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(ReQMB39651-0027			U.S. Patent	and Trademark Office	
OMB No. 0651-0027 (exp. 5/31/2002) _ 1010			_	<u> </u>	
Tab settings			ched original documents o	r conv thereof	
1. Name of conveying party(ies): To: The Commissioner of Patents and Trademarks	ΠΟΝ	FORM COVE	RSHEET	tu(ios)	
1. Name of conveying party(les).	'AT	ENTS ONLY	gia Tech Pesearch Cor	ty(les)	
				ent(s) or copy(ies).	
Submission of C	Conv	eyance Type	ess:		
James D. Heindi New	1 1	Assignment	Security Agreer	nent	
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3. Natthe unent lefance:	╜╷	Licerise	Change of Name	e - /	
Correction of PTO Error Assignment Reel # Frame #		Merger Stroot Addre	Other 05 Tenth Street 50.S. Government		
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Conveying Party(les/)2001		Mark if additional na	mes of conveying parties	attached Execution Dec	····
06/07/2001	<u>'</u>	City: Atlant	aState:_GA	attached Zip: 3033 Execution Date Zip: 30 Month Day	ar
Execution Date:		Additional name	(s) & address(es) attached	Yes 🗸 No	
Name (line 2) 4. Application number(s) or patent number(s): Second Party				Execution Date Month Day Ye	
Nambiging nument is being filed together with a new	applic	cation, the execut	ion date of the applica	ation is:	ai
A. Patent Application No.(s) 09/848,935		B. Patent No	.(s)		
Name (line 2)			. ,		
Receiving Party Additional numb	oers atta	ached?	if additional names of re	ceiving parties attached	
5.Namadland)address of party to whom corresponde	nce	6. Total number	of applications and pa	tents involved in a signment and	orded:
concerning document should be mailed:			CFR 3.41)\$	40.0 receiving party is not domiciled in the United	t ed
Name (lin q२)yan A. Schneider Name:		,		States, an appoint ne	
Address (line 1) Troutman Sanders LLP Internal Address:	_	✓ Enclosed	(Paid 07/09/200	/1 / representative is a tag	
Address (line 2)		Authorize	ed to be charged to de	(Designation must be Posit apparate documen fr	
				Assignment.)	
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Domestig Representative Name and Add	lress				m
		20-1 507 101	the first Receiving Party o	only.	
SuiteNa ନିଥିତ 					
Additys (nine 1) State: GA Zip: 30308-2216					
Address (line 2) DO NOT	r USE	THIS SPACE			
9. Signature.					
Address (line 3)	1	101			
Address (line 4)	hand	\$ \$\!\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	اسرا		
Ryan A. Schneider	ntalm.	WIYW		IAN O'V	
Name of Person Signing FOR	₹ OFF	ICE USE UNLY		Date	
Total number of pages includin					
	tents & 1	i required cover sheet i Trademarks, Box Assigni i, D.C. 20231			

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD A PORT OF THIS ADDRESS.

REEL: 012591 FRAME: 0058

Form PTO-1595 (Rev. 03/01)	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
OMB No. 0651-0027 (exp. 5/31/2002)	
Tab settings ⇔ ⇔ ▼	
To the Honorable Commissioner of Patents and Trademarks:	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies):	Name and address of receiving party(ies)
7-1201	Name Georgia Tech Research Corp.
Thomas K. Gaylord Elias N. Glytis James D. Meindl	Internal Address:
Additional name(s) of conveying party(ies) attached? 📮 Yes 📮 No	
3. Nature of conveyance:	
Assignment 🖳 Merger	FOF W. 11 G.
	Street Address: 505 Tenth Street
Security Agreement 🕌 Change of Name	
Other	
	City: Atlanta State: GA Zip: 30332
Execution Date: June 7, 2001	Additional name(s) & address(es) attached? 📮 Yes 👊 No
Application number(s) or patent number(s):	
If this document is being filed together with a new appli	cation, the execution date of the application is:
	B. Patent No.(s)
A. Patent Application No.(s)	B. Fatom resign
09/848,935 Additional numbers att	rached? 📮 Yes 🔼 No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Todd Deveau	7. Total fee (37 CFR 3.41)\$_40.00
	K Enclosed
internal Address: Troutman Sanders LLP	
	Authorized to be charged to deposit account
	8 Deposit account number: 20-1507
	8. Deposit account number: 20–1507
Street Address: 600 Peachtree St, N.E.	
Suite 5200	
City: Atlanta State: GA Zip: 30308	(Attach duplicate copy of this page if paying by deposit account)
	THIS SPACE
9. Statement and signature.	J
To the best of my knowledge and belief, the foregoing is a true copy of the original document.	information is true and correct and any attached copy
Roger S. Williams Roger S. Williams	7-9-2001
Name of Person Signing	Signature Date
	er sheet, attachments, and documents:
	h required cover sheet information to:

