



07-24-2003

Attorney Docket No: **LWE-157**



102504878

ER SHEET
OF PATENT

To the Hon. Commissioner of Patents and Trademarks:

Please record the enclosed copy of an assignment document. Relevant assignment data are as follows:

7.17.03

1. Assignors:

THOMAS J. KANE
1250 Altschul Avenue, Menlo Park, CA 94025

MARK A. ARBORE
171 Pepper Court, Los Altos, CA 94022

GREGORY L. KEATON
3487 18th Street, San Francisco, CA 94114

2. Assignee:

Lightwave Electronics
2400 Charleston Road
Mountain View, CA 94043

3. Execution Date of Assignment of Entire Interest in Patent Application: **July 2, 2003**

4. Execution Date of Declaration for Patent Application: **July 2, 2003**

4A. Patent Application No.: **10/386,406**

4B. Patent Number: **Not assigned**

5. Correspondence address: **Marek Alboszta**
LUMEN
2345 Yale Street, 2nd Floor
Palo Alto, CA 94306

6. Total Number of applications and Patents involved: **1**

7. Total fee (37 CFR 3.41): **\$40**

8. Statement and signature:

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

Tianhua Gu
Reg. No. 52,480

Tianhua Gu

Date: *7/15/03*
telephone: (650) 424-0100

Total number of pages including cover sheet, attachments, and document: **3**

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40.00 OF

PATENT
REEL: 014296 FRAME: 0015

ASSIGNMENT

THIS ASSIGNMENT, by

Thomas J. Kane, MARK A. ARBORE AND GREGORY L. KEATON

(hereinafter referred to as the Assignors), residing at **Menlo Park, California; Los Altos, California and San Francisco, California** respectively, witnessed:

WHEREAS, said Assignors have invented certain new and useful improvements in

L-band Optical Amplifier Based on Thulium-Doped Silica Fiber with Cut-Off.

for which application No. 10/386,406 for Letters Patent has been executed on 7/2/03,

WHEREAS,

Lightwave Electronics

(hereinafter referred to as the Assignee), a body having corporate powers under the laws of the state of **CALIFORNIA, MOUNTAIN VIEW, CALIFORNIA 94043**, is desirous of obtaining the entire right, title and interest in and to said inventions and said application for Letters Patent, and in and to any Letters Patent, United States or foreign, to be obtained therefor and thereon;

WHEREAS, said Assignors and said Assignee have executed an agreement entitled "Agreement Concerning Rights in Invention."

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and sufficient considerations, the receipt of which is hereby acknowledged:

1. The Assignors have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said Assignee, the entire right, title and interest in, to and under said inventions; said application for Letters Patent; any Letters Patent which may be granted for said inventions in the United States of America and any foreign country; any division of said application, continuation of said application, and any continuation-in-part of said application which is subject to said agreement concerning rights in invention; any reissue or extension of said Letters Patent; and all rights under the International Convention for the Protection of Industrial Property; said right, title and interest to be held and enjoyed by said Assignee for its own use and behoove to the full end of the term for which Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors, had this sale and assignment not been made.

2. Said Assignors hereby jointly and severally warrant and represent that, at the time of execution and delivery of these presents, said Assignors are the joint and lawful owners of the entire right, title and interest in and to said inventions and said application for Letters Patent, and that the same have not entered into any assignment, contract or understanding in conflict herewith.

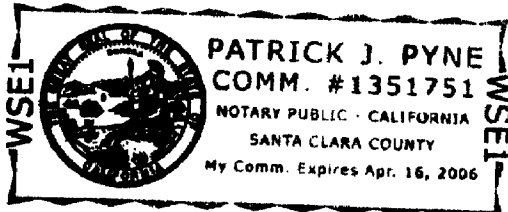
3. Said Assignors hereby jointly and severally covenant and agrees to assist and cooperate with said Assignee, whereby said Assignee may enjoy to the fullest extent said right, title and interest herein conveyed, provided, however, that the entire expense which may be incurred by said Assignors in lending such assistance and cooperation be paid by Assignee. Such cooperation shall include: (a) prompt execution of all papers (prepared at the expense of Assignee) which are deemed necessary or desirable by Assignee to perfect said right, title and interest herein conveyed, (b) prompt execution of all petitions, oaths, specifications, declarations and other papers (prepared at the expense of Assignee) which are deemed necessary or desirable by Assignee for filing or prosecuting in the United States or any foreign country said application, any application which is a division of said application, continuation of said application, or any continuation-in-part of said application which is subject to said agreement concerning rights in invention, any reissue application for any Letters Patent granted on said application, or for any interference proceeding involving said application or Letters Patent granted thereon; and (c) prompt assistance and cooperation in the prosecution of all legal proceedings involving said inventions, said application, or Letters Patent granted thereon, including oppositions, cancellation proceedings, priority contests, public use proceedings and court actions.

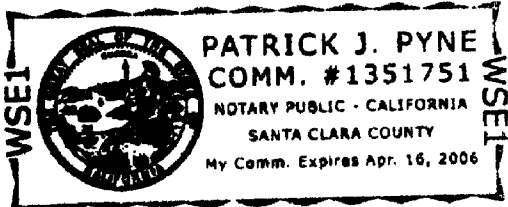
4. The terms, covenants and conditions of this Assignment shall inure to the benefit of said Assignee, its successors, assigns and/or other legal representatives, and shall be binding upon said Assignors, their heirs, legal representatives and assigns.


5. The terms, covenants and conditions of this Assignment are subject to the payment of royalty by Assignee to Assignors in accordance with the provisions of said Agreement Concerning Rights in Invention.

6. Said Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States to said Assignee as the assignee of said inventions.

IN WITNESS WHEREOF said Assignors have executed and delivered this instrument on the respective dates noted below.

Date: 7-2-03 Thomas J Kane
State: California County: Santa Clara **THOMAS J. KANE**
Subscribed and sworn to before me on this 2 day of JULY, 2003

Patrick J. Pyne
Notary Public

Date: 7-2-03 Mark A. Arbores
State: California County: Santa Clara **MARK A. ARBORE**
Subscribed and sworn to before me on this 2 day of JULY, 2003

Patrick J. Pyne
Notary Public

Date: 7-2-03 Gregory L. Keaton
State: California County: Santa Clara **GREGORY L. KEATON**
Subscribed and sworn to before me on this 2 day of JULY, 2003

Patrick J. Pyne
Notary Public