#### 06/22/2015 503360383

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3407005

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
RIGOBERT BOSMAN	01/13/2015
DIETRICH WIENKE	02/06/2015
JOHANNA GERTRUDA KERSJES	12/15/2014
JOZEF SIEGFRIED JOHANNES HOMMINGA	12/15/2014
ROELOF MARISSEN	12/15/2014
CHRISTIAAN HENRI PETER DIRKS	12/13/2014

### **RECEIVING PARTY DATA**

Name:	DSM IP ASSETS B.V.
Street Address:	HET OVERLOON 1
City:	HEERLEN
State/Country:	NETHERLANDS
Postal Code:	6411 TE

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number		
Application Number:	14405990		

### **CORRESPONDENCE DATA**

Fax Number: (703)816-4100

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: 7038164000 Email: dlb@nixonvan.com BRYAN H. DAVIDSON **Correspondent Name:** 

Address Line 1: NIXON & VANDERHYE P.C.

Address Line 2: 901 NORTH GLEBE ROAD, 11TH FLOOR

Address Line 4: ARLINGTON, VIRGINIA 22203

ATTORNEY DOCKET NUMBER:	4662-2952
NAME OF SUBMITTER:	BRYAN H. DAVIDSON
SIGNATURE:	/BRYAN H. DAVIDSON/
DATE SIGNED:	06/22/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

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**REEL: 035985 FRAME: 0156** 503360383

# **Total Attachments: 6** source=4662-2952 Executed Declarations and Assignments#page1.tif source=4662-2952\_Executed\_Declarations\_and\_Assignments#page2.tif source=4662-2952\_Executed\_Declarations\_and\_Assignments#page3.tif

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**PATENT** REEL: 035985 FRAME: 0157

Doc code: Oath Document Description: Oath or declaration filed

Attorney Docket Number BHD-4662-2952

	First Named Inventor	BOSMAN, Rigobert	
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76)			
☐ Declaration Submitted With Initial Filing  OR	221 (07 51 )( 1.70)		
Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.1	16(f)) required)		
ENDLESS SHAPED ARTICL	E		
(Title of the Invention)			
As a below named inventor, I hereby declare that:			
This declaration is directed to:  ☐ the attached application, or  ☐ United States Application Number 14/405,990 filed December 5, 20 ☐ PCT International application number filed on	14, or		
The above-identified application was made or authorized to be made by me.			
I believe I am the original inventor or an original joint inventor of a claimed inven	ition in the application.		
I hereby acknowledge that any willful false statement made in this declaration is by fine or imprisonment of not more than five (5) years, or both.	punishable under 18 U.S.C.	1001	
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in	n the Application identified ab	ove.	
WHEREAS, DSM IP Assets B.V. (hereinafter ASSIGNEE), a corporation of the State of The Netherlands, having an office and place of business at Het Overloon 1, , Heerlen, Netherlands Netherlands 6411 TE, is desirous of acquiring an interest therein;			
NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;			
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;			
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and			
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.			
AGREED and executed as noted below:			
LEGAL NAME OF INVENTOR/JOINT INVENTOR: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Rigobert	8	OSMAN	
Inventor's Signature:	Date: /3 2 /	and the second second	

Document Description: Oath or declaration filed

Attorney Docket Number BHD-4662-2952

First Named Inventor BOSMAN, Rigobert

	First Named Inventor	BOSMAN, Rigobert		
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OF	INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)			
USING AN APPLICATION DATA SHE  Declaration Submitted With Initial Filing OR	ELI (37 CFR 1.76)			
☐ Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.	16(f)) required)			
ENDLESS SHAPED ARTICL	<b>E</b>			
(Title of the Invention)				
As a below named inventor, I hereby declare that:				
This declaration is directed to:  ☐ the attached application, or ☐ United States Application Number 14/405,990, filed December 5, 20 ☐ PCT International application number filed on	014, or			
The above-identified application was made or authorized to be made by me.				
I believe I am the original inventor or an original joint inventor of a claimed inven				
I hereby acknowledge that any willful false statement made in this declaration is by fine or imprisonment of not more than five (5) years, or both.	punishable under 18 U.S.C.	1001		
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention i	n the Application identified at	oove.		
WHEREAS, DSM IP Assets B.V. (hereinafter ASSIGNEE), a corporation of the State of The Netherlands, having an office and place of business at Het Overloon 1, , Heerlen, Netherlands Netherlands 6411 TE, is desirous of acquiring an interest therein;				
NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention:				
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;				
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and				
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.				
AGREED and executed as noted below:				
LEGAL NAME OF INVENTOR/JOINT INVENTOR: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)				
Dietrich		VIENKE		
Inventor's Signature: 0/0/1/4 4/24/4	Date: 6 Je	6.2011		

