505392517 03/25/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JODY AKANA	01/09/2019
MOLLY ANDERSON	01/28/2019
BARTLEY K. ANDRE	01/28/2019
SHOTA AOYAGI	01/29/2018
ANTHONY MICHAEL ASHCROFT	01/09/2019
MARINE C. BATAILLE	01/09/2019
JEREMY BATAILLOU	01/09/2019
MARKUS DIEBEL	01/11/2019
M. EVANS HANKEY	02/08/2019
JULIAN HOENIG	01/09/2019
RICHARD P. HOWARTH	01/29/2019
JONATHAN P. IVE	01/29/2019
JULIAN JAEDE	01/11/2019
DUNCAN ROBERT KERR	01/10/2019
PETER RUSSELL-CLARKE	01/10/2019
BENJAMIN ANDREW SHAFFER	01/09/2019
MIKAEL SILVANTO	03/06/2019
SUNG-HO TAN	01/29/2019
CLEMENT TISSANDIER	01/11/2019
EUGENE ANTONY WHANG	01/29/2019
RICO ZÖRKENDÖRFER	01/11/2019

RECEIVING PARTY DATA

Name:	APPLE INC.
Street Address:	ONE APPLE PARK WAY
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

PROPERTY NUMBERS Total: 1

PATENT REEL: 048692 FRAME: 0278

505392517

Property Type	Number
Application Number:	29647929

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DATE SIGNED:	03/25/2019

Total Attachments: 42

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	IN WITNESS	WHEREOF, executed by the undersig	ned inventors on the dates opposite the undersigned na
	Date:	Signature of inventor	Name:
1.	1/9/19	· Halden	Jody AKANA
2.		1 0 0	Molly ANDERSON



	Date:	Signature of Inventor:	Name:
3.		<u>√</u>	Bartley K. ANDRE
4.		<u>J</u>	Shota AOYAGI
5.		<u>√</u>	Anthony Michael ASHCROFT
6.		<u>√</u>	Marine C. BATAILLE
7.		<u>√</u>	Jeremy BATAILLOU
8.		Ň	Markus DIEBEL
9.		٧	M. Evans HANKEY
10.		<u>V</u>	Julian HOENIG
11.		<u>√</u>	Richard P. HOWARTH
12.		<u>√</u>	Jonathan P. IVE
13.		<u>V</u>	Julian JAEDE
14.		V	Duncan Robert KERR
15.		<u>√</u>	Peter RUSSELL-CLARKE
16.		٧	Benjamin Andrew SHAFFER
17.	_ / _ /	<u> </u>	Mikael SILVANTO
18.		√	Sung-Ho TAN
19.	/ /	<u>√</u>	Clement TISSANDIER
20.		<u>v</u>	Eugene Antony WHANG
21.		V	Rico ZÖRKENDÖRFER



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

	111 11111111111111111111111111111111111		
	Date:	Signature of Inventor:	Name:
1.		<u>√</u>	Jody AKANA
2.	1 1291 19	Meelun	Molly ANDERSON



	Date:	Signature of Inventor:	Name:
3.		٧	_ Bartley K. ANDRE
4.		√	_ Shota AOYAGI
5.		٧	_ Anthony Michael ASHCROFT
6.		٧	_ Marine C. BATAILLE
7.		√	_ Jeremy BATAILLOU
8.		√	_ Markus DIEBEL
9.		٧	_ M. Evans HANKEY
10.		√	_ Julian HOENIG
11.		<u>√</u>	_ Richard P. HOWARTH
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	Date:	Signature of Inventor:	Name:
1.		√	Jody AKANA
2.		<u>√</u>	Molly ANDERSON



Da Lagain agir	te:	Signature of Inventor:	Name:
3	2819	4 SALL	Bartley K. ANDRE
			Shota AOYAGI
			Anthony Michael ASHCROFT
6.	<u>1. 1 .</u> Waliota	<u> </u>	Marine C. BATAILLE
7.		4	Jeremy BATAILLOU
s	<u> </u>	4	Markus DIEBEL
9.	1	X	M. Evans HANKEY
10,	<u> </u>	√	Julian HOENIG
11.	4		Richard P. HOWARTH
12.		<u>X</u>	Jonathan P. IVE
13.	<u> </u>		Julian JAEDE
#4		<u> 1</u>	Duncan Robert KERR
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2.		<u>\lambda</u>	Molly ANDERSON



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4.	1 129,19	1 for Wit	Shota AOYAGI
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	V	Marine C. BATAILLE
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	<u>√</u>	Rico ZÖRKENDÖRFER



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	Date:	Signature of Inventor:	Name:
١.		<u>√</u>	Jody AKANA
2.		<u>√</u>	Molly ANDERSON



