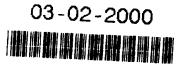
PORM PTO-1595 (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94)



U.S. DEPARTMENT OF COMMERC'E Patent and Trademark Office

101279331

To the Honorable Commissioner of Patents and Tradema	rks: Please record the attached original documents or copy thereof.			
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):			
Martin Blumenfeld Joseph J. Talghader Mark A. Sanders	Name: Regents of the University of Managements			
Additional name(s) of conveying party(ies) attached?Yes X N	Street Address: 600 Gateway, 200 Oak Street SE			
3. Nature of conveyance:	AM II:			
X Assignment _ Merger	City: Minneapolis State: MN ZIP: 55455			
Security Agreement Change of Name Other	City: Minneapolis State: MN ZIP: 55455			
Execution Date: January 25, 2000; January 27, 2000; a January 25, 2000, respectively	Additional name(s) & address(es) attached?Yes _X_No			
4. Application number(s) or patent number(s):				
If this document is being filed together with a new ap	oplication, the execution date of the application is:			
A. Patent Application No(s). 09/434,027	B. Patent No(s).			
Additional numbers attached?Yes _X_ No 5. Name and address of party to whom correspondence				
concerning document should be mailed:	••			
Name: Ann M. Mueting Address: MUETING, RAASCH & GEBHARDT, P.A	7. Total fee (37 CFR §3.41): \$_40.00_			
P.O. Box 581415 Minneapolis, MN 55458-1415	X Enclosed Authorized to be charged to deposit account			
3/02/2000 BCDATES 00000060 01434027	8. Please charge any additional fees or credit any overpayments to Deposit account number: 13-4895			
FC:561 40.00 0P	OT USE THIS SPACE			
Done	OT USE THIS STACE			
9. Statement and signature.				
To the best of my knowledge and belief, the foregoing information true copy of the original document. Ann M. Mueting/Reg.#33,977 Name of Person Signing Signature	Tebruary 3, 2000 Tebruary 3, 2000 Date			
Total number of pages including c	over sheet, attachments, and document(s): 3			

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks

Box Assignments

Washington, D.C. 20231

ASSIGNMENT

Whereas We, Martin Blumenfeld, Joseph J. Talghader, and Mark A. Sanders, with residences and citizenships as indicated below; have made an invention in

DIRECT MAPPING OF DNA CHIPS TO DETECTOR ARRAYS

Filed: November 4, 1999 Serial No.: 09/434,027

and executed an application for Letters Patent of the United States of America based thereon;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto Regents of the University of Minnesota ("Company"), a non-profit organization organized and existing under the laws of the State of Minnesota, having its principal office at 600 Gateway, 200 Oak Street SE, Minneapolis, MN 55455, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any continued prosecution application, divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to <u>Regents of the University of Minnesota</u> as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

Pare Bluege
Name: Martin Blumenfeld
Address: 3701 Washburn Avenue South, Minneapolis, MN 55410
Citizenship: USA
STATE OF 10 10 10 10 10 10 10 10 10 10 10 10 10
On this 25 day of 2000 before me personally appeared Martin Blumenfeld to me known to be the person described in and who executed the foregoing instrument, and he executed the same for the uses and purposes therein set forth.
Motary Public



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J.> MB

For: DIRECT MAPPING OF DNA CHIPS TO DETECTOR ARRAYS

Joseph J. Talghader 10497 Audubon Court, Eden Prairie, MN 55347 Address: Citizenship: **USA** STATE OF MINNESOTA COUNTY OF ANOKA day of January 2000 before me personally appeared Joseph J. Talghader to me known to be the person described in and who executed the foregoing instrument, and he executed the same for the uses and purposes therein set forth. BONITA P. BARTHOLOMEW NOTARY PUBLIC - MINNESOTA **ANOKA COUNTY** My Commission Expires 01/31/2000 Name: 1031 27th Avenue SE, Minneapolis, MN 55414 Address: Citizenship: STATE OF MA COUNTY OF Romasey On this 25 day of 2000 before me personally appeared Mark A. Sanders to me known to be the person described in and who executed the foregoing instrument, and he executed the same for the uses and purposes therein set forth.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Serial No.:

