506444619 01/12/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6491388

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHRISTOPHER B. FLEIZACH	06/05/2020
GIOVANNI M. AGNOLI	06/05/2020
KEVIN WILL CHEN	06/02/2020
SHAWN HENNING	06/12/2020
STEPHEN O. LEMAY	06/03/2020
CATHERINE B. B. MORRISON	06/22/2020
CAMILLE MOUSSETTE	06/08/2020
TU NGUYEN	06/05/2020
MATTHEW J. SUNDSTROM	06/02/2020
MOLLY PRAY WIEBE	07/23/2020
CHRISTOPHER WILSON	06/02/2020

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16814801

CORRESPONDENCE DATA

Fax Number:

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: (214) 259-0919

Email: katya.bond@dentons.com

Correspondent Name: BENJAMIN BOLIN

Address Line 1: 2000 MCKINNEY AVENUE

Address Line 2: SUITE 1900

Address Line 4: DALLAS, TEXAS 75201

PATENT 506444619 REEL: 054962 FRAME: 0380

ATTORNEY DOCKET NUMBER:	P41917US1
NAME OF SUBMITTER:	BENJAMIN BOLIN
SIGNATURE:	/Benjamin Bolin/
DATE SIGNED:	01/12/2021
Total Attachments: 22	
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> PATENT REEL: 054962 FRAME: 0381

ASSIGNMENT

This Assignment is by:

Christopher B. FLEIZACH c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

- 3. Assignor shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said non-provisional application and application for letters patent; (b) any division, continuation, or continuation-in-part claiming priority thereto or the benefit thereof, or any substitution of any such application, or (c) any letters patent or patents for said inventions in any country or jurisdiction, including, without limitation, any modifications to such letters patent or patents such as through any reissue, re-examination or other post-grant proceeding. For purposes of this paragraph, "procurement, maintenance, enforcement, defense" shall include, without limitation, any preparation, prosecution, pre-grant proceeding, and post-grant proceeding, whether before a patent office or other administrative body or judicial body with jurisdiction therefor.
- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date:	06/05/20	/ Signature:	C. 42	1
			Christopher B. FLEIZACH	

ASSIGNMENT

This Assignment is by:

Giovanni M. AGNOLI c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

- 3. Assignor shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said non-provisional application and application for letters patent; (b) any division, continuation, or continuation-in-part claiming priority thereto or the benefit thereof, or any substitution of any such application, or (c) any letters patent or patents for said inventions in any country or jurisdiction, including, without limitation, any modifications to such letters patent or patents such as through any reissue, re-examination or other post-grant proceeding. For purposes of this paragraph, "procurement, maintenance, enforcement, defense" shall include, without limitation, any preparation, prosecution, pre-grant proceeding, and post-grant proceeding, whether before a patent office or other administrative body or judicial body with jurisdiction therefor.
- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date: 06	6/05/20	/ Signature:		/
			Giovanni M. AGNOLI	

ASSIGNMENT

This Assignment is by:

Kevin Will CHEN c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

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- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date:	02-Jun-2020	Signature:	/	pu-	/
		_		Kevin Will CHEN	

ASSIGNMENT

This Assignment is by:

Shawn HENNING c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

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- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date: 06/12/20 | Signature: | Shawn HENNING | /

ASSIGNMENT

This Assignment is by:

Stephen O. LEMAY c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
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- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date:	03-Jun-2020	Signature:	/	+	/
		-		Stephen O. LEMAY	

ASSIGNMENT

This Assignment is by:

Catherine B. B. MORRISON c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
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22-Jun-2020	Comin Be Mari		
Date:	Signature: /	/	
	Catherine B. B. MORRISON		

ASSIGNMENT

This Assignment is by:

Camille MOUSSETTE c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

- 3. Assignor shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said non-provisional application and application for letters patent; (b) any division, continuation, or continuation-in-part claiming priority thereto or the benefit thereof, or any substitution of any such application, or (c) any letters patent or patents for said inventions in any country or jurisdiction, including, without limitation, any modifications to such letters patent or patents such as through any reissue, re-examination or other post-grant proceeding. For purposes of this paragraph, "procurement, maintenance, enforcement, defense" shall include, without limitation, any preparation, prosecution, pre-grant proceeding, and post-grant proceeding, whether before a patent office or other administrative body or judicial body with jurisdiction therefor.
- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date: 06/08/20	/ Signature:	CeM My	1
<u> </u>	_	Camille MOUSSETTE	'

ASSIGNMENT

This Assignment is by:

