503599313 12/07/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3645943

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL WITTEK	11/17/2015
DAGMAR KLASS	10/27/2015
ATSUTAKA MANABE	10/27/2015
CHRISTIAN JASPER	10/27/2015
VOLKER REIFFENRATH	11/04/2015
CONSTANZE BROCKE	11/03/2015
DETLEF PAULUTH	11/02/2015

RECEIVING PARTY DATA

Name:	MERCK PATENT GMBH
Street Address:	FRANKFURTER STRASSE 250
City:	DARMSTADT
State/Country:	GERMANY
Postal Code:	64293

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14820803

CORRESPONDENCE DATA

Fax Number: (703)243-6410

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: 703-243-6333
Email: mail@mwzb.com

Correspondent Name: MILLEN, WHITE, ZELANO & BRANIGAN-EJ

Address Line 1: 2200 CLARENDON BLVD.

Address Line 2: SUITE 1400

Address Line 4: ARLINGTON, VIRGINIA 22201

ATTORNEY DOCKET NUMBER:	MERCK-4371
NAME OF SUBMITTER:	ELIZABETH JERMAN
SIGNATURE:	/Elizabeth Jerman/
DATE SIGNED:	12/07/2015

This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7
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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

avention	LIQUID-CRYSTALLINE MEDIUM AND HIGH-FREQUENCY COMPONENTS COMPRISING SAME
es the below sun	sed inventor, I hereby declare that:
This declaration	The stracked application, or
structural test	United States Application or PCT International Application number 14/020/S(15) filed on August 7.
1.0	fied application was made or authorized to be made by me.
believe that I at	n the original inventor or an original joint inventor of a claimed invention in the application.
AND WHEREA	
hereinafter reteri all patern(s) liste	Frankfurter Strasse 250 64293 Darmstadt, GEBMANY red to as the ASSIGNER, is desirous of acquiring the entire right, title, and interest in and to said invention and d above, including any and all earlier priority rights (U.S. and fereign), divisions and continuations thereof, d all renewals, reissues, reexaminations and extensions thereof.
ASSIGNOR her right, title and it and all Letters F thereof, and in a to occur, with r	WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, eby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive necest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any attent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions and to any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or its unit of the filing or securing of patents in the United States and/or any countries foreign thereto concerning said expect to the filing or securing and had expresentatives to have, hold, exercise, and entoy said invention and patent.
including any at which may be g right to sue fix arising from or renewals, reissa representatives, entryed the sam	ASSIGNER, its assigns and expensive terms and continuations thereof, any and all Letters Patent and all earlier priority rights (U.S. and foreign), divisions and continuations and extensions thereof, including the ranted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, including the damages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise appetrationing thereto, for and during the term or terms of any and all such Letters Patent, including any and all suppertaining thereto, for and during the term or terms of any and all such Letters Patent, including any and all see, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal in as ample and benefitial a manner to all intents and purposes as the ASSIGNOR might or could have held and and, if the assignment had not been made.
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including any at which may be gright to sue fur arising from or renewals, reissure presentatives, enjoyed the san AND and foreign conference any off ANE any and all div	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and to sasign who assign the same to said assigns and longer than assign which the assignment is a same to said assignment, with all the rights, powers, privileges and advantages in anywise damages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise appertaining thereto, for and during the term or terms of any and all such Lesters Patent, including any and all sees, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal in as ample and beneficial a manner to all intents and purposes as the ASSIGNEE and its assigns and legal in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and are, if the assignment had not been made. ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States antries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to not papers that may be needed in connection with recurring Letters Patents thereon. ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on issues and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith, undersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this formation which may be necessary or desirable in order for the United States Patent and Trademark Office to
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including any at which may be gright to see four arising from or renewals, reisest representatives, enjoyed the same and foreign code execute any off ANE any and all diverse any and all diverse any other properly reconfine or imprise	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States intries for said invention and to assign the same to said assigns and longer the propers that may be necessary to file applications and representatives and to material and to assign the Said for said incomments and purposes as the ASSIGNOR might or could have held and actified for said during the term or terms of any and all such Lexices Patent, including any and all sees, reexaminations and extensions thereof, for the use and benefit of ASSIGNEH and its assigns and legal in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and actified assignment had not been made. ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States intries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to not papers that may be needed in connection with recurring Letters Patents thereon. ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on issons and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith, undersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this formation which may be necessary or desirable in order for the United States Patent and Trademark Office to I this document. IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR

