#### 505783263 11/20/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5830090

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
VLADIMIR ERMOLOV	11/15/2019
ANTTI LAMMINEN	11/18/2019
JUSSI SÄILY	11/15/2019
TAUNO VÄHÄ-HEIKKILÄ	11/18/2019
PEKKA RANTAKARI	11/18/2019

#### **RECEIVING PARTY DATA**

Name:	TEKNOLOGIAN TUTKIMUSKESKUS VTT OY
Street Address:	VUORIMIEHENTIE 3
City:	ESPOO
State/Country:	FINLAND
Postal Code:	FI-02150

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

Property Type	Number
Application Number:	16615239

#### **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: 703-816-4000

Email: PTOMAIL@nixonvan.com **Correspondent Name:** GORDON P. KLANCNIK Address Line 1: NIXON & VANDERHYE, PC

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

Address Line 4: ARLINGTON, VIRGINIA 22203

ATTORNEY DOCKET NUMBER:	GPK-227-328
NAME OF SUBMITTER:	GORDON P. KLANCNIK
SIGNATURE:	/GORDON P. KLANCNIK/
DATE SIGNED:	11/20/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

# **Total Attachments: 5** source=227-328\_Declaration\_Assignment#page1.tif source=227-328\_Declaration\_Assignment#page2.tif source=227-328\_Declaration\_Assignment#page3.tif source=227-328\_Declaration\_Assignment#page4.tif

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Boc code: Qath Bocument Description: Dath or declaration filed

Atterney Docket Number GPK-227-328

	First Named Inventor	ERMOLOV, Viadimir	
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. § 1.1	l6(f)) required)		
PROBE APPARA			
(Title of this Invent)	on)		
As a below named inventor, i hereby declare that:			
This declaration is directed to: the attached application, or United States Application Number filed , or PCT International application number PCT/FI2018/050385 filed	on May 22, 2018.		
The above-identified application was made or authorized to be made by me	<b>3</b> .		
I believe I am the original inventor or an original joint inventor of a claimed in	invention in the application		
I hereby acknowledge that any willful laise statement made in this declarati by fine or imprisonment of not more than five (5) years, or both.	on is punishable under 18	U.S.C. 1001	
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an inven	tion in the Application iden	tified above.	
WHEREAS, TEKNOLOGIAN TUTKIMUSKESKUS VTT OY (hereinafter AS Vuorimiehentie 3, Espoo, FINLAND, 02150, is desirous of acquiring an inte		g an office and place of business at	
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 & Venderbye 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 Sumame) Vladimir	ERMOLOV	vivione	
Inventor's Signature.	I Marter		
Lonond	15, 14	2019	
Witnessed by: DVS51 SAIL4			
Signature of witness:	Date: 15.11	. 7019	
		·······	

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

Doc code: Oath

Document Description: Oath or declaration filed

	GPK-227-328
	FRMOLOV Vladimir

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	First Named Inventor	ERMOLOV, Vladimir	
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILI USING AN APPLICATION DAT Declaration Submitted With Initial Filing		APPLICATION (37 CFR 1.63)	
OR Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § :	1.16(f)) required)		
<u> </u>			
PROBE APPAI			
	nuon		
As a below named inventor, I hereby declare that:			
This declaration is directed to:  the attached application, or  United States Application Number filed , or  PCT International application number PCT/FI2018/050385 filed on May 22, 2018.			
The above-identified application was made or authorized to be made by	me.		
I believe t am the original inventor or an original joint inventor of a claime			
I hereby acknowledge that any willful false statement made in this declar by fine or imprisonment of not more than five (5) years, or both.	ation is punishable under 18	U.S.C. 1001	
	••••••••		
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invi-	ention in the Application iden	tified above.	
WHEREAS, TEKNOLOGIAN TUTKIMUSKESKUS VTT OY (hereinafter / Vuorimiehentie 3, Espoo, FINLAND, 82150, is desirous of acquiring an i		g an office and place of business at	
NOW, THEREFORE, in consideration of Ten Dollars (\$10,00) and/or oth of which are hereby acknowledged, the said ASSIGNOR by these present ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNE America and all foreign countries, in and to the invention as described in subsequent applications based thereon including any and all continuation all resulting patents, together with the right of priority under the internation American Convention Relating to Patents, Designs and Industrial Models States of America adheres, and the ASSIGNOR hereby authorizes and resid Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successful that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represent ASSIGNEE with respect to this invention;	ints hereby sells, assigns, and OR'S entire right, title and int the aforesaid application, an inn convention for the Protess, and since and any other international equests the Commissioner of essors, assigns, and legal re	I transfers unto the said erest in the United States of d to the said application and to all ubstitutes of seid application, and cition of Industrial Property, Interagreements to which the United f Patents and Trademarks to issue presentatives. It is understood and	
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 furl ASSIGNEE, for the filing and granting of foreign applications and the performance of the performan			
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 Suman	ne)		
Antti	LAMMINEN		
Inventor's Signature:	Date: [8-11-20	( )	
Witnessed by: Vladimir Ermolov			
Signature of witness:	Data	11 2019	

