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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHANNES HENDRIKUS MARIA SPRUIT	07/15/2016
ALEXANDER MARC VAN DER LEE	07/15/2016
GERBEN KOOIJMAN	07/15/2016
OKKE OUWELTJES	01/16/2018
JOACHIM WILHELM HELLMIG	07/15/2016
ARNOLDUS JOHANNES MARTINUS JOZEPH RAS	01/29/2018
PETRUS THEODORUS JUTTE	07/15/2016

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15748207

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: 914-495-9516

Email: MARIANNE.FOX@Philips.com

Correspondent Name: PHILIPS INTELLECTUAL PROPERTY & STANDARD

Address Line 1: 465 COLUMBUS AVENUE

Address Line 2: SUITE 340

Address Line 4: VALHALLA, NEW YORK 10595

ATTORNEY DOCKET NUMBER: 2015P01037WOUS

NAME OF SUBMITTER: MARIANNE FOX

SIGNATURE: /MARIANNE FOX/

DATE SIGNED: 01/31/2018

Total Attachments: 7 source=2015P01037WOUSassign#page1.tif source=2015P01037WOUSassign#page2.tif source=2015P01037WOUSassign#page3.tif source=2015P01037WOUSassign#page4.tif source=2015P01037WOUSassign#page5.tif

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For good and valuable consideration, of which I/we acknowledge receipt, I/we as a below-named Assignor(s), 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 executed by me/us on was filed on., having a Serial No. 🕅 was filed on. 15 Jul 2016, having an International Application No. PCT/EP2016/066873, 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, nonprovisionals 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.

15-2-16	(sign name here)	Herrit	
Date	(print name here)	Johannes Hendrikus Maria SPRUIT	, Assignor
Date	(print name here)	Alexander Marc VAN DER LEE	, Assignor
Date	(print name here)	Gerben KOOIJMAN	, Assignor
Date	(print name here)	Okke OUWELTJES	, Assignor
Date	(print name here)	Joachim Wilhelm HELLMIG	, Assignor
Date	(print name here)	Arnoldus Johannes Martinus Jozeph RAS	, Assignor
Date	(print name here)	Petrus Theodorus JUTTE	, Assignor

í

and assign, and tr	ransfer the entire and exclusive i	we acknowledge receipt, I/we as a below-nan right, title, and interest in the following to Ko AE, Eindhoven, the Netherlands, its successo	ninklijke Philips N.V., having
representatives, in	ncluding any nominees (collecti	vely "the Assignee") my/our invention for wl	nich an application:
is executed co	oncurrently herewith		
was executed	by me us on		
was filed on	, ha	ving a Serial No	
was filed on.	15 Jul 2016, having an Internati	onal Application No. PCT/EP2016/066873,	
and all rights in a	nd to said application, and all of	her United States, foreign and international p	atent applications associated
therewith, based t	thereon, or claiming priority the	refrom including, but not limited to, any and	all provisionals, non-
provisionals divis	tions, continuations, continuatio	ns-in-part, re-examinations, reissues, and exte	ensions thereof, and the right to
claim priority the applications.	reto, and the entire and exclusiv	e right, title, and interest in and to any and al.	patents granted on these
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extent. Upon requestings	uest at the expense of the Assignical including patent prosecution acole, or convenient for securing a	he Assignee to enjoy the foregoing right, title nee, I/we agree to execute all papers, take all tions and infringement actions, and do all off and maintaining patents on the foregoing inve	rightful oaths, testify in all er such acts which may be
I/We certify that:	I/we have the full right to conve	y the above rights.	
	(sign name here)		
Date	(print name here)	Johannes Hendrikus Maria SPRUIT	, Assignor
15-7-2016		ana	
Date	(print name here)	Alexander Marc VAN DER LEE	, Assignor
Date	(print name here)	Gerben KOOIJMAN	, Assignor
Date	(print name here)	Okke OUWELTJES	, Assignor
Date	(print name here)	Joachim Wilhelm HELLMIG	, Assignor

Arnoldus Johannes Martinus Jozeph

Petrus Theodorus JUTTE

RAS

Date

Date

(print name here)

(print name here)

PATENT REEL: 044780 FRAME: 0550

, Assignor

, Assignor

Date

and assign, and transfer to a place of business at Hig	he entire and exclusive r gh Tech Campus 5,5656	ve acknowledge receipt, I/we as a below-namight, title, and interest in the following to Kor AE, Eindhoven, the Netherlands, its successovely "the Assignee") my/our invention for wh	ninklijke Philips N.V., havin rs, assigns, and legal
was filed on	us on, ba	ving a Serial No	
therewith, based thereon provisionals divisions, co	, or claiming priority ther ontinuations, continuation	her United States, foreign and international prefrom including, but not limited to, any and ans-in-part, re-examinations, reissues, and exteright, title, and interest in and to any and all	all provisionals, non- insions thereof, and the right
		officials in the United States and in any and a the Assignee(s), for its sole use, and that of i	
extent. Upon request at legal proceedings includ	the expense of the Assign ing parent prosecution ac	he Assignee to enjoy the foregoing right, title nee, I/we agree to execute all papers, take all fions and infringement actions, and do all oth nd maintaining patents on the foregoing inve	rightful oaths, testify in all er such acts which may be
I/We certify that I/we ha	ve the full right to conve	y the above rights.	
Date	(sign name here) (print name here)	Johannes Rendrikus Maria SPRUIT	, Assignor
Date	(print name here)	Alexander Marc VAN DER LEE	, Assignar
75 104 2010 Date	(print name here)	Gerben KOOIJMAN	, Assignor
Date	(print name here)	Okke OUWELTJES	, Assignor
Date	(print name here)	Joachim Wilhelm HELLMIG	, Assignor
Date	(print name here)	Arnoldus Johannes Martinus Jozeph	, Assignor

ras

(print name here)

