



To the Honorable Commissioner of P

102038189

il documents or copy thereof.

1. Name of conveying part(ies):

Tony Mule'
James D. Meindl
Thomas K. Gaylord
Elias N. Glytsis
Paul Kohl

3.14.02

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: Georgia Tech Research Corporation
Street Address: 505 Tenth Street, N.W.
Atlanta, GA 30332

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other:

Execution Date: February 18, 2002

OFFICE OF PUBLIC RECORDS
2002 MAR 14 AM 9:49
FINANCE SECTION

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent application No.(s)

B. Patent No.(s)

10/074,067Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Scott A. Horstemeyer
Thomas, Kayden, Horstemeyer & Risley, L.L.P.
100 Galleria Parkway, Suite 1750
Atlanta, Georgia 30339-5948

6. Total number of applications/patents involved: [1]

7. Total fee (37 CFR 3.41) \$ 40.00

- ☐ Enclosed
☒ Authorization to charge credit card (attached)

8. Deposit Account Number:

20-0778

(Attach duplicate copy of this page if paying by Deposit Account)

03/29/2002 LMUELLER 00000112 10074067

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Scott A. Horstemeyer

Typed Name

Signature

03/06/02

Date

Docket #: 62004-1970

Total number of pages including cover sheet, attachments, and document: [8]

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents and Trademarks, Box Assignments
Washington, D.C. 20231

**ASSIGNMENT
OF UTILITY PATENT APPLICATION**

WHEREAS, the following parties:

<u>Name</u>	<u>Address</u>
Tony Mule'	791 Atlantic Drive, NW, MC 0269, Atlanta, GA 30332
James D. Meindl	1046 Woodruff Plantation, Marietta, GA 30067
Thomas K. Gaylord	3180 Verdun Drive, NW, 30305
Elias N. Glytsis	1985 Poppleford Lane, Dunwoody, GA 30338
Paul Kohl	130 Cameron Glen Drive, Atlanta, Georgia 30328

hereinafter referred to as ASSIGNOR, has/have invented certain new and useful improvements ("invention(s)") as described and set forth in the below-identified utility application for United States Letters Patent entitled:

**OPTICAL WAVEGUIDES WITH EMBEDDED AIR-GAP CLADDING LAYER AND
METHODS OF FABRICATION THEREOF,**

which was:

- ☐ executed on even date herewith,
- ☒ filed with the United States Patent and Trademark Office (USPTO) on February 11, 2002, and assigned Serial No. 10/074,067, and
- ☐ further described in U.S. Provisional application entitled Guided-wave Optical Interconnection Using Volume Grating Coupler and Air Gap Technologies Embedded Within A Microelectronic Package, filed with the USPTO on February 11, 2001, and assigned Serial No. 60/268,142.

Note: Only one of the first two checkboxes will be checked. The third checkbox will be checked, only if appropriate.

WHEREAS, Georgia-Tech Research Corporation, having a place of business at 505 Tenth Street, N.W., Atlanta, GA 30332-0415, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in and to said invention(s), said utility application, said provisional application, and any U.S. and foreign patents which are related to the same.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR, ASSIGNOR has sold, assigned and transferred and does hereby sell, assign and transfer unto ASSIGNEE, and ASSIGNEE'S successors and assigns, (a) the entire right, title and interest, for the United States of America, in and to said invention(s), said utility application, and

said provisional application and all the rights and privileges in any application and under any and all patents that may be granted in the U.S. for said inventions, including all corresponding provisional, continuation, continuation-in-part, divisional, reissue, and reexamination applications; and (b) the entire right, title and interest in and to said invention(s), said utility application, and said provisional application for all countries foreign to the U.S., including all rights of priority arising from them, and all the rights and privileges under any and all forms of protection, including patents, that may be granted in said countries foreign to the U.S. for them.

