓ _____	Molly ANDERSON
3.    /    /    /	✓ _____	Bartley K. ANDRE
4.    /    /    /	✓ _____	Shota AOYAGI
5.    /    /    /	✓ _____	Anthony Michael ASHCROFT
6.    /    /    /	✓ _____	Marine C. BATAILLE
7.    /    /    /	✓ _____	Jeremy BATAILLOU
8.    /    /    /	✓ _____	Markus DIEBEL
9.    /    /    /	✓ _____	M. Evans HANKEY
10. <u>08.29.19</u>	✓ 	Julian HOENIG
11.  /    /    /	✓ _____	Richard P. HOWARTH
12.  /    /    /	✓ _____	Jonathan P. IVE
13.  /    /    /	✓ _____	Julian JAEDE
14.  /    /    /	✓ _____	Duncan Robert KERR
15.  /    /    /	✓ _____	Peter RUSSELL-CLARKE
16.  /    /    /	✓ _____	Benjamin Andrew SHAFFER
17.  /    /    /	✓ _____	Mikael SILVANTO
18.  /    /    /	✓ _____	Sung-Ho TAN
19.  /    /    /	✓ _____	Clement TISSANDIER
20.  /    /    /	✓ _____	Eugene Antony WHANG
21.  /    /    /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

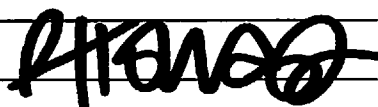
The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) 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:
1.    /   /	✓ _____	Jody AKANA
2.    /   /	✓ _____	Molly ANDERSON
3.    /   /	✓ _____	Bartley K. ANDRE
4.    /   /	✓ _____	Shota AOYAGI
5.    /   /	✓ _____	Anthony Michael ASHCROFT
6.    /   /	✓ _____	Marine C. BATAILLE
7.    /   /	✓ _____	Jeremy BATAILLOU
8.    /   /	✓ _____	Markus DIEBEL
9.    /   /	✓ _____	M. Evans HANKEY
10.   /   /	✓ _____	Julian HOENIG
11.   7/17/17	✓ 	Richard P. HOWARTH
12.    /   /	✓ _____	Jonathan P. IVE
13.    /   /	✓ _____	Julian JAEDE
14.    /   /	✓ _____	Duncan Robert KERR
15.    /   /	✓ _____	Peter RUSSELL-CLARKE
16.    /   /	✓ _____	Benjamin Andrew SHAFFER
17.    /   /	✓ _____	Mikael SILVANTO
18.    /   /	✓ _____	Sung-Ho TAN
19.    /   /	✓ _____	Clement TISSANDIER
20.    /   /	✓ _____	Eugene Antony WHANG
21.    /   /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

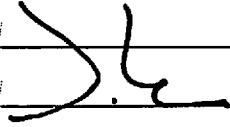
The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.    / /	✓ _____	Jody AKANA
2.    / /	✓ _____	Molly ANDERSON
3.    / /	✓ _____	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    / /	✓ _____	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    / /	✓ _____	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   7/22/19	✓ 	Jonathan P. IVE
13.    / /	✓ _____	Julian JAEDE
14.    / /	✓ _____	Duncan Robert KERR
15.    / /	✓ _____	Peter RUSSELL-CLARKE
16.    / /	✓ _____	Benjamin Andrew SHAFFER
17.    / /	✓ _____	Mikael SILVANTO
18.    / /	✓ _____	Sung-Ho TAN
19.    / /	✓ _____	Clement TISSANDIER
20.    / /	✓ _____	Eugene Antony WHANG
21.    / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

