503246727 04/01/2015

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL WITTEK	02/05/2015
ERDAL DURMAZ	01/30/2015
MALGORZATA RILLICH	02/02/2015
MILA FISCHER	02/03/2015
MATTHIAS BREMER	02/02/2015

RECEIVING PARTY DATA

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Postal Code:	64293

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14432968

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.

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ATTORNEY DOCKET NUMBER:	MERCK-4300
NAME OF SUBMITTER:	ASHLEY WEBER
SIGNATURE:	/Ashley Weber/
DATE SIGNED:	04/01/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT 503246727 REEL: 035314 FRAME: 0255

Total Attachments: 5 source=EXECUTED_DUAL_DEC_ASSIGNMENT#page1.tif

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Title of Invention	EIQUID CRYSTAL MEDIUM AND LIQUID CRYSTAL DISPLAY P 12/181-pl/sw
As the below nan	ned inventor, I hereby declare that:
This declaration	☐ The attached application, or
is directed to:	United States Application or PCT International Application number PCT/EP2013/002561 filed on 26 August 2013
The above-identit	fied application was made or authorized to be made by me.
I believe that I an	a the original inventor or an original joint inventor of a claimed invention in the application.
all natentis) listee	Merck Patent GmbH Frankfurter Strasse 250 64293 Darmstadt / DE ed to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, I all renewals, reissues, reexaminations and extensions thereof.
ASSIGNOR here right, title and int and aff Letters Pathereof, and in art to accrue with reinvention, SAID including any and which may be gright to see for darising from or a renewals, reissue representatives, i	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 terest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any tent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions ad 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, did 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 amages 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 sexaminations 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 so, if the assignment had not been made.
and foreign coun	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States tries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to a papers that may be needed in connection with securing Letters Patents thereon.
AND / any and all divisi	ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on ions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.
The un assignment infor property record t	idersigned hereby grant(s) the law firm of Millen. White, Zelano & Branigan, P.C. the power to insert on this mation which may be necessary or desirable in order for the United States Patent and Trademark Office to his document.
	IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.
I herek fine or imprisoni	by acknowledge that any willful faise statement made in this declaration is punishable under 18 U.S.C. 1001 by ment of not more than five (5) years, or both.
LEGAL NAME	
Inventor:	Malgorzata RILLICH Date: QQ //
Signature:	

MILLEN, WHITE, ZELABO & BRANGAN, P.C.
ATTORNEYS AT LAW
ARLINGTON COUNTHOUSE PLAZA
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TELEPHONE: 703.243.6333 | FAX: 703.243.6410
EMAIL: MAIL: MWZB.COM

Effective, September 16, 2012

Title of Invention	LIQUID	CRYSTAL MEDIUM AND LIQUID CRYSTAL DISPLAY	P 12/181-pl/sw
As the below nam	ed invento	r, I hereby declare that:	
This declaration		The attached application, or	
is directed to:	D	United States Application or PCT International Application number <u>PCT/EP2013</u> 26 August 2013	3/002561 filed on
	5.7	nion was made or authorized to be made by me.	,
I believe that I an	the origin	al inventor or an original joint inventor of a claimed invention in the application.	Control
all patem(s) listed including any and	Fig. 6- ed to as the labove, including the second terms of the sec	lerck Patent GmbH rankfurter Strasse 250 1293 Darmstadt / DE ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to soluding any and all earlier priority rights (U.S. and foreign), divisions and continuous, reissues, reexaminations and extensions thereof. ETH that for good and valuable consideration, the receipt whereof is hereby acknowledge.	ations thereof,
ASSIGNOR here right, title and int and all Letters Pathereof, and in art to accrue with resinvention, SAID including any any which may be gright to sue for diarising from or a renewals, reissue representatives.	by assigns, erest in and ant which also any as speed to the ASSIGNE! It all carrier anted there appearaining s, reexamir n as amole	sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire it to said invention and patent(s), including any and all divisions and continuations may be granted therefor, including any and all renewals, reissues, reexaminations and it U.S. (including provisional) or foreign priority and/or convention rights or be filting or securing of patents in the United States and/or any countries foreign there, its assigns and legal representatives to have, hold, exercise, and enjoy said inverpriority rights (U.S. and foreign), divisions and continuations thereof, any and all for, including any and all renewals, reissues, reexaminations and extensions thereof the assignment, with all the rights, powers, privileges and advantage thereto, for and during the term or terms of any and all such Letters Patent, includations and extensions thereof, for the use and benefit of ASSIGNEE and its assignment had not been made.	and exclusive thereof, and any and extensions enefits accruing or reto concerning said ntion and patent, Letters Patent of, including the as in anywise ling any and all as and legal
and fareign coun	moss for sai	t hereby agrees to execute all papers that may be necessary to file applications in a id invention and to assign the same to said ASSIGNUE, its assigns and legal repre- at may be needed in connection with securing Letters Patents thereon.	the United States sentatives and to
any and all divis	ions and co	t authorizes and requests the Commissioner of Patents and Trademarks to issue a minuations thereof, to ASSIGNEE, its assigns and legal representatives, in according	lance horewith.
The un assignment infor properly record	mation wh	hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power ich may be necessary or desirable in order for the United States Patent and Traden ant.	to insert on this nark Office to
		IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR	
I herel fine or imprison	oy acknowl ment of not	edge that any willful false statement made in this declaration is punishable under more than five (5) years, or both.	18 U.S.C. 1001 by
LEGAL NAME	OF INVER		
Inventor:	ivitchian W		in in the second se
Signature:			

