A / 3 58 : -40 For PTO-1595 (Rev. 08/05) U.S. DEPARTMENT OF COMMERCE OMB No. 0651-0027 (exp. 6/30/2008) States Patent and Trademark Office 03-06-2006 RF **IEET** 1)2.24.06 103190271 To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): HECKMEIER, Michael Name: Merck Patent GmbH GOETZ, Achim CZANTA, Markus **Internal Address:** PATRICK, John **FARRAND**, Louise Diane Additional name(s) of conveying party(ies) attached?

Yes

No 3. Nature of Conveyance/Execution Date(s): **Street Address:** Execution Date(s): 01/05/2006 ■ Assignment Merger City: Darmstadt Security Agreement ☐ Change of Name State: ☐ Joint Research Agreement Country: Germany Zip:64271 ☐ Government Interest Assignment Executive Order 9424, Confirmatory License Additional names(s) or address(es) attached?

Yes

No Other 4. Application or patent number(s): This document is being filed together with a new application. B. Patent No.(s) A. Patent Application No.(s) 03/01/20 GFREY1 00000076 10569460 Additional numbers attached? Yes No 05 FJ:80 40.00 N 5. Name and address to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: 7. Total fee (37CFR 1.21(h) AND 3.41) Authorized to be charged by credit card MILLEN, WHITE, ZELANO Name: Authorized to be charged to deposit account & BRANIGAN, P.C. Enclosed Address: Arlington Court Plaza I None required (government interest not affecting title) **Suite 1400** 8. Payment Information **Credit Card** 2200 Clarendon BLVD. Last 4 Numbers Arlington, VA 22201 **Expiration Date** Phone: (703) 243-6333 b) **Deposit Account Number 13-3402** Fax: (703) 243-6410 **Authorized User Name** E-Mail: mail@mwzb.com 9. Signature. February 24, 2006 Signature Anthony J. Zelano Name of Person Signing Total number of pages including cover

> Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Attorney Docket No. MERCK-3142

PATENT

sheet, attachments, and documents 3

REEL: 017628 FRAME: 0512

API2 Reals

2006

RECORDATION FORM COVER SHEET

MERCK-3142 Page 2 February 24, 2006

1. Name of conveying party(ies):
SCHOTT, Cecile
MONTENEGRO, Elvira
KIRSCH, Peer

PATENT

REEL: 017628 FRAME: 0513

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 LIQUID CRYSTALLINE MEDIUM

for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.

for which U.S. Application Serial No. for Letters Patent was filed in the U.S. Patent and Trademark Office on

for which an International Application was filed on 03.08.2004 as PCT/EP2004/008678 , designating the United States.

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 application(s), 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, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, 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 any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR

201 FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
HECKMEIER, Michael	Micheil Heclinen	05.01.06
202 FULL NAME OF SECOND JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
GOETZ, Achim	1 Sin 1	05.01.06
203 FULL NAME OF THIRD JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
CZANTA, Markus	Czzh	PS-01.06
204 FULL NAME OF FOURTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
PATRICK, John	fatruk	05.01-06
205 FULL NAME OF FIFTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
FARRAND, Louise Diane	Murca	05.01.06
206 FULL NAME OF SIXTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
SCHOTT, Cecile	The state of the s	05.01.06
207 FULL NAME OF SEVENTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
MONTENEGRO, Elvira	The bothy or	05.01.06
208 FULL NAME OF EIGHTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
KIRSCH, Peer	1-1-V	05-01.06
209 FULL NAME OF NINTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
210 FULL NAME OF TENTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE

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RECORDED: 02/24/2006