MR.LEN, WHITE, ZELANO & BRANIGAN, P.C. ATTORNEYS AT LAW ARLINGTON COUNTROUSE PLAZA

2200 CLARENDON BOULEVARD I SUITE 1400 I ARLINGTON VA 22201 TELEPHONE: 703.243.6333; FAX: 703.243.6410

EMARL: MAR.@MWZB.COM

Effective, September 16, 2012

PM4/154

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

	LIQUID-CRYSTALLINE MEDIUM AND HIGH-PREQUENCY COMPONENTS
Title of Invention	COMPRISING SAME
	, that)
As the below name	d inventor, I hereby declare that:
This declaration	{****}
J.BIR OCCIBERGOS	United States Application or PCT International Application number 14/820,803 filed on August 7.
is directed to:	N/1 2015
	to an authorized to be made by me.
The above-location	ed application was made or administration to a claimed invention in the application. the original inventor or an original joint inventor of a claimed invention in the application.
AND WHEREAS	
	Frankfurter Strasse 250
	d to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and to as the ASSIGNEE, is desirous of acquiring the entire right, title, and foreign), divisions and continuations thereof,
hereinafter referre	d to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said inventors and to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said inventors and to said inventors and state of the said inventors and extensions thereof.
all patent(s) listed	above, including any and an earner practify reprint the configuration of
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wnw '	WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, by assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive by assigns, sells, and transfers to ASSIGNEE, its assigns and eli divisions and continuation thereof, and any
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rigist, title and int	erest in and to said invention and patents), and all renewals, reissues, reexaminations and extensions
and all Letters Pa	by assigns, scientists and parent(s), including any and all divisions and continuations metern, and any erest in and to said invention and parent(s), including any and all renewals, reissues, reexaminations and extensions are which may be granted therefor, including any and all the convention rights or benefits accruing or do not any and all U.S. (including provisional) or foreign priority and/or any countries foreign thereto concerning said to any and all the filing or securing of parents in the United States and/or any countries foreign thereto concerning said
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to accrue with re-	spect to the filing or securing of patents in the United States and/or any countries lovengy market concerning supert to the filing or securing of patents in the United States and/or any countries lovengy naid invention and patent, ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and patent, as a superior priority rights (U.S. and foreign), divisions and continuations thereof, any and all Letters Patent and extensions thereof, including the
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AND	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the Ornice and to assign the same to said ASSIGNEE, its assigns and legal representatives and to attrict for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to attrict for said invention with securing Letters Patents thereon.
AND	ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on assigns and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith, sions and continuations thereof, to ASSIGNEE, its assigns and legal representatives.
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•	andersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this undersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this
The	indersigned hereby grani(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insect on the community which may be necessary or desirable in order for the United States Patent and Trademark Office to order the United States Patent and Trademark Office to order the United States Patent and Trademark Office to
assignment moord	this document
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5.	eby acknowledge that any willful faise statement made in this declaration is punishable under 18 U.S.C. 1001 by
I her	eby acknowledge that any white the property of not more than five (5) years, or both.
tine or unbarac	>>M462.1.0 ±
755000 6748	E OF INVENTOR Date: 27.40.2045
LEGAL NAM	Date: 27.30.2073
IBACHILA.	
Signature:	

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
ATTORNEYS AT LAW
ARLINGTON COURTEOUSE PLAZA
2200 CLARENDON BOULEVARD | SUITE 14001 ARLINGTON VA 22201
TELEPHONE: 703.243.6333 | FAX: 703.243.6410
EMAIL: MAIL@MWZE.COM