MILLEN, WHITE, ZELARO & BRANIGAN, P.C. ATTORNEYS AT LAW Arlington Courthouse Plaza 2206 CLARENDON BOULEVARD | SUITE 1400 | ARLINGTON VA 22201 TELEPHONE: 703.243.6333 | FAX: 703.243.6410

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Effective, September 16, 2012

Title of Invention	LIQUID CRYSTAL MEDIUM AND LIQUID CRYSTAL DISPLAY	P 12/181-pl/sw
As the below nan	ned inventor, I hereby declare that:	
This declaration	☐ The attached application, or	
is directed to:	United States Application or PCT International Application number <u>PCT/EF</u> 26 August 2013	'2013/002561 filed on
The above-identi	fied application was made or authorized to be made by me.	
I believe that I an	n the original inventor or an original joint inventor of a claimed invention in the applicat	ion.
all patent(s) lister	Merck Patent GmbH Frankfurter Strasse 250 64293 Darmstadt / DE ed to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and d above, including any and all earlier priority rights (U.S. and foreign), divisions and cord all renewals, reissues, reexaminations and extensions thereof.	f to said invention and ninuations thereof,
ASSIGNOR here right, title and int and all Letters Patherenf, and in an to accrue with resinvention, SAID including any and which may be gright to sue for diarising from or agreements, reissue representatives, i	WITNESSETH that for good and valuable consideration, the receipt whereof is hereby a ssigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the exterest in and to said invention and patent(s), including any and all divisions and continuation which may be granted therefor, including any and all renewals, reissues, reexaminated to any and all U.S. (including provisional) or foreign priority and/or convention rights spect to the filing or securing of patents in the United States and/or any countries foreign ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said all earlier priority rights (U.S. and foreign), divisions and continuations thereof, any and anted therefor, including any and all renewals, reissues, reexaminations and extensions that amages occurring before the assignment, with all the rights, powers, privileges and advance of the proposed of the proposed of the countries of the second of the proposed of the assignment, with all the rights, powers, privileges and advance of the proposed of the proposed of the second of the patent of the second of the proposed of the patent, it is a sample and beneficial a manner to all intents and purposes as the ASSIGNOR might in the assignment had not been made.	entire and exclusive tions thereof, and any tions and extensions or benefits accruing or thereto concerning said invention and patent, d all Letters Patent hereof, including the intages in anywise including any and all assigns and legat
and foreign coun	ASSIGNOR hereby agrees to execute all papers that may be necessary to file application thies for said invention and to assign the same to said ASSIGNEE, its assigns and legal r r papers that may be needed in connection with securing Letters Patents thereon.	s in the United States epresentatives and to
AND / any and all divisi	ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue to some continuations thereof, to ASSIGNEE, its assigns and legal representatives, in ac	ie a Letters Patent on cordance herewith.
The un assignment infor properly record t	idersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the pomation which may be necessary or desirable in order for the United States Patent and Trahis document.	wer to insert on this ademark Office to
	IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR	
I hereb fine or imprisom	by acknowledge that any willful false statement made in this declaration is punishable unment of not more than five (5) years, or both:	der 18 U.S.C. 1001 by
	OF INVENTOR	DY F
	Manthas BREMER Date: Date:	
Signature:	the sitzerress	

