505319475 02/08/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5366256

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FRANK VERBAKEL	08/24/2018
NICOLAAS LAMBERT	08/22/2018
HUGO VEENSTRA	08/22/2018
MARC ANDRE DE SAMBER	08/22/2018
JOSEPHUS ARNOLDUS HENRICUS MARIA KAHLMAN	01/08/2019
PIERRE HERMANUS WOERLEE	08/24/2018

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:	16324133

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.

Phone: 914-495-9516

jaclyn.busta@philips.com Email:

PHILIPS INTELLECTUAL PROPERTY & STANDARD **Correspondent Name:**

465 COLUMBUS AVENUE Address Line 1:

Address Line 2: **SUITE 340**

Address Line 4: VALHALLA, NEW YORK 10595

ATTORNEY DOCKET NUMBER:	2016P00486WOUS
NAME OF SUBMITTER:	THOMAS M. LUNDIN
SIGNATURE:	/Thomas M. Lundin/
DATE SIGNED:	02/08/2019

PATENT REEL: 048272 FRAME: 0406 505319475

Total Attachments: 6source=2016P00486WOUS_ExecutedDeclarationandAssignment#page1.tif source=2016P00486WOUS_ExecutedDeclarationandAssignment#page2.tif source=2016P00486WOUS_ExecutedDeclarationandAssignment#page3.tif source=2016P00486WOUS_ExecutedDeclarationandAssignment#page4.tif

source=2016P00486WOUS_ExecutedDeclarationandAssignment#page5.tif source=2016P00486WOUS_ExecutedDeclarationandAssignment#page6.tif

PATENT REEL: 048272 FRAME: 0407

Date:

Signature:

hereby sell, and assign, and tra having a place of business at H	nsfer the entire	n I/we acknowledge receipt, I/we as a below-named e and exclusive right, title, and interest in the following pus 5, 5656 AE, Eindhoven, the Netherlands, its suc ectively "the Assignee") my/our invention for which a	ng to Koninklijke Philips N.V., cessors, assigns, and legal
is executed concurrently he			
was filed on ***, having a U	nited States Ap	oplication No. ***	
was filed on 2017-Aug-14,	having an Inter	mational Application No. PCT/EP2017/070547,	
therewith, based thereon, or cla divisions, continuations, continu	ilming priority t rations-in-part,	Il other United States, foreign and international pate therefrom including, but not limited to, any and all pr re-examinations, reissues, and extensions thereof, e, and interest in and to any and all patents granted	ovisionals, non-provisionals and the right to claim priority
		fice officials in the United States and in any and all t the Assignee(s), for its sole use, and that of its succ	
Upon request at the expense of proceedings including patent pr	the Assignee, osecution action	e the Assignee to enjoy the foregoing right, title, and , I/we agree to execute all papers, take all rightful or ons and infringement actions, and do all other such ng and maintaining patents on the foregoing inventions.	iths, testify in all legal acts which may be
I/We certify that I/we have the f	ull right to conv	vey the above rights.	
		that the above-identified application was made or a al joint Inventor of a claimed invention in the applica	
I hereby acknowledge that any imprisonment of not more than		etement made in this declaration is punishable under or both.	18 U.S.C. 1001 by fine or
Date: <u>24 aug 9018</u>	Signature:	Frank VERBAKEL	Assignor/Inventor
Date:	Signature:	5	Assignor/Inventor
Date:	Signature:	Nicolaas LAMBERT	Assignor/Inventor
		Hago VEENSTRA	~
Date:	Signature:	Marc Andre DE SAMBER	Assignor/Inventor
Date:	Signature:		Assignor/Inventor

Josephus Arnoldus Henricus Maria KAHLMAN

Pierre Hermanus WOERLEE

PATENT REEL: 048272 FRAME: 0408

Assignor/Inventor

For good and valuable consideration, of which I/we acknowledge receipt, I/we as a belownamed 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 2017-Aug-14, having an International Application No. PCT/EP2017/070547,

