U.S. DEPARTMENT OF COMM Patent and Trademark O1801418 Prease record the attached original documents or copy thereof. Name and address of receiving party(ies): Name: Lightwave Microsystems Corporation Internal Address:
Prease record the attached original documents or copy thereof. Name and address of receiving party(ies): Name: Lightwave Microsystems Corporation Internal Address:
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Name: Lightwave Microsystems Corporation Internal Address:
Internal Address:
Street Address: 2911 Zanker Road Street Address: 2911 Zanker Road City: San Jose State/Country: California, U.S.A. ZIP: 95134 ditional name(s) & address(es) attached? [] Yes [x] OP/OF/STADO ion, the execution date of the application is:
Street Address: 2911 Zanker Road Street Address: 2911 Zanker Road City: San Jose State/Country: California, U.S.A. ZIP: 95134 ditional name(s) & address(es) attached? [] Yes [x] OP/OF/SOLOGY ion, the execution date of the application is:
Street Address: 2911 Zanker Road City: San Jose State/Country: California, U.S.A. ZIP: 95134 ditional name(s) & address(es) attached? [] Yes [x] Opposition, the execution date of the application is: 7/26/01
Street Address: 2911 Zanker Road 9 City: San Jose 2000 State/Country: California, U.S.A. ZIP: 95134 ditional name(s) & address(es) attached? [] Yes [x] Yes [x] Opposition, the execution date of the application is: 7/26/01
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Total number of applications and patents involved: [
Total fee (37 CFR 3.41)\$40.00
[X] Enclosed
[] Authorized to be charged to deposit account
Deposit account number:
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ASSIGNMENT

For good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, the undersigned

Kenneth McGreer	Peter D. Ascanio
843 Gregory Court	45315 Parkmeadow Drive
Fremont, California 94539	Fremont, California 95139
Maria Guardado	Randal E. Zugnoni
2057 Laurelei Avenue	6854 Brighton Drive
San Jose, California 95128	Dublin, California 94568

hereby sell and assign to LIGHTWAVE MICROSYSTEMS CORPORATION, a corporation of California, having a place of business at 2911 Zanker Road, San Jose, California 95134, U.S.A., its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions entitled

LIGHTWAVE CIRCUIT ASSEMBLY HAVING LOW DEFORMATION **BALANCED SANDWICH SUBSTRATE**

for which application for United States Letters Patent has been filed on under Serial No._____, or was executed by the undersigned on the date below and is being filed concurrently herewith, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignce may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignce as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful

documents including

petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with

Page 1 of 5

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A061

all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

ASSIGNMENT

Signed: Kon The Dices Date: 7/26/01

Kenneth McGreer

CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Santa Clara

On July 26, 2001

before me, Barbara S. deRuyter, Notary Public,

personally appeared Kenneth McGreer,



personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official, Signature of Notary Public

A061

PATENT

ASSIGNMENT

Signed: Peter D. ascanico Date: 7/26/01

CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Santa Clara

On July 26, 200/ before me, Barbara S. deRuyter, Notary Public,

personally appeared Peter D. Ascanio,



__personally known to me - OR - __proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

nature of Notary Public

PATENT

Assignment

Signed: Maria Buandonko Maria Guardado

Date: 26 July 2001

CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Santa Clara

On July 26, ______ before me, Barbara S. deRuyter, Notary Public,

personally appeared Maria Guardado,



personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

 \mathcal{A} Signature of Notary Public

A061

PATENT

Assignment

Date: 7/26/01 Signed: Randal E. Zugnoni

CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Santa Clara

ly 26, 00/ _____ before me, Barbara S. deRuyter, Notary Public, On 🔪

personally appeared Randal E. Zugnoni,



personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

PATENT REEL: 012033 FRAME: 0323

RECORDED: 07/26/2001