M. Blumenfeld et al.

09/434,027

Group Art Unit: 2877

Examiner: Not Assigned

Filed: I	November 4, 1999		Dock	Docket No.: 110.01230101			
Title: I	DIRECT MAPPING OF DNA CHIPS TO DETECTOR ARRAYS						
Commissioner of I Box Assignments Washington, D.C.	Patents and Tradema	arks					
We are transmittin	g the following doc	uments along with t	his Transmittal Sho	eet (which is submi	tted in triplicate):		
statement X A return p A Petition An Inform X A check i A certifie under 35	n for Extension of T mation Disclosure St n the amount of \$40 d copy of a _ application U.S.C. \$119. In executed Assignment	itted. ime for month(s) tatement (pgs), 1 0.00 , representing a cation, Serial No,	and a check in the 449 forms (pgs) Assignment Record filed, the Recordation Cover	amount of \$ for t); and copies of lation fee e right of priority of sheet (3 pp.)	he required fee cited documents. f which is claimed		
	Fee Calcu	llation for Claims	Pending After An	nendment			
	Pending Claims after Amendment (1)	Claims Paid for Earlier (2)	Number of Additional Claims (1-2)	Cost per Additional Claim	Additional Fees Required		
Total Claims				x \$9 =			
Independent Claims				x \$39 =			
One or M	ore New Multiple I	Dependent Claims P	resented? If Yes,	Add \$130 Here →			
Total Additional Claim Fees Required							
these papers and Triplicate copies of CERTIFICATE I paper(s), as describenvelope addressed this _3rd_day of I MUETING, RAAS	nis a PETITION For please charge any sof this sheet are encured to: Commissioner February, 2000. SCH & GEBHARD Minneapolis, MN 5	additional fees or oclosed. §1.8: The undersigned being deposited in for Patents and Tract. T. P.A.	ned hereby certifies the United States I ademarks, Box Ass By: 1220) Nam Reg. Direct	that this Transmitt Postal Service, as fi ignments, Washing W. Washing e: Ann M. Mueting No.: 33,977 et Dial: 612-305-12	al Letter and the rst class mail, in an ton, D.C. 20231, or		
	/CB#ATT	ENITETY TO ANICA		mile: 612-305-1228	8		

(SMALL ENTITY TRANSMITTAL UNDER RULE 1.8)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECORDED: 02/07/2000

Group Art Unit: 2877

Applicant(s):	M. Blumenfeld et al.		Group	Group Art Unit: 2877		
Serial No.:	09/434,027		Exam	Examiner: Not Assigned		
Filed:	November 4, 1999		Dock	et No.: 110.01230	101	
Title:	DIRECT MAPPING	G OF DNA CHIPS T	TO DETECTOR A	RRAYS		
Box Assignment Washington, D.C We are transmitti X Small er statement X A return A Petititi An Info X A check A certifity under 33		uments along with to dication under 37 Control inted. ime for month(s) tatement (pgs), 1 0.00_, representing A cation, Serial No,	Assignment Record	7 habeen establish amount of \$ for t ; and copies of ation fee e right of priority of	ed by verified the required feecited documents.	
Amend		No Additional fee is			alculated as shown:	
	Fee Calcu	ulation for Claims	Pending After Am	endment		
	Pending Claims after Amendment (1)	Claims Paid for Earlier (2)	Number of Additional Claims (1-2)	Cost per Additional Claim	Additional Fees Required	
Total Claims				x \$9 =		
Independent Claims				x \$39 =		
One or l	More New Multiple I	Dependent Claims P	resented? If Yes, A	Add \$130 Here →		
Total Additional Claim Fees Required						
these papers and Triplicate copies <u>CERTIFICATE</u> paper(s), as descri	this a PETITION For a please charge any so of this sheet are en a cunder and the	additional fees or c closed. <u>§1.8</u> : The undersign be being deposited in	redit overpaymented hereby certifies the United States P	that this Transmitt Postal Service, as fi	unt No. 13-4895.	

(SMALL ENTITY TRANSMITTAL UNDER RULE 1.8)