# 503769047 04/05/2016 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3815691

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT			
NATURE OF CONVEYA	NCE:	ASSIGNMENT	ASSIGNMENT			
CONVEYING PARTY D	ΑΤΑ					
		Name	Execution Date			
JÖRG SABCZYNSKI			10/15/2014			
BHARAT RAMACHAND	RAN		11/14/2014			
EHSAN DEHGHAN MAI	RVAST		10/14/2014			
WEIHUA ZHOU			10/14/2014			
RECEIVING PARTY DA						
Name:	KONINK	LIJKE PHILIPS N.V.				
Street Address:	HIGH TE	CH CAMPUS 5				
City:	EINDHO	VEN				
State/Country:	NETHER	RLANDS				
Postal Code:	5656 AE					
PROPERTY NUMBERS Property Type		Number	]			
Application Number:	1	5027317				
Application Number:		5027317				
		5027317 				
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i>	DATA (9 pe sent to t					
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone:	)ATA (9 pe sent to t provided;	914)332-0615 S <b>he e-mail address first; if that is un</b> t				
CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email:	DATA (9 pe sent to t provided; 9 ja	914)332-0615 T <b>he e-mail address first; if that is un</b> <b>if that is unsuccessful, it will be sei</b> 14-945-6000 Iclyn.busta@philips.com	nt via US Mail.			
CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name:	DATA (9 provided; 9 ja P	914)332-0615 The e-mail address first; if that is un- if that is unsuccessful, it will be ser 14-945-6000 Iclyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY	nt via US Mail.			
CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	DATA (9 provided; 9 ja P P	914)332-0615 The e-mail address first; if that is un if that is unsuccessful, it will be ser 14-945-6000 Iclyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY .O. BOX 3001	nt via US Mail. & STANDARD			
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	DATA (9 provided; 9 ja P P B	914)332-0615 the e-mail address first; if that is un- if that is unsuccessful, it will be ser 14-945-6000 clyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY .O. BOX 3001 RIARCLIFF MANOR, NEW YORK 105	nt via US Mail. & STANDARD			
CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	DATA (9 provided; 9 ja P P B	914)332-0615 the e-mail address first; if that is un- if that is unsuccessful, it will be ser 14-945-6000 clyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY .O. BOX 3001 RIARCLIFF MANOR, NEW YORK 105 2013P00689WOUS	nt via US Mail. & STANDARD			
CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER:	DATA (9 provided; 9 ja P P B	914)332-0615 the e-mail address first; if that is un if that is unsuccessful, it will be ser 14-945-6000 clyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY .O. BOX 3001 RIARCLIFF MANOR, NEW YORK 105 2013P00689WOUS DOUGLAS B. MCKNIGHT	nt via US Mail. & STANDARD			
CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER: SIGNATURE:	DATA (9 provided; 9 ja P P B	914)332-0615 the e-mail address first; if that is un- if that is unsuccessful, it will be sei 14-945-6000 Idlyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY .O. BOX 3001 RIARCLIFF MANOR, NEW YORK 105 2013P00689WOUS DOUGLAS B. MCKNIGHT /Douglas B. McKnight/	nt via US Mail. & STANDARD			
CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER:	DATA (9 provided; 9 ja P P B	914)332-0615 the e-mail address first; if that is un if that is unsuccessful, it will be ser 14-945-6000 clyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY .O. BOX 3001 RIARCLIFF MANOR, NEW YORK 105 2013P00689WOUS DOUGLAS B. MCKNIGHT	nt via US Mail. & STANDARD			
CORRESPONDENCE E Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER: SIGNATURE: DATE SIGNED: Total Attachments: 4	DATA (9 provided; 9 ja P B UMBER:	914)332-0615 the e-mail address first; if that is un- if that is unsuccessful, it will be ser 14-945-6000 clyn.busta@philips.com HILIPS INTELLECTUAL PROPERTY .O. BOX 3001 RIARCLIFF MANOR, NEW YORK 105 2013P00689WOUS DOUGLAS B. MCKNIGHT /Douglas B. McKnight/ 04/05/2016	nt via US Mail. & STANDARD			
CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	DATA (9 provided; 9 ja P P B UMBER:	edAssignment#page1.tif	nt via US Mail. & STANDARD			

PATENT REEL: 038194 FRAME: 0256

# ASSIGNMENT

For good and valuable consideration, of which J/we acknowledge receipt, J/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. 09 Oct 2014, having an International Application No. PCT/EP2014/071599,

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 October 2014	(sign name here)	Juhh	
Date	(print name here)	Jörg SABCZYNSKI	, Assignor
	(sign name here)		
Date	(print name here)	Bharat RAMACHANDRAN	, Assignor
	(sign name here)		
Date	(print name here)	Ehsan DEHGHAN MARVAST	, Assignor
	(sign name here)		
Date	(print name here)	Weihus ZHOU	, Assignor
		Page 1 of 1	

PATENT REEL: 038194 FRAME: 0257

## U.S.A. Sole/Joint

## ASSIGNMENT

PATENT REEL: 038194 FRAME: 0258

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:

was executed by me/us on .....

was filed on.

🔀 was filed on. 09 Oct 2014, having an International Application No. PCT/EP2014/071599,

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.

	(sign name here)		
Date	(print name here)	Jörg SABCZYNSKI	, Assignor
11/14/2014	(sign name here)	phaeath.	
Date	(print name here)	Bharat RAMACHANDRAN	, Assignor
	(sign name here)		
Date	(print name here)	Ebsan DEHGHAN MARVAST	, Assignor
	(sign name here)		
Date	(print name here)	Weihua ZHOU	, Assignor
		Page 1 of 1	

#### U.S.A. Sole/Joint

#### ASSIGNMENT

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 exe	cuted b	iy me/u	s on	*******		•••••
--	---------	---------	---------	------	---------	--	-------

🔯 was filed on. 09 Oct 2014, having an International Application No. PCT/EP2014/071599,

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 Assignce(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.

	(sign name here)		
Date	(print name here)	Jörg SABCZYNSKI	, Assignor
	(sign name here)		
Date	(print name here)	Bharat RAMACHANDRAN	, Assignor
10/14/2014	(sign name here)	Dehghan	
Date	(print name here)	Ebsan DEHĞHAN MARVAST	, Assignor
	(sign name here)		
Date	(print name here)	Weihua ZHOU	, Assignor

Page 1 of 1

PATENT REEL: 038194 FRAME: 0259

## U.S.A. Sole/Joint

### ASSIGNMENT

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. 09 Oct 2014, having an International Application No. PCT/EP2014/071599,

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.

	(sign name here)		
Date	(print name here)	Jörg SABCZYNSKI	, Assignor
	(sign name here)		
Date	(print name here)	Bharat RAMACHANDRAN	, Assignor
	(sign name here)		
Date	(print name here)	Ehsan DEHGHAN MARVAST	, Assignor
10/14/2014	(sign name here)	Weihua Zhou	
Date	(print name here)	Weihua ZHOU	, Assignor
		Page 1 of 1	

PATENT REEL: 038194 FRAME: 0260

**RECORDED: 04/05/2016**