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PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | | NEW ASSIGNMENT | NEW ASSIGNMENT | | |
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| CONVEYING PARTY D | ΑΤΑ | | | | |
| | | Name Execution | n Date | | |
| LARS SCHMITT | 09/20/2018 | } | | | |
| JENS MUEHLSTEFF | | 09/18/2018 | 3 | | |
| ERIK BRESCH | | 09/20/2018 | } | | |
| XINCHI YU | | 09/19/2018 | } | | |
| RECEIVING PARTY DA | ТА | | | | |
| Name: | KONINK | KLIJKE PHILIPS N.V. | | | |
| Street Address: | HIGH TI | ECH CAMPUS 5 | | | |
| City: | EINDHO | EINDHOVEN | | | |
| State/Country: | NETHERLANDS | | | | |
| Postal Code: | 5656 AE | | | | |
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| PROPERTY NUMBERS Property Type | | Number | | | |
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> PATENT REEL: 051504 FRAME: 0900

For good and valuable consideration, of which I/we acknowledge receipt, I/we as a below-named Assignor(s) or Inventor, hereby sell, and assign, and transfer the entire and exclusive right, title, and interest in the following to Koninklijke Philips N.V., having a place of business at High Tech Campus 5, 5656 AE, Eindhoven, the Netherlands, its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention for which an application:

| is executed concurrently herewith | \square |
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was filed on ***, having a United States Application No. ***

was filed on 2018-Jul-23, having an International Application No. PCT/EP2018/069894,

and all rights in and to said application, and all other United States, foreign and international patent applications associated therewith, based thereon, or claiming priority therefrom including, but not limited to, any and all provisionals, non-provisionals divisions, continuations, continuations-in-part, re-examinations, reissues, and extensions thereof, and the right to claim priority thereto, and the entire and exclusive right, title, and interest in and to any and all patents granted on these applications.

I/We authorize and request that the Patent Office officials in the United States and in any and all foreign countries to issue any and all Letters Patent when granted, solely to the Assignee(s), for its sole use, and that of its successors, assigns, and legal representatives.

I/We will provide my/our cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I/we agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee.

I/We certify that I/we have the full right to convey the above rights.

As a below-named Inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that I am the original Inventor or an original joint Inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

| Date: 09/20/20 A8 | Signature: | Lavel S. L. G. Lars SCHMITT | , Assignor/Inventor |
|-------------------|------------|--------------------------------|---------------------|
| Date: | Signature: | Jens MUEHLSTEFF | , Assignor/Inventor |
| Date: | Signature: | Erik BRESCH | , Assignor/Inventor |
| Date: | Signature: | Xinchi YU | , Assignor/Inventor |
| | | | PATENT |

PATENT REEL: 051504 FRAME: 0901 For good and valuable consideration, of which I/we acknowledge receipt, I/we as a below-named Assignor(s) or Inventor, hereby sell, and assign, and transfer the entire and exclusive right, title, and interest in the following to Koninklijke Philips N.V., having a place of business at High Tech Campus 5, 5856 AE, Eindhoven, the Netherlands, its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention for which an application:

- Is executed concurrently herewith
- was filed on ***, having a United States Application No. ***
- 🔀 was filed on 2018-Jul-23, having an International Application No. PCT/EP2018/069694,

and all rights in and to said application, and all other United States, foreign and international patent applications associated therewith, based thereon, or claiming priority therefrom including, but not fimited to, any and all provisionals, non-provisionals divisions, continuations, continuations-in-part, re-examinations, relasues, and extensions thereof, and the right to claim priority thereto, and the entire and exclusive right, title, and interest in and to any and all patents granted on these applications.

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I hereby acknowledge that any willful false statement made in this declaration is punichable under 18 U.S.C. 1001 by fine or mprisonment of not more than five (5) years, or both.

| Oate: | Signature: | Lars SCHMHTT | Assignor/Inventor |
|-------------------------|-------------|--------------------|---------------------------------|
| 0ate: <u>18-09-7018</u> | Signature (| General Existences | Assignatinventor |
| Date: | Signature: | Erik BRESCH | Assignor/inventor |
| Oate: | Signature: | | Assignor/inventor |
| | | REEL | PATENT .: 051504 FRAME: 0902 |

For good and valuable consideration, of which i/we acknowledge receipt, i/we as a below-named Assignor(s) or inventor, hereby sell, and assign, and transfer the entire and exclusive right, title, and Interest in the following to Koninklijke Philips N.V., having a place of business at High Tech Campus 5, 5656 AE, Eindhoven, the Netherlands, its successors, assigns, and legal representatives, including any nominees (collectively "the Asaignee") my/our invention for which an application:

is executed concurrently herewith

🗍 was filed on ***, having a United States Application No. ***

🔀 was filed on 2018-Jul-23, having an international Application No. PCT/EP2018/069894,

and all rights in and to said application, and all other United States, foreign and international patent applications associated therewith, based thereon, or claiming priority therefrom including, but not limited to, any and all provisionals, non-provisionals divisions, continuations, continuations-in-part, re-examinations, reissues, and extensions thereof, and the right to claim priority thereto, and the entire and exclusive right, title, and interest in and to any and all patents granted on these applications

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Thereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by line or imprisonment of not more than five (5) years, or both

| Oste: | Signature: | Lars SCHANTT | Assignor/Inventor |
|------------------------------|------------|------------------|-------------------|
| Date: | Signature: | Jews MUEHR.STEF5 | Assignor/inventor |
| Date: <u>20 - 09 - 201</u> 8 | Signature: | Enik Bresch | Assignor/Inventor |
| Date: | Signature: | , Xinchi VL | Assignor/inventor |

PATENT REEL: 051504 FRAME: 0903

U.S.A. Sole/Joint

ASSIGNMENT & DECLARATION

0904

For good and valuable consideration, of which I/we acknowledge receipt, I/we as a below-named Assignor(s) or Inventor, hereby sell, and assign, and transfer the entire and exclusive right, title, and interest in the following to Koninklijke Philips N.V., having a place of business at High Tech Campus 5, 5656 AE, Eindhoven, the Netherlands, its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention for which an application:

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x was filed on 2018-Jul-23, having an International Application No. PCT/EP2018/069894,

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| Date: | Signature: | Lars SCHMITT | , Assignor/Inventor |
|--------------------------|------------|-----------------|-------------------------------|
| Date: | Signature: | Jens MUEHLSTEFF | |
| Date: | Signature: | Erik BRESCH | , Assignor/Inventor |
|)ate: <u>19 9 2018</u> | Signature: | Xinchi YU | , Assignor/Inventor |
| RECORDED: | 01/14/2020 | | PATENT REEL: 051504 FRAME: |