Milley, White, Zelano & Branigan, P.C.
Altorneys at Law
Arlington Courthouse Plaza
2200 Clarendon Boulevard) Shite 1400 | Arlington VA 22201
Telephone: 703.243.6333 | Fax: 703.243.6410
Email: Mail@Mwzbloom

Effective, September 16, 2012:

Title of Invention	LIQUID CRYSTAL MEDIUM AND LIQUID CRYSTAL DISPLAY	P 12/181-pl/sw
As the below man	jed inventor. Thereby declare that	
This declaration	and that the territory	
is directed to:	United States Application of PCT International Application number <u>PC1/EP201</u> . D 26 August 2013	3/002561 filed on
	fied application was made or authorized to be made by me.	
I believe that I an	n the original inventor or an original joint inventor of a claimed invention in the application.	
all majornitud lister	Merck Patent GmbH Frankfurter Strasse 250 64293 Darmstack / DE ed to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to s d above, including any and all earlier priority rights (U.S. and foreign), divisions and continu d all renewals, reissues, recyaminations and extensions thereof.	aid invention and ations thereof.
ASSIGNOR hero right, title and in and all Letters Pi thereof, and in as to accrae with re- invention, SAID including any an which may be gr- right to sac for di- arising from or a remewals, reliess	WITNLSSETH that for good and valuable consideration, the receipt whereof is hereby acknowly assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the enting tension in the said invention and patent(s), including any and all divisions and continuations along which may be granted therefor, including any and all renewals, reissues, reexaminations and any and all U.S. (including provisional) or foreign priority and/or convention rights or bissect to the filing or securing of patents in the United States and/or any countries foreign their ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invedual cartier priority rights (U.S. and foreign), divisions and continuations thereof, any and all canted therefor, including any and all renewals, reissues, reexaminations and extensions thereof amages occurring before the assignment, with all the rights, powers, privileges and advantage ppertaining thereto, for and during the term or terms of any and all such Letters Patent, includes, reexaminations and extensions thereof, for the use and benefit of ASSIGNLE and its assign as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or or, if the assignment had not been made.	and exclusive sthereof, and any can't extensions enefits accruing or reto concerning said intion and parent. Letters Patent of, including the es in any wise ding any and all as and legal
and familia conf	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in a strict for said invention and to assign the same to said ASSIGNEE, its assigns and legal typic appears that may be needed in connection with securing Letters Patents thereon.	the United States sentatives and to
AND any and all divis	ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a tions and continuations thereof, to ASSIGNEE, its assigns and logal representatives, in according	Letters Patent on lance herewith
The un assignment infor properly record	idersigned hereby grant(s) the law firm of Mithen. White, Zelano & Branigan, P.C. the power mation which may be necessary or desirable in order for the United States Patent and Tradenthis document.	to insert on this mark Office to
	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 underment of not more than five (5) years, or both.	18.U.S.3°, 1001 by
	OF INVENTOR MHa.FISCHER Date: 02.02.2	~ [C]
Inventor	Mila FISCHER Date: QQ QQ Z	C.2/3×.3
Signature:	<u> </u>	
<u> </u>	<u> </u>	

MILLER, WHITE, ZELANG & BRANIGAN, P.C. A FIDENCYS AT LAW ARLINGTON COERTHOLSE PLAZA 2200 CLAREMOON BOLLEVARD: SUSTE 1400 [ARLINGTON VA 22201 TELEPROSE: 703-243-6333; FAN: 703-243-6410 EMAIL: NUMERANWER COM

Effective, September 16, 2012

Title of Invention	LIQUII	O CRYSTAL MEDIUM AND LIQUID CRYSTAL DISPLAY	.P 12/181-pl/sw
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The above-identif	ied applic	ation was made or authorized to be made by me.	
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AND A any and all divisi	SSIGNO ons and o	R authorizes and requests the Commissioner of Patents and Trademarks to issuntinuations thereof, to ASSIGNEE, its assigns and legal representatives, in ac-	ue a Letters Patent on cordance herewith.
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LEGAL NAME (Inventor:	OF INVE		.2015
Signature:		Erda (Venez	

Millen, White, Zelano & Branigan, P.C.
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Email: mail@mwzb.com

Effective, September 16, 2012

PATENT REEL: 035314 FRAME: 0261

RECORDED: 04/01/2015