01 FC:581

Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

ASSIGNMENT

WHEREAS, we, Thomas K. Gaylord, Elias N. Glytsis, and James D. Meindl have invented certain improvements in PHASE MASK CONSISTING OF AN ARRAY OF MULTIPLE DIFFRACTIVE ELEMENTS FOR SIMULTANEOUS ACCURATE FABRICATION OF LARGE ARRAYS OF OPTICAL COUPLERS AND METHOD FOR MAKING SAME for which a patent application was filed on May 3, 2001 in the United States Patent and Trademark Office and accorded Serial No. 09/848,935 and whereas

GEORGIA TECH RESEARCH CORPORATION 400 Tenth Street Atlanta, Georgia 30332

desires to purchase the same;

(SEAL)

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable considerations paid by the said

GEORGIA TECH RESEARCH CORPORATION

the receipt and sufficiency of which are hereby acknowledged, we have and by these presents do hereby sell, assign, transfer and convey unto the said

GEORGIA TECH RESEARCH CORPORATION

in and for the United States and its territories and for foreign countries, the entire right, title and interest in and to said application and any other intellectual property claiming priority thereto, in and to the inventions therein set forth, and in and to any other U.S., International and/or Foreign patent or other intellectual property now known or in the future that may issue on or claim priority to said application, and/or any conventional, division, continuation, continuation-in-part, reissue, renewal, reexam, continued prosecution application ("CPA"), or Request for Continued Examination ("RCE") thereof; and we hereby bind ourselves, our heirs, legal representatives, administrators and assigns properly to execute without further consideration, any and all applications, petitions, oaths and assignments or other papers and instruments that may be necessary in order to carry into full force and effect the sale, assignment, transfer and conveyance hereby made or intended to be made.

IN WITNESS WHEREOF, I have no	ereunto set my hand and seal this day of
Jane , 2001.	Thomas & Saylord (SEAL)
State of (heary &)	Thomas K. Gaylord June 7, 2001 (SEAL)
	Date
County of Dekali-	
On this $)$ day of $)$ $(2001, 2001$	before me, a notary public, came to me known and
known to be the individual described in and	who executed the foregoing assignment, and he duly
acknowledged the same to be his free act and	d deed.
	Cramin a tout
	NOTARY PUBLIC

My Commission Expires: (1 3 3 4)

Assignment Docket No.: GTRC80

IN WITNESS WHEREOF, I have he	ereunto set my hand and seal this day of
, 2001.	Peliopophia (SEAL)
	Elias N. Glytis
State of (Cor) (Lamber)	June 7, 2001
	Date
County of Dellace	
	before me, a notary public, came to me known and
	who executed the foregoing assignment, and he duly
acknowledged the same to be his free act an	d deed.
	Granus 3 ten
	NOTARY PUBLIC
(SEAL)	My Commission Expires:
(====)	
IN WITNESS WHEREOF, I have he	ereunto set my hand and seal this day of
June 14, 2001.	James Mende (SEAL)
	James D. Meindl
State of (ev_{2}, \sim)	June 14, 2001
	Date
County of Dellings	
On this $\frac{14th}{}$ day of $\frac{\text{June}}{}$, 2001,	before me, a notary public, came to me known and
	who executed the foregoing assignment, and he duly
acknowledged the same to be his free act an	d deed. The Min Con
	NOTARY PUBLIC Catherine D. Marks
(SEAL)	My Commission Expires: June 7, 2005

Approved for use through 09/30/2000. OBM 0651-0031 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/848,935
Filing Date	May 3, 2001
First Named Inventor	GAYLORD, T., et al.
Group Art Unit	2874
Examiner Name	Unassigned
Attamari Dagleat Niverban	CTDC90

