504589522 10/11/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4636234

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	CONFIRMATORY ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DIRK KENNETH DE VRIES	10/11/2017
ALBERT VAN DE GOOR	10/11/2017

RECEIVING PARTY DATA

Name: NXP B.V.	
Street Address: High Tech Campus 60	
City: Eindhoven	
State/Country: NETHERLANDS	
Postal Code: 5656 AG	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Patent Number:	7688083	

CORRESPONDENCE DATA

Fax Number: (408)518-5671

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: 3474431592

Email: david.schaeffer@nxp.com
Correspondent Name: DAVID L. SCHAEFFER

Address Line 1: 411 EAST PLUMERIA DRIVE, MS41
Address Line 2: NXP SEMICONDUCTORS, IP&L
Address Line 4: SAN JOSE, CALIFORNIA 95134

NAME OF SUBMITTER:	DAVID L. SCHAEFFER
SIGNATURE:	/David L. Schaeffer/
DATE SIGNED:	10/11/2017

Total Attachments: 12

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PATENT 504589522 REEL: 044184 FRAME: 0027



CONFIRMATORY ASSIGNMENT OF PATENT RIGHTS

For valuable consideration, the receipt and sufficiency of which is hereby acknowledged, on the date(s) set forth below, Dirk Kenneth De Vries, an individual, and Albert Van De Goor, an individual (each, "Assignor", and, collectively, "Assignors"), to ensure that the assignment recorded in the U.S. Patent & Trademark Office on October 19, 2011, at Reel 027084, Frame 0635, annexed hereto as Exhibit A, (the "Original Assignment"), is complete, hereby sell, assign, and transfer to NXP B.V., a limited liability company incorporated in the Netherlands, with corporate seat in Eindhoven, the Netherlands, and address at High Tech Campus 60, 5656 AG Eindhoven, the Netherlands ("Assignee"), the full extent of all right, title, and interest in and to any and all of the following (collectively, the "Rights"):

- 1. The patents, provisional patent applications and/or patent applications listed in the table below (individually and collectively referred to herein as the "*Patents*");
- 2. All inventions claimed or described in the Patents (collectively, the "Inventions");
- 3. All rights with respect to the Inventions, including all U.S. patents or other governmental grants or issuances that may be granted with respect to the Inventions or from any direct or indirect divisionals, continuations, continuations-in-part, or other patent applications claiming priority rights from the Patents ("*Potential Patents*");
- 4. All reissues, reexaminations, extensions, or registrations of the Patents or Potential Patents;
- 5. All non-United States patents, patent applications, and counterparts relating to any or all of the Inventions, the Patents, or Potential Patents, including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances ("Foreign Rights"), and including the right to file foreign applications directly in the name of Assignee, its successors and assigns;
- 6. The right to claim priority rights deriving from the Patents;
- 7. All causes of action and remedies related to the Patents, the Inventions, Potential Patents, or Foreign Rights (including, without limitation, the right to sue for past, present, or future infringement, misappropriation or violation of rights related to any of the foregoing and the right to collect royalties and other payments under or on account of any of the foregoing); and
- 8. Any and all other rights and interests arising out of, in connection with, or in relation to, the Patents, the Inventions, Potential Patents, or Foreign Rights.

Patent No.	Filing Date	Title and First Named Inventor
US 7688083	September 19, 2005	Analogue measurement of
		alignment between layers of a semiconductor device
		Dirk Kenneth De Vries

This Confirmatory Assignment of Patent Rights (the "Assignment") is made fully effective on the date of the Original Assignment, thereby confirming each Assignor's intent to transfer all of the Rights as of that date.

Each Assignor will not sign any writing or do any act conflicting with this Assignment, and, without further compensation, will sign all documents and do such additional acts as Assignee, its successors, legal representatives, and assigns deem necessary or desirable to perfect enjoyment of the Rights, conduct proceedings regarding the Rights (including any litigation or interference proceedings), or perfect or defend title to the Rights. Assignor requests the respective patent office or governmental agency in each jurisdiction to

issue any and all patents, certificates of invention, utility models, or other governmental grants or issuances that may be granted upon any of the Rights in the name of the Assignee, as the assignee to the entire interest therein.

successors, legal representatives, and assigns and will be binding upon Assignor, their

The terms and conditions of this Assignment will inure to the benefit of Assignee, its

Exhibit A

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: **NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT**

CONVEYING PARTY DATA

Name	Execution Date
Dirk Kenneth De Vries	05/21/2007
Albert Van De Goor	05/21/2007

RECEIVING PARTY DATA

Name: Koninklijke Philips Electronics N.V.	
Street Address: Groenewoudseweg 1	
City: Eindhoven	
State/Country: NETHERLANDS	
Postal Code: 5621 BA	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Patent Number:	7688083	