Effective, September 16, 2012

PM1154

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	LIQUID-CRYSTALLINE MEDIUM AND HIGH-FREQUENCY COMPONENTS COMPRISING SAME	
As the below nan	ned inventor, I hereby declare that:	
This declaration	Silver of the state of the stat	
1 Mrs Decimenation	United States Application or PCT International Application number 14/820.803 filed on August 7.	
is directed to:		
The above-identi	fied application was made or authorized to be made by me.	
I believe that I ar	n the original inventor or an original joint inventor of a claimed invention in the application.	
AND WHEREA	S MERCS PATENT GMBH	
	Frankfurter Strasse 250	
	CAROL Promoteds CERRANN	
all patent(s) fiste including any an	red to as the ASSIGNEE, is destrous of acquiring the entire right, title, and interest in and to said invention and d above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, d all renewals, reissues, reexaminations and extensions thereof.	
ASSIGNOR her- right, title and in and all Letters P thereof, and in a to accrue with re invention, SAID including any ar- which may be g- right to sue for o arising from or a renewals, reissue representatives, enjoyed the san	WITNESSHIII that for good and valuable consideration, the receipt whereof is hereby acknowledged, eby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive elerest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any attent which may be gramed therefor, including any and all renewals, reissues, reexaminations and extensions and to any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or espect to the filing or securing of patents in the United States and/or any countries foreign thereto concerning said in ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and patent, and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, any and all Letters Patent all earlier priority rights (U.S. and foreign), divisions and continuations and extensions thereof, including the tensions occurring before the assignment, with all the rights, powers, privileges and advantages in anywise appertaining thereto, for and during the term or terms of any and all such Letters Patent, including any and all es, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and not, if the assignment had not been made.	
AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNOF, its assigns and legal representatives and to execute any other papers that may be needed in connection with securing Letters Patents thereon.		
AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Leners Patent on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.		
The undersigned hereby grant(s) the law firm of Millen, White, Zelann & Branigan, P.C. the power to insert on this assignment information which may be necessary or desirable in order for the United States Patent and Trademark Office to properly record this document.		
IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR		
Thereby 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.		
LEGAL NAM	E OF DIVENTOR Alsands MANABE Date: 27 /0 20 / S	
Signature:	- Mil Mank	
CHELINGS. C.	The state of the s	

MILIEN, WHITE, ZIELANO & BRANICAN, P.C.
ATTOENEYS AT LAW
ARLINGTON COURTIBUSE PLAZA
2200 CLARENDON ROULEVARD (SUITE 1400 FARLINGTON VA 2220)
TELEPHONE: 703.243.63331FAX: 703.243.6410
ESIAR: MARL@MWZR.COM

Effective, September 16, 2012

924/154

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	LIQUID-CRYSTALLINE MEDIUM AND HIGH-FREQUENCY COMPONENTS COMPRISING SAME		
As the below named inventor, I hereby declare that:			
This declaration	The attached application, or		
is directed to:	United States Application or PCT International Application number 14/820,803 filed on August 7.		
	fied application was made or authorized to be made by me.		
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.		
MERCK PATENT GMBH Frankfurter Strasse 250 64293 Darmstadt, GERMANY hereinafter referred to as the ASSIGNEE, is desirous of acquiring the emire right, title, and interest in and to said invention and all patent(s) listed above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, including any and all renewals, reissues, reexaminations and extensions thereof.			
NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto concerning said invention, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and patent, including any and all earlier priority rights (U.S. and foreign),divisions and continuations thereof, any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, including the right to sue for damages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patens, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.			
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IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR			
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.			
	OF INVENTOR 72 OLY 7.045		
Inventor:	Christian JASPER Date: (* Cook Cook)		
Signature:	Man war Minn		

Millen, White, Zelano & Branigan, P.C.
Attorners at Law
Arlington Courthouse Plaza
2200 Clarendon Boulevard (Suite 14001 Arlington V A 22201
Telephone: 703,243,6333 (Fax: 703,243,6410
Email: mail.@mwzb.com