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:		Signature:		, Assignori
Date:	2018-8-22	Signature:	Frank VERBAKEL A	, Assignori
		9	Nicolass LAMBERT	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Date:		Signature:		, Assignori
		_	Hum VEENSTDA	

hereby sell, and assign, and trar having a place of business at Hig	nsfer the entire gh Tech Camp	Note acknowledge receipt, lowe as a below-named American and exclusive right, title, and interest in the following bus 5, 5656 AE, Eindhoven, the Netherlands, its succeptively "the Assignee") my/our invention for which are	g to Koninklijke Philips N.V., cessors, assigns, and legal
☐ is executed concurrently here ☐ was filed on ***, having a Un ☐ was filed on 2017-Aug-14, h	ited States Ap	oplication No. *** national Application No. PCT/EP2017/070547,	
therewith, based thereon, or claid divisions, continuations, continuations, continuations.	ming priority to ations-in-part,	l other United States, foreign and international paten herefrom including, but not limited to, any and all pro re-examinations, reissues, and extensions thereof, a c, and interest in and to any and all patents granted o	visionals, non-provisionals and the right to claim priority
		fice officials in the United States and in any and all fo the Assignee(s), for its sole use, and that of its succe	
Upon request at the expense of proceedings including patent pro	the Assignee, psecution action	e the Assignee to enjoy the foregoing right, title, and in the Assignee to execute all papers, take all rightful oat one and infringement actions, and do all other such a such a maintaining patents on the foregoing invention	hs, testify in all legal cts which may be
I/We certify that I/we have the fu	III right to conv	ey the above rights.	
and that I am the original Invento	or or an origina	that the above-identified application was made or au al joint Inventor of a claimed invention in the applicat	ion.
I hereby acknowledge that any v imprisonment of not more than fi		tement made in this declaration is punishable under or both.	18 U.S.C. 1001 by fine or
Date:	Signature:	Frank VERBAKEL	Assignor/Inventor
Date:	Signature:	3	Assignor/Inventor
Date: 22-08-2018	Signature:	Nicolaas LAMBERT	Assignor/Inventor
Date: 22-08-2018	Signature:	Hugo VEENSTRA	Assignor/Inventor
Date:	Signature:	Marc Andre DE SAMBER Josephus Arnoldus Henricus Maria KAHLMAN	Assignor/inventor

Pierre Hermanus WOERLEE

Signature:

PATENT REEL: 048272 FRAME: 0410

Assignor/Inventor

hereby sell, and assign, and tran having a place of business at Hig	nsfer the entire gh Tech Camp	I/we acknowledge receipt, I/we as a below-named A e and exclusive right, title, and interest in the following ous 5, 5656 AE, Eindhoven, the Netherlands, its succeptively "the Assignee") my/our invention for which an	j to Koninklijke Philips N.V., essors, assigns, and legal
is executed concurrently her			
was filed on ***, having a Un	,	•	
was filed on 2017-Aug-14, h	aving an Inter	mational Application No. PCT/EP2017/070547,	
therewith, based thereon, or claid divisions, continuations, continuations, continuations.	ming priority to ations-in-part,	l other United States, foreign and international patent herefrom including, but not limited to, any and all pro- re-examinations, reissues, and extensions thereof, a e, and interest in and to any and all patents granted o	visionals, non-provisionals nd the right to claim priority
		fice officials in the United States and in any and all fo the Assignee(s), for its sole use, and that of its succe	
Upon request at the expense of proceedings including patent pro	the Assignee, osecution action	e the Assignee to enjoy the foregoing right, title, and i , I/we agree to execute all papers, take all rightful oatl ons and infringement actions, and do all other such a ng and maintaining patents on the foregoing invention	hs, testify in all legal cts which may be
I/We certify that I/we have the fu	ıll right to conv	vey the above rights.	
		that the above-identified application was made or aut al joint inventor of a claimed invention in the applicati	
I hereby acknowledge that any vimprisonment of not more than f		stement made in this declaration is punishable under or both.	18 U.S.C.: 1001 by fine or
Date:	Signature:		Assignor/Inventor
WW. Co.	orginature.	Frank VERBAKEL	wasignimiasinu
Date:	Signature:	3	Assignor/Inventor
Date:	Signature:	Nicolaas LAMBERT	Assignor/Inventor
		Hugo VEENSTBA	erraisti (assissi a pesens
Date: 2017/01/22	Signature:	Mare More DE SAMBER	Assignor/Inventor
Date:	Signature:	Commence Com	Assignor/Inventor
Date:	Signature:	Josephus Arnoldus Henricus Maria KAHLMAN	Assignor/Inventor
	~	,	· and a substance seasons and a property of a

