

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT						
NATURE OF CONVEYANCE:	ASSIGNMENT						
CONVEYING PARTY DATA							
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Alice Liu</td><td>12/09/2003</td></tr><tr><td>Pamela Shiell Trammel</td><td>06/26/2006</td></tr></tbody></table>	Name	Execution Date	Alice Liu	12/09/2003	Pamela Shiell Trammel	06/26/2006	
Name	Execution Date						
Alice Liu	12/09/2003						
Pamela Shiell Trammel	06/26/2006						
RECEIVING PARTY DATA							
Name:	LIGHTWAVE MICROSYSTEMS CORPORATION						
Street Address:	2911 Zanker Road						
City:	San Jose						
State/Country:	CALIFORNIA						
Postal Code:	95134						
PROPERTY NUMBERS Total: 1							
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12181905</td></tr></tbody></table>	Property Type	Number	Application Number:	12181905			
Property Type	Number						
Application Number:	12181905						
CORRESPONDENCE DATA							
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NAME OF SUBMITTER:	Gregory Turocy						
Total Attachments: 6 source=assn114a#page1.tif source=assn114a#page2.tif source=assn114a#page3.tif							

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PATENT
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ASSIGNMENT

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

Alice Liu
1561 Woodmeadow Court
San Jose, CA 95131

Pamela Shiell Trammel
1325 Cordelia Avenue
San Jose, CA 95129


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

**METHODS TO REDUCE POLARIZATION DEPENDENT LOSS IN PLANAR
LIGHTWAVE CIRCUITS**

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 assignee 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 assignee 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 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:  Date: 12/09/03
Alice Liu

CERTIFICATE OF ACKNOWLEDGMENT

State of _____

County of _____

On _____ before me, _____,
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Alice Liu.
Name(s) of Signer(s)

__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.

Signature of Notary Public

ASSIGNMENT

Signed: _____ Date: _____
Pamela Shiell Trammel

CERTIFICATE OF ACKNOWLEDGMENT

State of _____

County of _____

On _____ before me, _____,
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Pamela Shiell Trammel.
Name(s) of Signer(s)

__ 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.

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

Alice Liu
1561 Woodmeadow Court
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for which application for United States Letters Patent has been filed on February 9, 2006 under Serial No. 11/351,031, 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 assignee 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 assignee 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 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.

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Alice Liu

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County of _____

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personally appeared Alice Liu.
Name(s) of Signer(s)

____ 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.

Signature of Notary Public

ASSIGNMENT

Signed: Pamela Shiell Trammel Date: 6/26/06
Pamela Shiell Trammel

CERTIFICATE OF ACKNOWLEDGMENT

State of _____

County of _____

On _____ before me, _____,
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Pamela Shiell Trammel.
Name(s) of Signer(s)

____ 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.

Signature of Notary Public