505885454 01/28/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT5932279

CONVEYING PARTY DATA

Name	Execution Date
YUAN LING	09/20/2018
SHEIKH SADID HASAN	09/18/2018
OLADIMEJI FEYISETAN FARRI	09/18/2018
JUNYI LIU	04/03/2019

RECEIVING PARTY DATA

Name:	KONINKLIJKE PHILIPS N.V.
Street Address:	HIGH TECH CAMPUS 5
City:	EINDHOVEN
State/Country:	NETHERLANDS
Postal Code:	5656 AE

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16634624

CORRESPONDENCE DATA

Fax Number: (914)495-9540

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.

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Correspondent Name: PHILIPS INTELLECTUAL PROPERTY & STANDARD

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Address Line 4: VALHALLA, NEW YORK 10595

ATTORNEY DOCKET NUMBER:	2017P02265WOUS
NAME OF SUBMITTER:	YAN GLICKBERG
SIGNATURE:	/Yan Glickberg/
DATE SIGNED:	01/28/2020

Total Attachments: 4

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PATENT 505885454 REEL: 051639 FRAME: 0001

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PATENT REEL: 051639 FRAME: 0002 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
was filed on ***, having a United States Application No. ***
was filed on 2018-Aug-03, having an International Application No. PCT/EP2018/071158,

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: 20 8 13 130	Signature:	Yuan LING	Assignor/Inventor
Date:	Signature:	Sheikh Sadid HASAN	Assignor/Inventor
Date:	Signature:	Oladimeji Feyisetan FARRI	Assignor/Inventor
Date:	Signature:	Junyi LIU	Assignor/Inventor

PATENT REEL: 051639 FRAME: 0003

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 was filed on ***, having a United States Application No. *** was filed on 2018-Aug-03, having an International Application No. PCT/EP2018/071158, 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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Date:	Signature:		Assignor/Inventor
Date:18-Sept-2018	Signature:	Yuan LING	Assignor/Inventor
Date:	Signature:	Sheikh Sadid Al HASAN	Assignor/Inventor
Date:	Signature:	Oladimeji Feyisetan FARRI	Assignor/Inventor
	~	Junyi LIU	'sur

PATENT REEL: 051639 FRAME: 0004

ASSIGNMENT & DECLARATION

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 was filed on ***, having a United States Application No. *** was filed on 2018-Aug-03, having an International Application No. PCT/EP2018/071158,

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, reexaminations, 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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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:	Signature	*	Assignor/
	* •	Yuan LING	Inventor
Date:	Signature :	Sheikh Sadid HASAN	Assignor/ Inventor
Date: - <u>09-78-2018</u>	Signature :	Oladimeji Feyisetan FARRI	Assignor/ Inventor
Date:	Signature :	*	Assignor/ Inventor

REEL: 051639 FRAME: 0005

hereby sell, and assign, and tra having a place of business at H	nsfer the entin igh Tech Cam	n I/we acknowledge receipt, I/we as a below-name e and exclusive right, title, and interest in the follow pus 5, 5656 AE, Eindhoven, the Netherlands, its si ectively "the Assignee") my/our invention for which	ring to Koninklijke Philips N.V. uccessors, assigns, and legal
is executed concurrently her was filed on ***, having a Ur	nited States Ap		
₩ was filed on zu16-Aug-u3, f	naving an intei	rnational Application No. PCT/EP2018/071158,	
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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Upon request at the expense of proceedings including patent pro	the Assignee, osecution action	e the Assignee to enjoy the foregoing right, title, an I/we agree to execute all papers, take all rightful o ons and infringement actions, and do all other such ng and maintaining patents on the foregoing invent	aths, testify in all legal acts which may be
I/We certify that I/we have the fu	ill right to conv	vev the above rights	
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		that the above-identified application was made or a al joint Inventor of a claimed invention in the applic	
I hereby acknowledge that any use imprisonment of not more than f		tement made in this declaration is punishable unde or both.	er 18 U.S.C. 1001 by fine or
Date:	Signature:	Yuan LING	Assignor/Inventor
Date:	Signature:		Assignor/Inventor
Date:	Signature:	Sheikh Sadid HASAN	Assignor/Inventor
		Oladimeji Feyisetan FARRI	
Uate: 4/5/2019	Signature:	Junyi Liu,	Assignor/Inventor

Oladimeji Feyisetan FARRI Janyi LIU

RECORDED: 01/28/2020

PATENT

REEL: 051639 FRAME: 0006