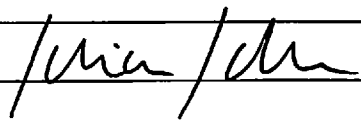
The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.    /   /	✓ _____	Jody AKANA
2.    /   /	✓ _____	Molly ANDERSON
3.    /   /	✓ _____	Bartley K. ANDRE
4.    /   /	✓ _____	Shota AOYAGI
5.    /   /	✓ _____	Anthony Michael ASHCROFT
6.    /   /	✓ _____	Marine C. BATAILLE
7.    /   /	✓ _____	Jeremy BATAILLOU
8.    /   /	✓ _____	Markus DIEBEL
9.    /   /	✓ _____	M. Evans HANKEY
10.   /   /	✓ _____	Julian HOENIG
11.   /   /	✓ _____	Richard P. HOWARTH
12.   /   /	✓ _____	Jonathan P. IVE
13.   07/15/19	✓ 	Julian JAEDE
14.   /   /	✓ _____	Duncan Robert KERR
15.   /   /	✓ _____	Peter RUSSELL-CLARKE
16.   /   /	✓ _____	Benjamin Andrew SHAFFER
17.   /   /	✓ _____	Mikael SILVANTO
18.   /   /	✓ _____	Sung-Ho TAN
19.   /   /	✓ _____	Clement TISSANDIER
20.   /   /	✓ _____	Eugene Antony WHANG
21.   /   /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.



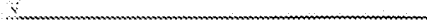
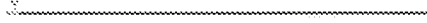
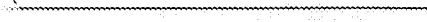
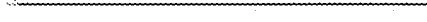






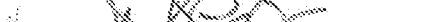
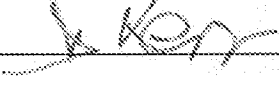
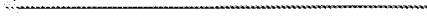

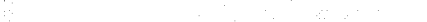




The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.	/ /		Jody AKANA
2.	/ /		Molly ANDERSON
3.	/ /		Bartley K. ANDRE
4.	/ /		Shota AOYAGI
5.	/ /		Anthony Michael ASHCROFT
6.	/ /		Marine C. BATAILLE
7.	/ /		Jeremy BATAILLOU
8.	/ /		Markus DIEBEL
9.	/ /		M. Evans HANKEY
10.	/ /		Julian HOENIG
11.	/ /		Richard P. HOWARTH
12.	/ /		Jonathan P. IVE
13.	/ /		Julian JAEDE
14.	7/11/19		Duncan Robert KERR
15.	/ /		Peter RUSSELL-CLARKE
16.	/ /		Benjamin Andrew SHAPPER
17.	/ /		Mikael SILVANTO
18.	/ /		Sung-Ho TAN
19.	/ /		Clement TISSANDIER
20.	/ /		Eugene Antony WHANG
21.	/ /		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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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:
1.    / /	✓ _____	Jody AKANA
2.    / /	✓ _____	Molly ANDERSON
3.    / /	✓ _____	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    / /	✓ _____	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    / /	✓ _____	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   / /	✓ _____	Jonathan P. IVE
13.   / /	✓ _____	Julian JAEDE
14.   / /	✓ _____	Duncan Robert KERR
15.   7/16/19	✓ 	Peter RUSSELL-CLARKE
16.   / /	✓ _____	Benjamin Andrew SHAFFER
17.   / /	✓ _____	Mikael SILVANTO
18.   / /	✓ _____	Sung-Ho TAN
19.   / /	✓ _____	Clement TISSANDIER
20.   / /	✓ _____	Eugene Antony WHANG
21.   / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

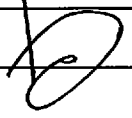
The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.	/ /	✓ _____	Jody AKANA
2.	/ /	✓ _____	Molly ANDERSON
3.	/ /	✓ _____	Bartley K. ANDRE
4.	/ /	✓ _____	Shota AOYAGI
5.	/ /	✓ _____	Anthony Michael ASHCROFT
6.	/ /	✓ _____	Marine C. BATAILLE
7.	/ /	✓ _____	Jeremy BATAILLOU
8.	/ /	✓ _____	Markus DIEBEL
9.	/ /	✓ _____	M. Evans HANKEY
10.	/ /	✓ _____	Julian HOENIG
11.	/ /	✓ _____	Richard P. HOWARTH
12.	/ /	✓ _____	Jonathan P. IVE
13.	/ /	✓ _____	Julian JAEDE
14.	/ /	✓ _____	Duncan Robert KERR
15.	/ /	✓ _____	Peter RUSSELL-CLARKE
16.	7/18/19	✓ 	Benjamin Andrew SHAFFER
17.	/ /	✓ _____	Mikael SILVANTO
18.	/ /	✓ _____	Sung-Ho TAN
19.	/ /	✓ _____	Clement TISSANDIER
20.	/ /	✓ _____	Eugene Antony WHANG
21.	/ /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.