Effective, September 16, 2012

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of	LIQUID-CRYSTALLINE MEDIUM AND HIGH-FREQUENCY COMPONENTS		
Invention	COMPRISING SAME		
As the below named inventor, I hereby declare that:			
This declaration			
is directed to:	United States Application or PCT International Application number 14/820,803 filed on August 7, 2015		
The above-identi	fied application was made or authorized to be made by me.		
I believe that I are	n the original inventor or an original joint inventor of a claimed invention in the application.		
all materitle) lister	MERCK PATENT GMBH Frankfurter Strasse 250 64293 Darmstadt, GERMANY ed to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and d above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, d all renewals, reissues, reexaminations and extensions thereof.		
ASSIGNOR here right, title and in and all Letters Properties of the control of th	WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, eby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive terest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any attent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions and to any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or spect to the filing or securing of patents in the United States and/or any countries foreign thereto concerning said ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and patent, d all earlier priority rights (U.S. and foreign), divisions and continuations thereof, any and all Letters Patent anted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, including the lamages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise appetraining thereto, for and during the term or terms of any and all such Letters Patent, including any and all es, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and e, if the assignment had not been made.		
AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection with securing Letters Patents thereon.			
AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.			
The undersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this assignment information which may be necessary or desirable in order for the United States Patent and Trademark Office to properly record this document.			
	IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR		
I here fine or imprison	by acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by timest of not more than five (5) years, or both.		
LEGAL NAME	OF INVENTOR Volker REIFFENRATH Date: 04/1/20/15		
Comments and a	VINA Ros Despite		

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
ATTORNEYS AT LAW
ARLINGTON COURTHOUSE PLAZA
2200 CLARENDON BOULEVARD (SUITE 1400) ARLINGTON VA 22201
TELEPHONE: 703.243.6333 | FAX: 703.243.6410

EMAIL: MAIL@MWZB.COM

Effective, September 16, 2012

PM1154

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	LIQUID-CRYSTALLINE MEDIUM AND HIGH-FREQUENCY COMPONENTS COMPRISING SAME	
As the below named inventor. I hereby declare that:		
This declaration	Anna Carlos de C	
3 33555 311.0101.0101	United States Application in PCT International Application number 14/820 893 filed on August 7.	
is directed to:	2015	
The above identi	fied application was made or authorized to be made by me.	
t believe that Lar	n the original inventor or an original joint inventor of a claimed invention in the application.	
AND WHEREAS	MERCE PATENT GMBB Frankfurter Steases 250 64293 Danisladt, GEBMANY	
all patent(s) liste including any an	d abuve, including any and an earner privately rights (1.3. market) and the last the state of the state of the data of the state of the	
ASSIGNOR hore right, sittle and in and all Leners P thereof, and in a to accrue with relievention, SAID including any an which may be gright to sue for classing from or a renewals, reisson procesulatives, asjoyed the sam	WITNESSETH that for good and valuable consideration, the receipt whereof is bereby acknowledged, and passigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive threat in and to said invention and patent(s), including any and all divisions and continuations thereof, and any attent which may be granted therefor, including any and all renewals, reissure, reexaminations and extensions and to any and all U.S. tincluding provisional) or feeting priority and/or convention rights or benefits accoming or espect to the filling or securing of patents in the United States and/or any countries foreign thereto concerning raid in ASSIGNEE, its adsigns and legal representatives to have, hold, exercise, and only said invention and patent, and after priority rights (U.S. and foreign) divisions and continuations thereof, any and all Letters Patent cannot therefor, including any and all renewals, reismes, recommendations and extensions thereof, including the faminges occurring before the assignment, with all the rights, powers, privileges and advantages in anywise apportaining thereto, for and during the seam or terms of any and all such Letters Patent, including any and all concerning and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal in as ample and beneficial a manner to all intense and purposes as the ASSIGNOR might or could have bold and e, if the assignment had not been made.	
and foreign con- execute any oth-	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States entries for said in caption and to assign the same to said ASSIGNEE, its assigns and logal representatives, and to er papers that may be needed in connection with securing Letters Patents thereon.	
any and all divi	ASSIGNOR authorizes and requests the Communicationer of Patents and Trademarks to issue a Letters Potent on stone and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance horowith.	
assistantiant into	indersigned ficreby grant(s) the law firm of Millen, White, Zelano & Branisan, P.C. the power to insert on this contains which may be necessary or desirable in order for the United States Putent and Trademark Office to this document.	
******	IN TESTIMONY WHEREOF this and gement is executed by ASSIGNOR	
fine or haprison	thy acknowledge that any willing false statement made in this declaration is punishable under 18 U.S.C. 1001 by named of not more than five (5) years, or limb.	
LEGAL HAM	OF MOVENTOR CONSTRUCTE Date: 3 [] []	
Signature		