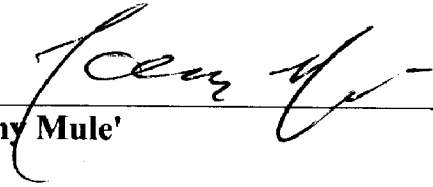
ASSIGNOR authorizes ASSIGNEE to make application for such protection in its own name and maintain such protection in any and all countries foreign to the U.S., and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from ASSIGNOR, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

ASSIGNOR hereby consents that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of ASSIGNEE to apply for patent or other form of protection for said inventions, said utility application, or said provisional application and to claim the aforesaid benefit of the right of priority.

ASSIGNOR requests that any and all patents for said inventions be issued to ASSIGNEE in the U.S. and to ASSIGNEE in all countries foreign to the U.S., or to such nominee as ASSIGNEE may designate.

ASSIGNOR covenants and agrees that, when requested, ASSIGNOR shall, without charge to ASSIGNEE but at ASSIGNEE'S expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient in connection with the patent applications, patents, or other forms of protection of said invention(s), and for the defense and protection thereof if challenged in the court of law.

ASSIGNOR authorizes ASSIGNEE or its agents to insert, on ASSIGNOR's behalf, the filing date and/or serial number above pertaining to the utility application and/or the provisional application, if not known as of the date of execution of this document.



Tony Mule'

Date: 2/18/02

United States of America

State of Georgia

County of Fulton

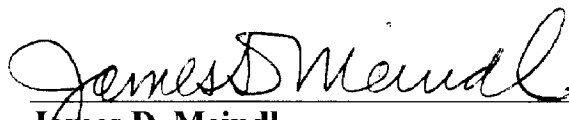
On this 18th day of February, 2002, before me personally came **Tony Mule'** to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.



Notary Public Catherine D. Marks

CATHERINE D MARKS
Notary Public, Fulton County, Georgia
My Commission Expires June 7, 2005

My Commission Expires (Date)


James D. Meindl

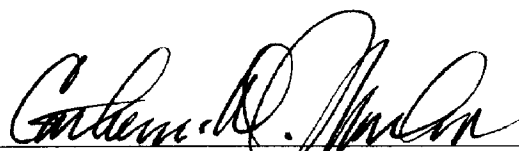
Date: February 18, 2002

United States of America

State of Georgia

County of Fulton

On this 18th day of February, 20 02, before me personally came **James D. Meindl** to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.


Notary Public, Catherine D. Marks
CATHERINE D MARKS
Notary Public, Fulton County, Georgia
My Commission Expires June 7, 2005

My Commission Expires (Date)

Thomas K Gaylord
Thomas K. Gaylord

Date: Feb. 18, 2002

United States of America

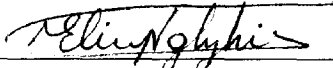
State of Georgia

County of De Kalb

G On this 18th day of February, 2002 before me personally came **Thomas K. Kaylord** to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.

Charm S. Ford
Notary Public

9-16-05
My Commission Expires (Date)



Elias N. Glytsis

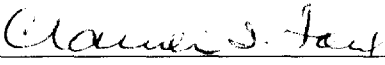
Date: Feb. 18, 2002

United States of America

State of Georgia

County of DeKalb

On this 18th day of February, 2002 before me personally came **Elias N. Glytsis** to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.



Notary Public

9-16-05

My Commission Expires (Date)



Paul Kohl

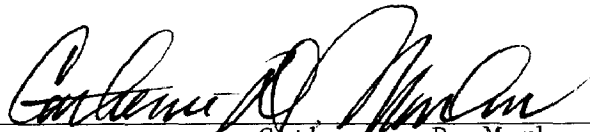
Date: 2/18/2002

United States of America

State of Georgia

County of Fulton

On this 18th day of February, 20 02 before me personally came **Paul Kohl** to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.



Notary Public Catherine D. Marks

CATHERINE D MARKS
Notary Public, Fulton County, Georgia
My Commission Expires June 7, 2005

My Commission Expires (Date)