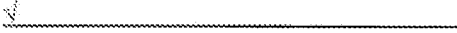
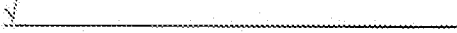
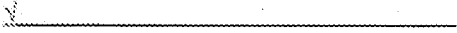

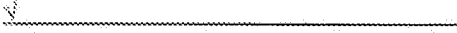
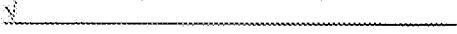
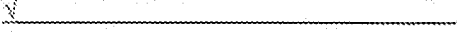
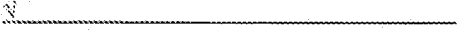

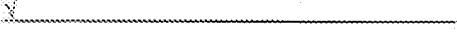
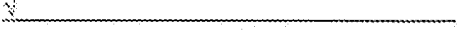
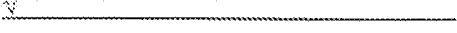
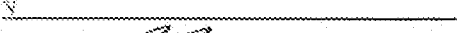
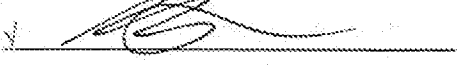
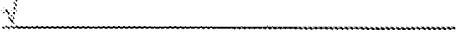
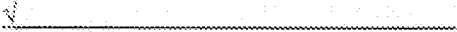
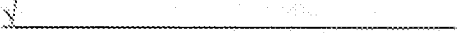

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1. / /		Jody AKANA
2. / /		Molly ANDERSON
3. / /		Bartley K. ANDRE
4. / /		Shota AOYAGI
5. / /		Anthony Michael ASHCROFT
6. / /		Marine C. BATAILLE
7. / /		Jeremy BATAILLOU
8. / /		Markus DIEBEL
9. / /		M. Evans HANKEY
10. / /		Julian HOENIG
11. / /		Richard P. HOWARTH
12. / /		Jonathan P. IVE
13. / /		Julian JAEDE
14. / /		Duncan Robert KERR
15. / /		Peter RUSSELL-CLARKE
16. / /		Benjamin Andrew SHAFFER
17. 9/9/19		Mikael SILVANTO
18. / /		Sung-Ho TAN
19. / /		Clement TISSANDIER
20. / /		Eugene Antony WHANG
21. / /		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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

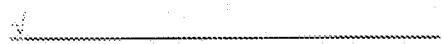
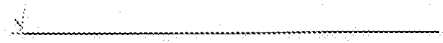
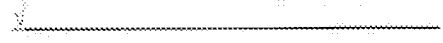
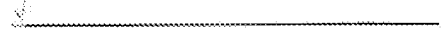
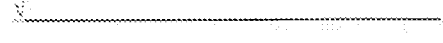
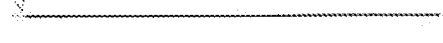
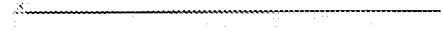
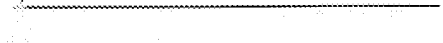






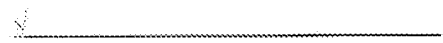
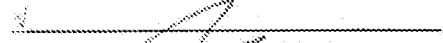
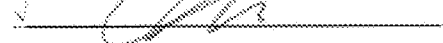
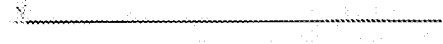
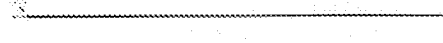
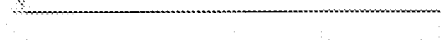