		ENCLO	SURES (check	all that a	oply)	
Fee Transmittal F Fee Attache Amendment/Resp	ed	(for an Drawin Licensi	ng-related Papers	D/SB/60)		After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group
After Final Affidavits/o Extension of Time Express Abandon Information Discl	ment Request	Petition Routing Slip (PTC and Accompanying Petition Petition to Convert to a Provisional Application Power of Attorney or Auth of Agent Terminal Disclaimer Small Entity Statement Request for Refund		Petition to a tion or Authorization		(Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Additional Enclosure(s) (please identify below): Return Postcard
Certified Copy of Document(s) Response to Missi Incomplete Applie Response to Parts under § 1.52 or 1.5	ng Parts/ cation • Missing 37 C.F.R	Remarks				
_			APPLICANT, A	TTORNE	Y, OI	RAGENT
Firm or Individual name Signature Date 7	er S. Williams,		3			
		CEF	RTIFICATE OF	MAILING	G	
I hereby certify that thi envelope addressed to: 0 date:	s correspondence Commissioner for	is being deposit Patents, Box As	ed with the United signment, Washing	States Poston, D.C. 20	tal Set 0231 o	vice as First Class mail in an in this
Typed or printed name						
Signature	Rose LE			Date	7-	9-2001

Burden Hour Statement. This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision

TOTAL AMOUNT OF PAYMENT

(\$)40.00

Complete if Known			
Application Number	09/848,935		
Filing Date	May 3, 2001		
First Named Inventor	GAYLORD, T., et al.		
Examiner Name	Not Assigned		
Group Art Unit	2874		
Attorney Docket No.	GTRC80		

METHOD OF PAYMENT	FEE CALCULATION (continued)					
The Commissioner is hereby authorized to charge	3. AE	DITION	AL FI	EES		
indicated fees and credit any over payments to:		Large Entity		Small Entity		
Deposit Account 20-1507	Fee	Fee	Fee	Fee	Fee Description	Fee Paid
Number	Code	(\$) 130	Code 205	(\$) 65	Surcharge - late filing fee or oath	
Deposit TROUTHAN CANDEDOLL D	105				5	
Account Name TROUTMAN SANDERS LLP	127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
Ivaille	139	130	139	130	Non-English specification	
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	147	2,520	147	2,520	For filing a request for ex parte reexamination	
Applicant Claims small entity status. See 37 CFR 1.27	112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
2. Payment Enclosed:	113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
Check Credit card Money Other	115	110	215	55	Extension for reply within first month	
Order	116	390	216	195	Extension for reply within second month	
FEE CALCULATION	117	890	217	445	Extension for reply within third month	
1. BASIC FILING FEE Large Entity Small Fee Entity	118	1,390	218	695	Extension for reply within fourth month	
Fee Fee Code Fee Fee Description	128	1,890	228	945	Extension for reply within fifth month	
Code (\$) (\$) Fee Paid	119	310	219	155	Notice of Appeal	
101 710 201 355 Utility filing fee 106 320 206 180 Design filing fee	120	310	220	155	Filing a brief in support of an appeal	
107 490 207 245 Plant filing fee	121	270	221	135	Request for oral hearing	
108 710 208 355 Reissue filing fee 114 150 214 75 Provisional filing fee	138	1,510	138	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$)	140	110	240	55	Petition to revive - unavoidable	
2. EXTRA CLAIM FEES	141	1,240	241	620	Petition to revive - unintentional	
Fee from	142	1,240	242	620	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	143	440	243	220	Design issue fee	
Total Claims - 20** = X \$ = \$	144	600	244	300	Plant issue fee	
Independent 3** = X \$ = \$	122	130	122	130	Petitions to the Commissioner	
Claims Multiple Dependent =	123	50	123	50	Processing fee under 37 CFR 1.17(q)	
	126	180	126	240	Submission of Information Disclosure Stmt	
Large Entity Small Entity Fee Fee Fee Fee Fee Fee Description Code (\$) Code (\$)	581	40	581	40	Recording each patent assignment per property (times number of properties)	40.
103 18 203 9 Claims in excess of 20	146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))	
102 80 202 40 Independent claims in excess of 3 104 270 204 135 Multiple dependent claim, if not paid	149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))	
109 80 209 40 ** Reissue independent claims over	179	710	279	355	Request for Continued Examination (RCE)	
original patent 110 18 210 9 ** Reissue claims in excess of 20 and	169	900	169	900	Request for expedited examination of a design application	
over original patent	Other fee (specify)					
SUBTOTAL (2) (\$)	1	ed by Basic	Filing F	ee Paid	SUBTOTAL (3) (\$)	40.
**or number previously paid, if greater; For Reissues, see above	1.6000	0, 00310			(4)	

SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Roger S. Williams	Registration. No. (Attorney/Agent)		Telephone	404-885-3582
Signature	Rugh	•		Date	7-9-200)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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Customer No. 006980 Docket No.: GTRC80

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of)
GAYLORD, T., et al.) Art Unit: 2874
Serial No.: 09/848,935) Examiner: Unknown
Filed: 3 May 2001)
For: Phase Mask Consisting of an Array of Multiple Diffractive Elements)))

REQUEST FOR CORRECTED NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

BOX: ASSIGNMENTS
Honorable Commissioner of
Patents
Assignment Division, CG4
1213 Jefferson Davis Hwy, Suite 320
Washington, D.C. 20231

Atlanta, Georgia 30308-2216

Dear Sir:

The Notice of Recordation of Assignment Document dated 20 September 2001 has been received and reviewed. The Assignment Recordation Cover Sheet submitted on 9 July 2001 misspelled one of the conveying parties' name as Elias N. Glytis. The correct spelling is Elias N. Glytsis.

Applicant encloses a new Assignment Recordation Cover Sheet, the Notice of Recordation of Assignment Document dated 20 September, 2001, the original assignment recordation cover sheet, and the original assignment with transmittal forms.

Applicant respectfully requests a corrected Notice of Recordation of Assignment Document.

Applicant believes no fee is due; however, the Commissioner is hereby authorized to charge

any additional fees and credit any overpayment to PTO Account 20-1507.

spectfully submitted,

Registration No. 45,083

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Honorable Commissioner of Patents, Box: Assignments, Assignment Division, CG-4

1213 Jefferson Davis Hwy, Suite 320 Washington, D.C. 20231 on **January 15, 2002**

Name of Applicant Assignee, or

Registered Representative

Signature

Troutman Sanders

Bank of America Plaza, Suite 5200

600 Peachtree Street, N.E.

Atlanta, Georgia 30308-2216

404.885.2773

786858

Approved for use through 10/31/2002. OBM 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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10

TRANSMITTAL
FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number 09/848,935

Filing Date 3 May 2001

First Named Inventor Gaylord, T., et al.

Group Art Unit 2874

Examiner Name Unknown

Attorney Docket Number GTRC80

ENCLOSURES (check all that apply)				
Fee Transmittal Form Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement	Assignment Papers Drawing(s) Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Address Terminal Disclaimer Request for Refund CD, Number of CD(s)	After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below): Return Postcard; Request for Corrected Notice of Recordation of Assignment Document		
Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53	Remarks:			
	TRE OF APPLICANT, ATTORNEY, O	R AGENT		
Firm or Individual name Signature Ryan A. Schneider, Reg. No. 45,083 Date Ryan A. Schneider, Reg. No. 45,083				
CERTIFICATE OF MAILING				
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as				
first class mail in an envelope addressed to: Commissioner for Patents, Assignment Division, 1213 Jefferson Davis Hwy., Suite 320, Washington, D.C. 20231 on this date:				
Typed or printed name Virginia Hamilton				
Signature Virginia Hamilton Date Danuary 15, 2002				

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UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

SEPTEMBER 20, 2001

PTAS

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TROUTMAN SANDERS LLP TODD DEVEAU 600 PEACHTREE ST, N.E. SUITE 5200 ATLANTA, GA 30308

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/12/2001

REEL/FRAME: 011976/0111

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GAYLORD, THOMAS K.

DOC DATE: 06/07/2001

ASSIGNOR:

GLYTIS, ELIAS N.

DOC DATE: 06/07/2001

ASSIGNOR:

MEINDL, JAMES D.

DOC DATE: 06/07/2001

ASSIGNEE:

GEORGIA TECH RESEARCH CORP. 505 TENTH STREET

ATLANTA, GEORGIA 30332

SERIAL NUMBER: 09848935

PATENT NUMBER:

FILING DATE: 05/03/2001

ISSUE DATE:

SEP 2 2001

JOANN STEWART, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

RECORDED: 01/15/2002