Petrus Theodorus JUTTE

PATENT REEL: 044780 FRAME: 0551

, Assignor

and assign, and trans a place of business at	fer the entire and exclusive High Tech Campus 5,5656	we acknowledge receipt, I/we as a below-na- right, title, and interest in the following to Ke AE, Eindhoven, the Netherlands, its success ively "the Assignee") my/our invention for w	oninklijke Philips N.V., having iors, assigns, and legal
is executed concu	rrently herewith		
was executed by r	ne/us on		
was filed on	, h	aving a Serial No	corcorcor
was filed on. 15 J	ul 2016, baving an Internat	ional Application No. PCT/EP2016/066873,	
		ther United States, foreign and international	
		refrom including, but not limited to, any and	· · · · · · · · · · · · · · · · · · ·
		ins-in-part, re-examinations, reissues, and ext re right, title, and interest in and to any and a	•
		officials in the United States and in any and the Assignee(s), for its sole use, and that of	
legal proceedings incl	uding patent prosecution as or convenient for securing a	nee, I/we agree to execute all papers, take all stions and infringement actions, and do all of and maintaining patents on the foregoing inve	her such acts which may be
I/We certify that I/we	have the full right to conve	y the above rights.	
	(sign name here)		
Date	(print name here)	Johannes Hendrikus Maria SPRUIT	, Assignor
Date	(print name here)	Alexander Marc VAN DER LEE	, Assignor
Date 16-01-2010	(print name here)	Gerben KOOIJMAN	, Assignor
1 <u>6 - 97 - 2018</u> Date	(print name here)	Okke OUWELTJES	, Assignor
Date	(print name here)	Josephim Wilhelm HELLMIG	, Assignor
Date	(print name here)	Arnoldus Johannes Martinus Jozeph RAS	, Assignor
Date	(nrint name here)	Petrus Theodorus JUTTE	Assimar

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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:

	s executed concurrently herewith	
	as executed by me'us on	
	as filed on. , having a Serial No.	۰,
X	as filed on. 15 Jul 2016, having an International Application No. PCT/EP2016/066873,	

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.

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

	(sign name here)		
Date	(print name here)	Johannes Hendrikus Maria SPRUIT	, Assignor
Date	(print name here)	Alexander Marc VAN DER LEE	, Assignor
Date	(print name here)	Gerben KOOIJMAN	, Assignor
Date /5/]-/20(C	(print name here)	Okke OUWELTJES	, Assignor
Date	(print name here)	Josephim Wilhelm HELLMIG	, Assignor
Date	(print name here)	Arnoldus Johannes Martinus Jozeph RAS	, Assignor
Date	(print name here)	Petrus Theodorus JUTTE	, Assignor

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representatives, including any nominees (collectively "the Assignee") my/our invention for which an application:

	is e	xecuted co	ncurrently herewith
	was	executed	by me/us on
	was	s filed on	, having a Serial No.
\boxtimes	was	s filed on. I	5 Jul 2016, having an International Application No. PCT/EP2016/066873,

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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	(sign name here)		
Date	(print name here)	Johannes Hendrikus Maria SPRUIT	, Assignor
Date	(print name here)	Alexander Marc VAN DER LEE	, Assignor
Date	(print name here)	Gerben KOOIJMAN	, Assignor
Date	(print name here)	Okke OUWELTJES	, Assignor
Date 29-01-2018	(print name here)	Joachim Wilhelm HELLMIG	, Assignor
Date	(print name here)	Arnoldus Johannes Martinus Jozeph RAS	Assignor
Date	(print name here)	Petrus Theodorus JUTTE	Assignor

and assign, and tra a place of business	insfer the entire and exclusive ris at High Tech Campus 5,5656	ve acknowledge receipt, I/we as a below-namight, title, and interest in the following to Kor AE, Eindhoven, the Netherlands, its successovely "the Assignee") my/our invention for wh	ninklijke Philips N.V., having rs, assigns, and legal
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therewith, based the provisionals divisi	nereon, or claiming priority ther ons, continuation	her United States, foreign and international parefrom including, but not limited to, any and ans-in-part, re-examinations, reissues, and extee right, title, and interest in and to any and all	ill provisionals, non- insions thereof, and the right to
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Date	(print name here)	Johannes Hendrikus Maria SPRUIT	, Assignor
Date	(print name here)	Alexander Marc VAN DER LEE	, Assignor
Date	(print name here)	Gerben KOOIJMAN	, Assignor
Date	(print name here)	Okke OUWELTJES	, Assignor
Date	(print name bere)	Joachim Wilhelm HELLMIG	Assignor

Arnoldus Johannes Martinus Jozeph

Petrus Theodorpis MALL

PATENT REEL: 044780 FRAME: 0555

, Assignor

, Assignor

RECORDED: 01/31/2018

(print name here)

Date