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1. / /		Jody AKANA
2. / /		Molly ANDERSON
3. / /		Bartley K. ANDRE
4. / /		Shota AOYAGI
5. / /		Anthony Michael ASHCROFT
6. / /		Marine C. BATAILLE
7. / /		Jeremy BATAILLOU
8. / /		Markus DIEBEL
9. / /		M. Evans HANKEY
10. / /		Julian HOENIG
11. / /		Richard P. HOWARTH
12. / /		Jonathan P. IVE
13. / /		Julian JAEDE
14. / /		Duncan Robert KERR
15. / /		Peter RUSSELL-CLARKE
16. / /		Benjamin Andrew SHAPPER
17. / /		Mikael SILVANTO
18. 7/18/19		Sung-Ho TAN
19. / /		Clement TISSANDIER
20. / /		Eugene Antony WHANG
21. / /		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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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:
1.    / /	✓ _____	Jody AKANA
2.    / /	✓ _____	Molly ANDERSON
3.    / /	✓ _____	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    / /	✓ _____	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    / /	✓ _____	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   / /	✓ _____	Jonathan P. IVE
13.   / /	✓ _____	Julian JAEDE
14.   / /	✓ _____	Duncan Robert KERR
15.   / /	✓ _____	Peter RUSSELL-CLARKE
16.   / /	✓ _____	Benjamin Andrew SHAFFER
17.   / /	✓ _____	Mikael SILVANTO
18.   / /	✓ _____	Sung-Ho TAN
19.   7/10/19	✓  _____	Clement TISSANDIER
20.   / /	✓ _____	Eugene Antony WHANG
21.   / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.

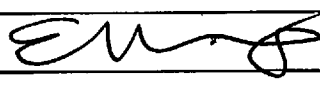
The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.    / /	✓ _____	Jody AKANA
2.    / /	✓ _____	Molly ANDERSON
3.    / /	✓ _____	Bartley K. ANDRE
4.    / /	✓ _____	Shota AOYAGI
5.    / /	✓ _____	Anthony Michael ASHCROFT
6.    / /	✓ _____	Marine C. BATAILLE
7.    / /	✓ _____	Jeremy BATAILLOU
8.    / /	✓ _____	Markus DIEBEL
9.    / /	✓ _____	M. Evans HANKEY
10.   / /	✓ _____	Julian HOENIG
11.   / /	✓ _____	Richard P. HOWARTH
12.   / /	✓ _____	Jonathan P. IVE
13.   / /	✓ _____	Julian JAEDE
14.   / /	✓ _____	Duncan Robert KERR
15.   / /	✓ _____	Peter RUSSELL-CLARKE
16.   / /	✓ _____	Benjamin Andrew SHAFFER
17.   / /	✓ _____	Mikael SILVANTO
18.   / /	✓ _____	Sung-Ho TAN
19.   / /	✓ _____	Clement TISSANDIER
20.   7/19/17	✓ 	Eugene Antony WHANG
21.   / /	✓ _____	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, 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, 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 One Apple Park Way, 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 January 8, 2019 (also known as United States Application No. 29/676,128), 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 non-provisional 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.










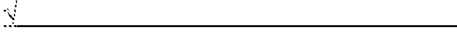
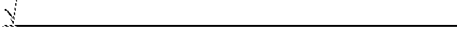
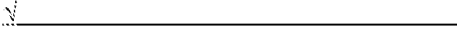
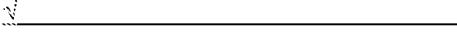
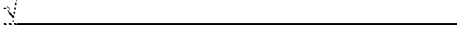
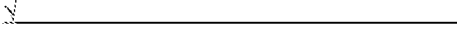
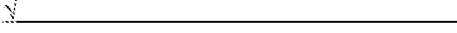
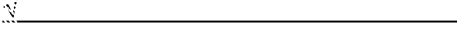




The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection 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:
1.    /    /    /		Jody AKANA
2.    /    /    /		Molly ANDERSON
3.    /    /    /		Bartley K. ANDRE
4.    /    /    /		Shota AOYAGI
5.    /    /    /		Anthony Michael ASHCROFT
6.    /    /    /		Marine C. BATAILLE
7.    /    /    /		Jeremy BATAILLOU
8.    /    /    /		Markus DIEBEL
9.    /    /    /		M. Evans HANKEY
10.   /    /    /		Julian HOENIG
11.   /    /    /		Richard P. HOWARTH
12.   /    /    /		Jonathan P. IVE
13.   /    /    /		Julian JAEDE
14.   /    /    /		Duncan Robert KERR
15.   /    /    /		Peter RUSSELL-CLARKE
16.   /    /    /		Benjamin Andrew SHAFFER
17.   /    /    /		Mikael SILVANTO
18.   /    /    /		Sung-Ho TAN
19.   /    /    /		Clement TISSANDIER
20.   /    /    /		Eugene Antony WHANG
21.   09/10/19		Rico ZÖRKENDÖRFER