IN THE UN



**EMARK OFFICE** HEET

100872393

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  Detlef PAULUTH Joachim KRAUSE Guenter GAUGLITZ Bernd DRAPP  No additional names attached   3. Nature of Conveyance:  □ assignment □ merger □ security agreement □ change of name □ other	2. Name and address of receiving party(ies):  MERCK PATENT GESELLSCHAFT MIT BESCHRANKTER HAFTUNG 64271 Darmstadt GERMANY  No additional names(s) or address(es) attached		
EXECUTION DATE: September 11, 1998			
4. Application number(s) or patent number(s): THIS DOCUMENT IS NOT BEING FILED WIT	TH A NEW APPLICATION.		
A. Patent Application Number(s)  √∫ 09/122,884	B. Patent Number(s)		
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: MILLEN, WHITE, ZELANO & BRANIGAN, P.C.  Address: Arlington Court Plaza I Suite 1400 2200 Clarendon Blvd. Arlington, VA 22201	6. Total number of applications and patents involved: - 1 - 7. Total fee (37 C.F.R. §3.41) \$40.00  ☑ Check enclosed ☑ Charge any deficiencies in the payment of fees associated with this communication or credit any overpayment to 8. DEPOSIT ACCOUNT NO. 13-3402		
DO NOT USE THIS SPACE			
John A. Sopp (Reg. #33,103) Attorney for Applicant(s)  Signature  Total number of pages including cover sheet, at	Date    Sample   Oracle   Orac		
♦ Attorney Docket #MERCK 1913	— <b>86</b>		

**SPATENT REEL: 9554 FRAME: 0804** 

## ASSIGNMENT

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 relating to

## OPTICAL TRANSDUCERS BASED ON LIQUID CRYSTALLINE PHASES

date.	for Letters Patent to be filed in th	e United States Patent and Trade	mark Offi	ice was executed on even
	on Serial No09/122,884	for Letters Patent was filed in the	U.S. Pate	nt and Trademark Office
☐ for which an Internation United States.	al Application was filed on	PCT/	1	, designating the
AND WHEREAS	MERCK PATENT GESE 64271 Darmstadt, GERMA	LLSCHAFT MIT BESCHRAN NY	KTER H	AFTUNG

hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions, continuations and provisionals 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, including any and all divisions, continuations and provisionals 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 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, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions, continuations and provisionals 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, continuations and provisionals 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
Detlef PAULUTH	Odle Pete	11.09.1998
202 FULL NAME OF SECOND JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
Joachim KRAUSE	Jeachun Warse	11.09.1998
203 FULL NAME OF THIRD JOINT INVENTOR, IF ANY	inventor's signature (,)	DATE
Günter GAUGLITZ	Conter James	11.09.1998
204 FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE &	DATE
Bernd DRAPP	Celord Archalls	11.09.1998
205 FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
206 FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
207 FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
208 FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
210 FULL NAME OF TENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
212 FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE

PATENT RECORDED: 10/30/1998 REEL: 9554 FRAME: 0805