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

Doc code: Oath Document Description: Oath or declaration filed

	GPK-227-328
mar i ki	EDMOLOW Vindenia

### 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 Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required) PROBE APPARATUS (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 filed , or PCT International application number PCT/FI2018/050385 filed on May 22, 2018 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, TEKNOLOGIAN TUTKIMUSKESKUS VTT OY (hereinafter ASSIGNEE), an entity, having an office and place of business at Vuorimiehentie 3, Espoo, FINLAND, 02150, 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 Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname) SÄILY JUSSI Inventor's Signature 19.11.2019 Witnessed by: Ermolov Name: Signature of witness 15.11,2019

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

Doc code: Oath

Document Description: Oath or declaration filed

Attorney Oocket Number GPK-227-328
First Named Inventor ERMOLOV, Vtadimir

	irst Named Inventor ERMOLOV, Vladimir	
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)	
PROBE APPARATU	ys .	
(Title of the Invention)	3	
As a below named inventor, I hereby declare that:		
This declaration is directed to: the attached application, or United States Application Number filed , or PCT International application number PCT/FI2018/050385 filed on	May 22, 2018.	
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 application.	
I hereby acknowledge that any willful false statement made in this declaration is by line or imprisonment of not more than five (5) years, or both.	s punishable under 18 U.S.C. 1001	
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention	in the Application identified above.	
WHEREAS, TEKNOLOGIAN TUTKIMUSKESKUS VTT OY (hereinafter ASSIGNEE), an entity, having an office and place of business at Vuorimiehentie 3, Espaio, FINLAND, 02150, 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;		
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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)		
Teamo	VÄHÄ-HEIKKILÄ	
Inventor's Signature:	Date: 18,11, 2019	
Wilnessed by: Name. Rekka Rantakari		
Signature of witness:	Date: /8.4.2579	

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

Doc code: Oath

Document Description: Oath or declaration filed

	MIGNIBY DUCKBI MINDSI	GPK-227-328
·	First Named Inventor	ERMOLOV, Vladimir
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY USING AN APPLICATION DATA Declaration Submitted With Initial Filing OR		PPLICATION (37 CFR 1.63)
Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.1	6(f)) required)	
PROBE APPAR/		
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NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other of which are hereby acknowledged, the said ASSIGNOR by these presents ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOF America and all foreign countries, in and to the invention as described in the subsequent applications based thereon including any and all continuations, all resulting patents, together with the right of priority under the Internationa American Convention Relating to Patents, Designs and Industrial Models, a States of America adheres, and the ASSIGNOR hereby authorizes and required Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its success agreed that ASSIGNEE'S attorneys Nixon & Vanderbye P.C. have represent ASSIGNEE with respect to this invention;	hereby sells, assigns, and to I'S entire right, title and inter a aforesaid application, and I divisions, reissues, and sub I Convention for the Protecti- and any other international ac- uests the Commissioner of F sors, assigns, and legal repri	ransfers unto the said ast in the United States of to the said application and to all stitutes of said application, and on of Industrial Property, Inter- presments to which the United fatents and Trademarks to issue esentatives. It is understood and
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;		
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ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without furthe ASSIGNEE, for the filing and granting of foreign applications and the perfect		
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)		
Pekka	RANTAKARI	
inventor's Signature	Date: 18.71. 2	013
Witnessed by: Vladimin Ephons	000000000000000000000000000000000000000	***************************************
Signature of witness:	Date:	2619

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