Millen, White, Zelano & Bronder, P.C.
Attorners at Caw
Artholog Constitues Plaza
2200 Clarescon Bollovard (Scie 140) (Artholog VA 2220)
The epigner 703/243,6333 (Fax: 703/243,6410)
Email: mail @ain/28.004

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PAY 1154

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of LIQUID-CRYSTALLINE MEDIUM AND HIGH-I COMPRISING SAME	FREQUENCY COMPONENTS
As the below named inventor, I hereby declare that:	
The state of the s	
This declaration The attached approximation of PCT International	Application number 14/820,893 filed on August 7.
1. 31-nated to: DQ 2015	
The above identified application was made or authorized to be made by me.	a the second in this reguligation
The above-identified application was interested an original joint inventor of a claid believe that I am the original inventor or an original joint inventor of a claid	likel mennen in ne approxim
AND WHEREAS MERCK PATENT GMBH	
Frankfurter Strasse 250	
64293 Darmstadt, GERMANY hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire all patent(s) listed above, including any and all earlier priority rights (U.S. a including any and all renewals, reissues, reexaminations and extensions there	right, title, and interest in and to said invention and and foreign), divisions and continuations thereof, reof.
NOW, WITNESSETH that for good and valuable consideration, to ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns a right, title and interest in and to said invention and patent(s), including any right, title and interest in and to said invention and patent(s), including any and all and all Letters Patent which may be granted therefor, including any and all thereof, and in and to any and all U.S. (including provisional) or foreign prior ascence with respect to the filing or securing of patents in the United State invention, SAID ASSIGNEE, its assigns and legal representatives to have, including any and all earlier priority rights (U.S. and foreign), divisions and which may be granted therefor, including any and all renewals, reissues, refight to sue for damages occurring before the assignment, with all the right arising from or appertaining thereto, for and during the term or terms of an renewals, reissues, reexaminations and extensions thereof, for the use and trepresentatives, in as ample and beneficial a manner to all intents and purpenjoyed the same, if the assignment had not been made.	the receipt whereof is hereby acknowledged, and legal representatives, the entire and exclusive and all divisions and continuations thereof, and any renewals, reissues, reexaminations and extensions iority and/or convention rights or benefits accruing or es and/or any countries foreign thereto concerning said hold, exercise, and enjoy said invention and patent, It continuations thereof, any and all Letters Patent examinations and extensions thereof, including the is, powers, privileges and advantages in anywise y and all such Letters Patent, including any and all benefit of ASSIGNEE and its assigns and legal tosses as the ASSIGNOR might or could have held and
and foreign countries for said invention and it assign the said to said the	Letters Patents thereon.
AND ASSIGNOR authorizes and requests the Commissioner of	Patents and Trademarks to issue a Letters Patent on and legal representatives, in accordance herewith.
The undersigned hereby gram(s) the law firm of Millen, White, assignment information which may be necessary or desirable in order for properly record this document.	
IN TESTIMONY WHEREOF this assignmen	it is executed by ASSIGNOR
I hereby acknowledge that any willful false statement made in t fine or imprisonment of not more than five (5) years, or both.	this declaration is punishable under 18 U.S.C. 1001 by
AL OF IMPENITUR	02/1/1/2015
LEGAL NAME OF INVENTOR Inventor: Detlef PAULUTH	Date: UNITIONS
Signature:	

MRLEN, WHITE, ZELANO & BRANIGAN, P.C.
ATTORNEYS AT LAW
ARLINGTON COURTHOUSE PLAZA
2200 CLARENDON BOULEYARD | SUITE 1400 | ARLINGTON V A 2220 |
TELEPHONE: 703.243.6333 | FAX: 703.243.6410
EMAIL: MAIL@MWZB.COM

Effective, September 16, 2012

PATENT REEL: 037229 FRAME: 0629

RECORDED: 12/07/2015