Document Description: Oath or declaration filed

Attorney Decket Number BHD-4662-2952

	First Named I	oventor	BOSMAN, Rigobert
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.83) USING AN APPLICATION DATA SHEET (37 CFR 1.76)			
Declaration Submitted With Initial Filing			
OR  Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.	16(f)) required	)	
ENDLESS SHAPED ARTICI	Æ	***************************************	***************************************
(Title of the invention)			
As a below named inventor, I hereby declare that:			
This declaration is directed to:			
the attached application, or	044		
<ul> <li>United States Application Number 14/405,990, filed December 5, 2</li> <li>PCT International application number filed on</li> </ul>	014, O		
• • • • • • • • • • • • • • • • • • • •			
The above-identified application was made or authorized to be made by me.			
I believe I am the original inventor or an original joint inventor of a dairned inve			
I hereby acknowledge that any willful false statement made in this declaration in by fine or imprisonment of not more than five (5) years, or both	s punishable un	der 18 U.S.C.	1001
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention	in the Application	on identified a	ooye.
WHEREAS, DSM IP Assets B.V. (hereinafter ASSIGNEE), a corporation of the business at Het Overloon 1, , Heerlen, Netherlands Netherlands 6411 TE, is de			
NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;			
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;			
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and			
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filling and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.			
AGREED and executed as noted below:			
Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Johanna Gertruda		<u> </u>	ERSJES
Inventor's Signature	Date		1/2014

Doc code: Oath Document Descr

Document Description: Oath or declaration filed

Attorney Docket Number BHD-4662-2952

First Named Inventor BOSMAN Rightert

First Ma	iamed inventor   BOSMAN, Rigobert
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGNMENT FOR UTILITY OR DESIGN FOR UTILITY OR UTILITY O	
Declaration Submitted With Initial Filing OR	
🔀 Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) red	equired)
ENDLESS SHAPED ARTICLE	
(Title of the invention)	t
As a below named inventor, I hereby declare that:	
This declaration is directed to the attached application, or United States Application Number 14/405,990, filed December 5, 2014, or PCT international application number filed on	
The visive-identified application was made or authorized to be made by me.    believe   am the original a ventor or an original point inventor of a claimed inventor in the hereby acknowledge that any wilful false elatement made in this declaration is pureable by fine or impresoment of not more than five (5) years, or both.	
WHEREAS, the undersigned (bereinafter ASS/GNOP), has made an invention in the Ap WHEREAS, DSM IP Assets B.V. (hereinafter ASS/CNEE), a corporation of the State of	The Netherlands, having an office and place of
In princes of the Coordinal II. Hearley, Notherlands Netherlands (41) TE is decreased.	Y
NOW THE EDGE is considered to Dollar & COS ander the good and a cost of a reference as investigated the social ASIGNOR by these presents the edge and ASIGNOR by these presents to energy and ASIGNOR Sentency ASIG	The second control of the second control of the second control of the United States of second control of the s
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, it recreases two and advisors further remunisation, in and to any improvements, and applications of consisted to the said invention.	
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its autoessors, aseign in ASSIGNEE at properties and title in and to the invention bereby transferred, and	ris, and legal representatives, diversed excential
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remunerable ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title the	
AGREED and executed as noted below:	
Legal Name of Additional Joint Inventor, if any:	
(E.g., Given Name (first and middle (if any)) and Family Name or Sumama) Jogef Siegfried Johannes	HOMMINGA
inventor's Signature:	Date: / < - / 2 / 4

Document Description: Oath or declaration filed

Roelof

inventor's

Signature:

BHD-4662-2952 Attorney Docket Number BOSMAN, Rigobert First Named Inventor INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76) Declaration Submitted With Initial Filing OR Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required) **ENDLESS SHAPED ARTICLE** (Title of the Invention) As a below named inventor, I hereby declare that: This declaration is directed to: the attached application, or United States Application Number 14/405,990, filed December 5, 2014, or PCT International application number filed on The above-identified application was made or authorized to be made by me. I believe 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. WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the Application identified above. WHEREAS, DSM IP Assets B.V. (hereinafter ASSIGNEE), a corporation of the State of The Netherlands, having an office and place of business at Het Overloon 1, Heerlen, Netherlands Netherlands 6411 TE, is desirous of acquiring an interest therein; NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention; ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention: ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filling and granting of foreign applications and the perfecting of title thereto in ASSIGNEE. AGREED and executed as noted below: Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)

I/We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR §1.56.

MARISSEN

Date: 74

December 2014

Document Description: Oath or declaration filed

Attorney Docket Number BHD-4662-2952
First Named Inventor BOSMAN, Rigobert

	First Named Invi	entor	BOSMAN, Rigobert	
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76)				
Declaration Submitted With Initial Filing OR				
Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.	16(f)) required)			
ENDLESS SHAPED ARTICL	E			
(Title of the Invention)			•	
As a below named inventor, I hereby declare that:				
This declaration is directed to: the attached application, or United States Application Number 14/405,990, filed December 5, 20 PCT International application number filed on	014, or			
The above-identified application was made or authorized to be made by me.				
I believe I am the original inventor or an original joint inventor of a claimed inver	ntion in the applica	ition.		
I hereby acknowledge that any willful false statement made in this declaration is by fine or imprisonment of not more than five (5) years, or both.	s punishable unde	r 18 U.S.C.	1001	
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention	in the Application	identified al	bave.	
WHEREAS, DSM IP Assets B.V. (hereinafter ASSIGNEE), a corporation of the business at Het Overloon 1, , Heerlen, Netherlands Netherlands 6411 TE, is de	State of The Neth	erlands, ha j an interes	ving an office and place of t therein;	
NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;				
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;				
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and				
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.				
AGREED and executed as noted below:				
Legal Name of Additional Joint Inventor, if any:	· · · · · · · · · · · · · · · · · · ·			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)  Christiaan  Henri Peter			DIRKS	
Inventor's Signature:	Date:	13-	December 2014	

I/We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR §1.56.

PATENT REEL: 035985 FRAME: 0163