Tu NGUYEN c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

- 3. Assignor shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said non-provisional application and application for letters patent; (b) any division, continuation, or continuation-in-part claiming priority thereto or the benefit thereof, or any substitution of any such application, or (c) any letters patent or patents for said inventions in any country or jurisdiction, including, without limitation, any modifications to such letters patent or patents such as through any reissue, re-examination or other post-grant proceeding. For purposes of this paragraph, "procurement, maintenance, enforcement, defense" shall include, without limitation, any preparation, prosecution, pre-grant proceeding, and post-grant proceeding, whether before a patent office or other administrative body or judicial body with jurisdiction therefor.
- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date: 06/05/20 Signature: / WW /
Tu NGUYEN

ASSIGNMENT

This Assignment is by:

Matthew J. SUNDSTROM c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

- 3. Assignor shall promptly sign and execute all papers and documents, take all lawful oaths, and do all acts necessary, required or useful for the procurement, maintenance, enforcement, defense or otherwise to secure title thereto to the Assignee, at the sole cost and expense of Assignee, its successors, legal representatives and assigns, in each case including, without limitation, arising from or relating to (a) said inventions, or said non-provisional application and application for letters patent; (b) any division, continuation, or continuation-in-part claiming priority thereto or the benefit thereof, or any substitution of any such application, or (c) any letters patent or patents for said inventions in any country or jurisdiction, including, without limitation, any modifications to such letters patent or patents such as through any reissue, re-examination or other post-grant proceeding. For purposes of this paragraph, "procurement, maintenance, enforcement, defense" shall include, without limitation, any preparation, prosecution, pre-grant proceeding, and post-grant proceeding, whether before a patent office or other administrative body or judicial body with jurisdiction therefor.
- 4. Assignor hereby authorizes and requests the Commissioner of Patents in the United States to issue the above mentioned letters patent of the United States to Assignee as the assignee of said inventions and said application for letters patent, and the letters patent to be issued thereon for the sole use of Assignee, its successors, legal representatives and assigns.

Date:	02-Jun-2020	Signature:	/	May Kro-	/
		_		Matthew J. SUNDSTROM	

ASSIGNMENT

This Assignment is by:

Molly Pray WIEBE c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

- 1. Assignor hereby sells, assigns, transfers and sets over or acknowledges that Assignor has sold, assigned, transferred and set over, to Assignee, its successors, legal representatives and assigns, Assignor's entire right (including the right to claim priority), title and interest in and to the above-mentioned inventions, provisional application and application for letters patent, any and all provisionals, non-provisionals, divisions, continuations, and continuations-in-part claiming priority thereto or the benefit thereof, substitutions of said applications, and any and all letters patent or patents in the United States of America and all foreign countries or jurisdictions which may be granted therefor and thereon, including, without limitation, any modifications to such letters patent or patents such as through reissue, re-examination or other post-grant proceeding, any and all extensions of said letters patent or patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee (including any right to institute actions and to recover for past, present and future infringement), for its own use and the use of its successors, legal representatives and assigns, to the full end of the term or terms for which letters patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.
- 2. Assignor represents, warrants and covenants (a) that, at the time of execution and delivery of this agreement, Assignor is a lawful owner of a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth in this agreement, or (b) that Assignor lawfully owned a right, title and interest in and to said inventions and said non-provisional application and application for letters patent, and that the same were unencumbered and that Assignor sold, assigned, transferred and set over to Assignee and its successors, legal representatives and assigns, the right, title and interest in and to said inventions and said non-provisional application and application for letters patent.

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Date:	23-Jul-2020	Signature:	/	maly B. wil.	/
				Molly Pray WIEBE	

ASSIGNMENT

This Assignment is by:

Christopher WILSON c/o Apple Inc. One Apple Park Way Cupertino, California 95014

(referred to in this Assignment as "Assignor"), whose residence or mailing address information is listed above.

This Assignment is to:

Assignee: Apple Inc.

Address: One Apple Park Way, Cupertino, California 95014

A juristic entity duly organized under and pursuant to the laws of: California

(referred to in this Assignment as "Assignee"), which desires to acquire the entire right, title and interest in, to and under said patent application and the inventions covered thereby.

Assignor has invented certain new and useful inventions in:

USER INTERFACES FOR NON-VISUAL OUTPUT OF TIME

for which the following application has been filed in the United States of America:

Serial No.: 16/814,801 Filing Date: March 10, 2020

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,

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Date:	02-Jun-2020	Signature:	هند	/
			Christopher WILSON	