

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT																
NATURE OF CONVEYANCE:	ASSIGNMENT																
CONVEYING PARTY DATA																	
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Holger WINKLER</td> <td>02/24/2012</td> </tr> <tr> <td>Andreas BENKER</td> <td>02/24/2012</td> </tr> <tr> <td>Martina HUEBER</td> <td>02/24/2012</td> </tr> <tr> <td>Monika KURSAWE</td> <td>02/24/2012</td> </tr> <tr> <td>Ralf PETRY</td> <td>02/24/2012</td> </tr> <tr> <td>Stefan TEWS</td> <td>02/24/2012</td> </tr> <tr> <td>Tim VOSGROENE</td> <td>02/24/2012</td> </tr> </tbody> </table>		Name	Execution Date	Holger WINKLER	02/24/2012	Andreas BENKER	02/24/2012	Martina HUEBER	02/24/2012	Monika KURSAWE	02/24/2012	Ralf PETRY	02/24/2012	Stefan TEWS	02/24/2012	Tim VOSGROENE	02/24/2012
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<table border="1"> <tr> <td>Name:</td> <td>MERCK PATENT GESELLSCHAFT MIT BESCHRANKTER HAFTUNG</td> </tr> <tr> <td>Street Address:</td> <td>FRANKFURTER STRASSE 250</td> </tr> <tr> <td>City:</td> <td>DARMSTADT</td> </tr> <tr> <td>State/Country:</td> <td>GERMANY</td> </tr> <tr> <td>Postal Code:</td> <td>64293</td> </tr> </table>		Name:	MERCK PATENT GESELLSCHAFT MIT BESCHRANKTER HAFTUNG	Street Address:	FRANKFURTER STRASSE 250	City:	DARMSTADT	State/Country:	GERMANY	Postal Code:	64293						
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CORRESPONDENCE DATA																	
Fax Number:	(703)243-6410																
Phone:	703-243-6333																
Email:	mail@mwzb.com																
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.																	
Correspondent Name:	Millen, White, Zelano & Branigan - AMB																
Address Line 1:	2200 Clarendon Blvd.																
Address Line 2:	Suite 1400																
Address Line 4:	Arlington, VIRGINIA 22201																

OP \$40.00 13501570

ATTORNEY DOCKET NUMBER:	MERCK-3944
NAME OF SUBMITTER:	Richard J. Traverso
Total Attachments: 1 source=ASSIGNMENT#page1.tif	

ASSIGNMENT

ATTY. DOCKET NO.

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement(s) relating to

PHOSPHOR MIXTURES COMPRISING EUROPIUM--DOPED ORTHO-SILICATES

and for which one or more of the following apply:

- ☐ U.S. Provisional Application Serial No. was filed in the United States Patent and Trademark Office on
- ☒ A U.S. Non-Provisional
- ☐ application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.
- ☐ Application Serial No. for Letters Patent was filed in the U.S. Patent and Trademark Office on
- ☒ as International Application No. was filed on 10.09.2010 designating the United States.

PCT/EP2010/005570

AND WHEREAS

MERCK PATENT GESELLSCHAFT
MIT BESCHRÄNKTER HAFTUNG
Darmstadt, Germany

hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and all application(s) listed above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.

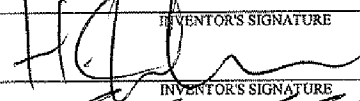

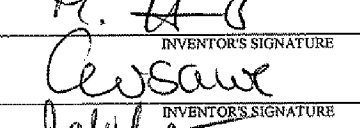
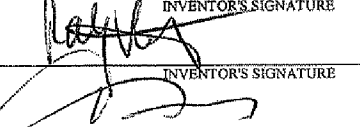
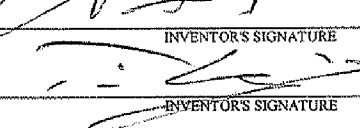
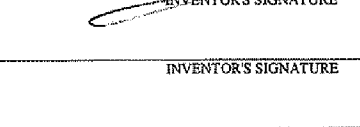
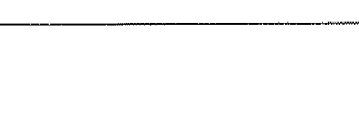
NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application(s), including 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 application, 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 Patent when granted, 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.

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 filing said applications and securing Letters Patents thereon.

AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and 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

201 FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
WINKLER, Holger		24.02.2012
202 FULL NAME OF SECOND JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
BENKER, Andreas		24.02.2012
203 FULL NAME OF THIRD JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
HUEBER, Martina		24.02.2012
204 FULL NAME OF FOURTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
KURSAWE, Monika		24.02.2012
205 FULL NAME OF FIFTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
PETRY, Ralf		24.02.2012
206 FULL NAME OF SIXTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
TEWS, Stefan		24.02.2012
207 FULL NAME OF SEVENTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
VOSGROENE, Tim		24.02.2012
208 FULL NAME OF EIGHTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
		24.02.2012
209 FULL NAME OF NINTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE

PATENT

RECORDED: 04/12/2012

REEL: 028035 FRAME: 0319