CORRESPONDENCE DATA

Fax Number: (408)518-5671 Phone: 3474431592

Email: david.schaeffer@nxp.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

David L. Schaeffer Correspondent Name:

Address Line 1: 411 East Plumeria Drive, MS41 Address Line 2: NXP Semiconductors, IP&L Address Line 4: San Jose, CALIFORNIA 95134

NAME OF SUBMITTER: David L. Schaeffer

Total Attachments: 2

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PATENT

REEL: 027084 FRAME: 0635 PATENT

REEL: 044184 FRAME: 0032

501695587

Date

For good and valuable consideration, of which I/we acknowledge receipt, I/we, as a below-named Assignor(s), hereby sell, assign, and transfer the entire and exclusive right, title, and interest in the following to Koninklijke Philips Electronics N.V., having a place of business at Groenewoudseweg 1, 5621 BA Eindhoven, NL, 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, having a	-	
and all rights in and to said application, and a associated therewith, based thereon, or claimi provisionals, non-provisionals divisions, cont extensions thereof, and the right to claim prio and to any and all patents granted on these ap	ing priority therefrom including, but not tinuations, continuations-in-part, reexam prity thereto, and the entire and exclusive	limited to, any and all inations, reissues, and
I/We authorize and request that the Patent Of countries to issues any and all Letters Patent v sole use, and that of its successors, assigns, and	when granted, solely to Koninklijke Phi	-
I/We will provide my/our cooperation to enable fullest extent. Upon request at the expense of oaths, testify in all legal proceedings including other such acts which may be necessary, desire foregoing invention or for perfecting title them.	f the Assignee, I/we agree to execute all ag patent prosecutional actions and infrir trable, or convenient for securing and ma	papers, take all rightful agement actions, and do all
I/We certify that I/we have the full right to co	onvey the above rights.	
Date (sign name here) (print name here)	DE VRIES Dirk Kenneth	, Assignor
(sign name here)		, Assignor

(print name here)

VAN DE GOOR Albert

For good and valuable consideration, of which I/we acknowledge receipt, I/we, as a below-named Assignor(s),

hereby sell, assign, and transfer the entire and exclusive right, title, and interest in the following to Koninklijke Philips Electronics N.V., having a place of business at Groenewoudseweg 1, 5621 BA Eindhoven, NL, 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, having an International Application No. 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. I/We authorize and request that the Patent Office officials in the United States and in any and all foreign countries to issues any and all Letters Patent when granted, solely to Koninklijke Philips Electronics N.V., 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 prosecutional 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.

21-05 2007 (sign name here) , Assignor
Date (print name here) VAN DE GOOR Albert

DE VRIES Dirk Kenneth

(sign name here)

(print name here)

Date

RECORDED: 10/19/2011

Page 1 of 1

PATENT REEL: 024084 FRAME: 0634

, Assignor

CONFIRMATORY ASSIGNMENT OF PATENT RIGHTS

For valuable consideration, the receipt and sufficiency of which is hereby acknowledged, on the date(s) set forth below, Dirk Kenneth De Vries, an individual, and Albert Van De Goor, an individual (each, "Assignor", and, collectively, "Assignors"), to ensure that the assignment recorded in the U.S. Patent & Trademark Office on October 19, 2011, at Reel 027084, Frame 0635, amexed hereto as Exhibit A, (the "Original Assignment"), is complete, hereby sell, assign, and transfer to NXP B.V., a limited liability company incorporated in the Netherlands, with corporate sent in Eindhoven, the Netherlands, and address at High Tech Campus 60, 5656 AG Eindhoven, the Netherlands ("Assignee"), the full extent of all right, title, and interest in and to any and all of the following (collectively, the "Rights"):

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- All reissues, reexaminations, extensions, or registrations of the Patents or Potential Patents:
- 5. All non-United States patents, patent applications, and counterparts relating to any or all of the Inventions, the Patents, or Potential Patents, including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances ("Fareign Rights"), and including the right to file foreign applications directly in the name of Assignee, its successors and assigns;
- 6. The right to claim priority rights deriving from the Patents;
- 7. All causes of action and remedies related to the Patents, the Inventions, Potential Patents, or Foreign Rights (including, without limitation, the right to sue for past, present, or future infringement, misappropriation or violation of rights related to any of the foregoing and the right to collect royalties and other payments under or on account of any of the foregoing); and
- Any and all other rights and interests arising out of, in connection with, or in relation to, the Patents, the Inventions, Potential Patents, or Foreign Rights.