Pierre Hermanus WOERLEE

PATENT REEL: 048272 FRAME: 0411

hereby sell, and assign, and having a place of business at	transfer the entin : High Tech Cam	i I/we acknowledge receipt, I/we as a below-named e and exclusive right, title, and interest in the following pus 5, 5656 AE, Eindhoven, the Netherlands, its suc- pectively "the Assignee") my/our invention for which a	ng to Koninklijke Philips N.V., ccessors, assigns, and legal
is executed concurrently		no Brandino Kin 1999	
was filed on ***, having a		rnational Application No. PCT/EP2017/070547,	
W was men ou to used as	*, naving an inter	mational Application 190. Forther 29 11101 0591,	
therewith, based thereon, or divisions, continuations, continuations, continuations	claiming priority t inuations-in-part,	Il other United States, foreign and international pater therefrom including, but not limited to, any and all pr re-examinations, reissues, and extensions thereof, e, and interest in and to any and all patents granted	evisionals, non-provisionals and the right to claim priority
		fice officials in the United States and in any and all f the Assignee(s), for its sole use, and that of its succ	
Upon request at the expense proceedings including patent	of the Assignee, prosecution action	e the Assignee to enjoy the foregoing right, title, and , i/we agree to execute all papers, take all rightful oa ons and infringement actions, and do all other such ng and maintaining patents on the foregoing invention	uths, testify in all legal acts which may be
I/We certify that I/we have the	e full right to conv	vey the above rights.	
	*	that the above-identified application was made or at all joint Inventor of a claimed invention in the applica	•
I hereby acknowledge that an imprisonment of not more tha	*	itement made in this declaration is punishable under or both.	18 U.S.C. 1001 by fine or
Date:	Signature:	5	Assignor/Inventor
Date:	Signature:	Frank VERBAKEL	Assignor/Inventor
Parker	Signature:	Nicolass LAMBERT	Assignor/Inventor
	•	Hugo VEENSTRA	
Date:	Signature:	Marc Andre DE SAMBER	Assignor/Inventor
Date: 0-1-2019	Signature:		Assignor/Inventor
		Josephus Arnoldus Henricus Maria KAHLMAN	

Pierre Hermanus WOERLEE

Signature:

Date:

PATENT REEL: 048272 FRAME: 0412

Assignor/Inventor

RECORDED: 02/08/2019

hereby sell, and assign, and Iran having a place of business at Hig	sfer the entire gh Tech Camp	I/we acknowledge receipt, I/we as a below-named A and exclusive right, title, and interest in the following bus 5, 5656 AE, Eindhoven, the Netherlands, its succeively "the Assignee") my/our invention for which are	g to Koninklijke Philips N.V., cessors, assigns, and legal
☐ is executed concurrently here ☐ was filed on ***, having a Uni ☐ was filed on 2017-Aug-14, h.	ited States Ap	plication No. *** national Application No. PCT/EP2017/070547,	
therewith, based thereon, or claim divisions, continuations, continua-	ming priority thations-in-part,	other United States, foreign and international paten nerefrom including, but not limited to, any and all pro re-examinations, reissues, and extensions thereof, a , and interest in and to any and all patents granted o	visionals, non-provisionals and the right to claim priority
		ice officials in the United States and in any and all fo the Assignee(s), for its sole use, and that of its succe	
Upon request at the expense of proceedings including patent pro	the Assignee, secution action	the Assignee to enjoy the foregoing right, title, and I/we agree to execute all papers, take all rightful oat ons and infringement actions, and do all other such any and maintaining patents on the foregoing invention.	ths, testify in all legal acts which may be
I/We certify that I/we have the fu	ll right to conv	rey the above rights.	
		that the above-identified application was made or au al joint Inventor of a claimed invention in the applicat	
I hereby acknowledge that any vimprisonment of not more than fi		tement made in this declaration is punishable under or both.	18 U.S.C. 1001 by fine or
Date:	Signature:		Assignor/Inventor
		Frank VERBAKEL	Assignor/Inventor
Date:	Signature:	Nicolaas LAMBERT	•
Date:	Signature:	Hugo VEENSTRA	Assignor/Inventor
Date:	Signature:	Marc Andre DE SAMBER	Assignor/Inventor
Date:	Signature:	Josephus Arnoldus Henricus Maria KAHLMAN	Assignor/inventor
Date: <u>24-8-2-8</u>	Signature:	Pierre Hermanns WOERLEE	Assignor/inventor

PATENT REEL: 048272 FRAME: 0413