	Date:	Signature of Inventor:	Name:
3.		<u>√</u>	Bartley K. ANDRE
4.		<u>√</u>	Shota AOYAGI
5.		<u>√</u>	Anthony Michael ASHCROFT
6.	01/0313	· Chi	Marine C. BATAILLE
7.		V	Jeremy BATAILLOU
8.		√	Markus DIEBEL
9.		٧	M. Evans HANKEY
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5.		<u>v</u>	Anthony Michael ASHCROFT
6.		٧	Marine C. BATA!LLE
7.	01/09/19	V-354	Jeremy BATAILLOU
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5.		<u>√</u>	Anthony Michael ASHCROFT
6.		<u>√</u>	Marine C. BATAILLE
7.		<u>√</u>	Jeremy BATAILLOU
8.		<u>√</u>	Markus DIEBEL
9.		√	M. Evans HANKEY
10.		V AI	Julian HOENIG
11.	12919	· (TONA)	Richard P. HOWARTH
12.		<u>v</u>	Jonathan P. IVE
13.		<u>√</u>	Julian JAEDE
14.		<u>v</u>	Duncan Robert KERR
15.		٧	Peter RUSSELL-CLARKE
16.		٧	Benjamin Andrew SHAFFER
17.		vi	Mikael SILVANTO
18.		√	Sung-Ho TAN
19.		ý.	Clement TISSANDIER
20.		v'	Eugene Antony WHANG
21.		<u>V</u>	Rico ZÖRKENDÖRFER



ASSIGNMENT

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	Date:	Signature of Inventor:	Name:
1.		1	Jody AKANA
2.		<u> </u>	Molly ANDERSON



	Date:	Signature of Inventor:	Name:
3.		<u>√</u>	Bartley K. ANDRE
4.		<u>√</u>	Shota AOYAGI
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9.		<u>√</u>	M. Evans HANKEY
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11.		<u> </u>	Richard P. HOWARTH
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19.		V	Clement TISSANDIER
20.	_ / _ / _	<u>√</u>	Eugene Antony WHANG
21.	<i>l</i> /	V	Rico ZÖRKENDÖRFER

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13.	01.11.19	/Min/ul	Julian JAEDE
14.		<u>, / / / / / / / / / / / / / / / / / / /</u>	Duncan Robert KERR
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	Date:	Signature of Inventor:	Name:
1.		V	Jody AKANA
2.		<u> </u>	Molly ANDERSON



	Date:	Signature of Inventor:	Name:
3.		٧	Bartley K. ANDRE
4.		<u>√</u>	Shota AOYAGI
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11.		V	Richard P. HOWARTH
12.		<u>v</u>	Jonathan P. IVE
13.		ý	Julian JAEDE
14.		V All All All All All All All All All Al	Duncan Robert KERR
15.	1 110119	1 Hekuller	Peter RUSSELL-CLARKE
16.		<u>√</u>	Benjamin Andrew SHAFFER
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	Date:	Signature of Inventor:	Name:
1.		√	Jody AKANA
2.		<u>√</u>	Molly ANDERSON



	Date	Signature of Inventor:	Name:
3.		<u> </u>	Bartley K. ANDRE
4.		3	Shota AOYAGI
5.		: V	Anthony Michael ASHCROFT
6,	/	<u> </u>	Marine C. BATAILLE
7,		<u> </u>	Jeremy BATAILLOU
8.		<u> </u>	Markus DIEBEL
9.	111	Ÿ	M. Evans HANKEY
10,	<u></u>	Ŋ.	Julian HOENIG
IJ.		<u>V</u>	Richard P. HOWARTH
12.		<u>V</u>	Jonathan P. IVE
13.		<u> </u>	Julian JAEDE
14.		<u> </u>	Duncan Robert KERR
15.	<u></u>	<u> </u>	Peter RUSSELL-CLARKE
16:			Benjamin Andrew SHAFFER
17.	3,6,10		Mikäel SILVANTO
13.		8	Sung-Ho TAN
19.		<u> </u>	Clement TISSANDIER
20.	<u>/_/</u>	<u> Xaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa</u>	Eugene Antony WHANG
21,	- J	√	Rico ZÖRKENDÖRFER



ASSIGNMENT

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2.		<u> </u>	Molly ANDERSON



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3.		<u> </u>	Bartley K. ANDRE
4.		<u>√</u>	Shota AOYAGI
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6.	1 1	<u>√</u>	Marine C. BATAILLE
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9.		<u>V</u>	M. Evans HANKEY
10.		V	Julian HOENIG
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13.		<u> </u>	Julian JAEDE
14.	/	<u>√</u>	Duncan Robert KERR
15.		<u>√</u>	Peter RUSSELL-CLARKE
16.		<u> </u>	Benjamin Andrew SHAFFER
17.		v /	Mikael SILVANTO
18.	129,19	v Ch	Sung-Ho TAN
19.		v ·	Clement TISSANDIER
20.		<u> </u>	Eugene Antony WHANG
21.		√	Rico ZÖRKENDÖRFER



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7.		√	Jeremy BATAILLOU
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		Page 2 of 2	

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