Patent No.	Filing Date	Title and First Named Inventor
US 7688083	September 19, 2005	Analogue measurement of alignment between layers of a semiconductor device
		Dirk Kenneth De Vries

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issue any and all patents, certificates of invention, utility models, or other governmental grants or issuances that may be granted upon any of the Rights in the name of the Assignee, as the assignee to the entire interest therein.

The terms and conditions of this Assignment will inure to the benefit of Assignee, its

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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SUBMISSION TYPE: NEW ASSIGNMENT						
NATURE OF CONVE			ASSIGNMENT			
CONVEYING PARTY DATA						
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Dirk Kenneth De Vrie		**************				
jAlbert Vari De Goor				10012.1720U1		
RECEIVING PARTY I)ATA					
Name:	Koninklijke F	hilips Ele	etrogics N.V.			
Street Address:	Groenswoud	iseweg 1				
City:	Eindhoven					
State/Country:	NETHERLA	ADS				
Postal Code:	5621 BA					
PROPERTY NUMBERS Total: 1 Property Type Number						
Palent Number:		7688083	3083			
CORRESPONDENCE	: DATA					
Fax Number:	(408)51	8-5671				
Phone:	347443	1892				
Email:			guzp com			
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail. Correspondent Name: David L. Schaeffer Address Line 1: 411 East Plumeria Drive, MS41 Address Line 2: NXP Semiconductors, IP&L						
Correspondent Name		Schaeff				
Address Line 1: 411 East Plumeria Drive, MS41						
Address Line 2: NXP Semicondi						
Address Line 4: San Jose, CALIFORNIA 95134						
NAME OF SUBMITTER: David L. Schaeffer						
Total Attachments: 2 source=7686083inventorAssignmentExecuted#page1.til source=7688083inventorAssignmentExecuted#page2.til						

501695587

PATENT REEL: 027084 FRAME: 0635

For good and valuable consideration, of which I/we acknowledge receipt, I/we, as a below-named Assignor(s), hereby sell, assign, and transfer the entire and exclusive right, title, and interest in the following to Koninklijke Philips Electronics N.V., having a place of business at Groenewoudseweg I, \$621 BA Eindhoven, N.L., its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention for which an application:

is executed con-	nurently herewith		
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countries to issues s	my and all Letiers Patent	office officials in the United States and whon granted, solely to Koninklijke i and legal representatives.	
fullest extent. Upon oaths, testify in all i other such acts whi	n request at the expense (legal proceedings includi	able the Assignee to enjoy the foregoing the Assignee, I/we agree to execute ag patent prosecutional actions and in sirable, or convenient for securing and ereto in the Assignee.	all papers, take all rightful fringement actions, and do all
I/We certify that I/v	ve have the full right to c	onvey the above rights.	
./ May 2001	(sign name here)	Miser	"Assignor
Date	(print name bers)	DE VRIES Dirk Kenneth	
	(sign name here)		, Assignor
Date	(print name here)	VAN DE GOOR Albert	

Page 1 of 1

PATENT

REEL: 027084 FRAME: 0636

For good and valuable consideration, of which I/we acknowledge receipt, I/we, as a below-named Assignor(s), hereby sell, assign, and transfer the entire and exclusive right, title, and interest in the following to Kominklijke Philips Electronics N.V., having a place of business at Groenewoudseweg 1, 5621 EA Eindhoven, NL, its successors, assigns, and legal representatives, including any numinees (collectively "the Assignee") my/our invention for which an application:

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was executed	by me/us on	or the commence of the commenc	
		, having a Serial No	eren kalierra k
was filed on .	, hevir	g au International Application No	
associated therew provisionals, non extensions thereo	rith, based thereon, or clair -provisionals divisions, co	i all other United States, foreign and inte ming priority therefrom including, but m ntinnations, continuations-in-part, reexa iority thereto, and the entire and exclusi- applications.	ot limited to, any and all minations, reissnes, and
countries to issue		Office officials in the United States and is t when granted, solely to Koninklijke Ph and logal representatives.	
foliosi extent. Up oaths, testify in al other such acts w	on request at the expense if legal proceedings include	able the Assignee to enjoy the foregoing of the Assignee, I/we agree to execute al- ing patent prosecutional actions and infr timble, or convenient for securing and mereto in the Assignee.	ll papers, take all rightful ingoment actions, and do all
I/We certify that)	/we have the full right to c	convey the above rights.	
	(sign name here)		, Assignor
Date	(prîst name here)	DE VRIES Dirk Kenneth	
21-05 2247	(sign name here)		, Assignor
iJate '	(print name here)	VAN DE GOOR Albert	

Page 1 of 1

RECORDED: 10/19/2011

PATENT

REEL: 027084 FRAME: 0637