

06-21-2000

FORM PTO-1595  
 (Rev. 6-93)  
 OMB No. 0651-0011 (exp. 4/9)



VER SHEET  
 NLY S-31-00  
 U.S. DEPARTMENT OF COMMERCE  
 Patent and Trademark Office

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To the Commissioner of P.

the attached original documents or copy thereof.

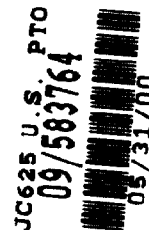
1. Name of conveying party(ies):  
 Joseph R. Dempewolf;  
 Robert K. Wade; and  
 Ian Turner;  
 Additional name(s) of conveying party(ies)  
 attached?  Yes  No

2. Name and address of receiving party(ies):  
 Name: LIGHTCHIP, INC.  
 Address: 5 Industrial Way  
 Salem, New Hampshire 03079

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_

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

Execution Date: 05/25/00; 05/24/00; 05/17/00



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: 5/25/00; 5/24/00; 5/17/00.

A. Patent Application No. (s)

B. Patent No. (s)

09-583764

Additional numbers attached?  Yes  No

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

Thomas E. Anderson  
 Jenkins & Gilchrist, P.C.  
 1445 Ross Avenue, Suite 3200  
 Dallas, Texas 75202-2799

6. Total number of applications and patents  
 involved: 1

7. Total fee (37 CFR 3.41):..... \$ 40.00  
 Enclosed  
 Authorized to be charged to deposit  
 account

8. Deposit account number:  
10-0447  
 (Attach duplicate copy of this page if  
 paying by deposit account)

06/19/2000 ASCOTT 00000241 100447 09583764  
 01 FC:581 40.00 CH

DO NOT USE THIS SPACE

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.

Thomas E. Anderson  
 Name of Person Signing

Signature

May 31, 2000  
 Date

Total number of pages including cover sheet, attachments, and document: 7

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

**ASSIGNMENT**

WHEREAS, the undersigned, to wit:

- (1) Joseph R. Dempewolf
- (2) Robert K. Wade; and
- (3) Ian Turner

(hereinafter collectively ASSIGNOR), has/have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled:

"ULTRA-DENSE WAVELENGTH DIVISION MULTIPLEXING/DEMULPLEXING DEVICES"

- (X only one)
- (a) X which was executed concurrently herewith and is being filed herewith in the United States Patent and Trademark Office;
  - (b) \_\_\_\_\_ which was executed on \_\_\_\_\_, 20\_\_, and is being filed herewith in the United States Patent and Trademark Office;
  - (C) \_\_\_\_\_ which was filed as U.S. Patent Application No. \_\_\_\_\_ on \_\_\_\_\_, 20\_\_;

AND WHEREAS, LIGHTCHIP, INC. (hereinafter ASSIGNEE), a corporation organized and existing under the laws of the Commonwealth/State of Delaware, and having its principal place of business at 5 Industrial Way, Salem, New Hampshire 03079, is desirous of acquiring the entire right, title, and interest in and to said invention and any and all patents that may be obtained therefor, and in and to said application and any and all patents that may issue therefrom;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR does hereby sell, assign, transfer, and set over unto said ASSIGNEE, its successors, assigns, and legal representatives, all right, title, and interest in and to said invention throughout the world, and any and all patents of the United States and foreign countries that may be obtained therefor, and in and to said application, including any and all continuations, continuations-in-part, divisionals, reissues, re-examinations, substitutions, and extensions thereof, and any and all patents of the United States

and foreign countries that may issue therefrom, such right, title, and interest including the right to file applications and obtain patents, utility models, industrial models, and designs for said invention in the name of said ASSIGNEE, its successors, assigns, and legal representatives, throughout the world, including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention, and all rights to register said invention in appropriate registries;

ASSIGNOR also does hereby covenant that it has the full right to convey the entire right, title, and interest herein assigned, and that it has not and will not execute any agreement in conflict herewith;

ASSIGNOR also does hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application, including any continuations, continuations-in-part, divisions, reissues, re-examinations, substitutions, and extensions thereof, to said ASSIGNEE, its successors, assigns, and legal representatives as the ASSIGNEE of the entire right, title, and interest herein assigned;

ASSIGNOR also does hereby agree to, at any time, upon request, without further or additional consideration but at the expense of said ASSIGNEE, its successors, assigns, or legal representatives, execute and deliver any and all papers, make all rightful oaths, and do all lawful acts that may be necessary or desirable to perfect the entire right, title, and interest herein assigned in said ASSIGNEE, its successors, assigns, and legal representatives, and generally do everything possible to vest the entire right, title, and interest herein assigned in said ASSIGNEE, its successors, assigns, and legal representatives;

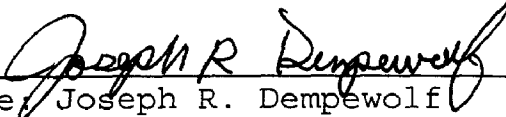
ASSIGNOR also does hereby agree to, at any time, upon request, without further or additional consideration but at the expense of said ASSIGNEE, its successors, assigns, or legal representatives, execute and deliver any and all papers, make all rightful oaths, and do all lawful acts that may be necessary or desirable to make application for and obtain any and all continuations, continuations-in-part, divisionals, reissues, re-examinations, substitutions, or extensions of said application, or any application on said invention, or any patent issuing therefor or therefrom;

ASSIGNOR also does hereby agree to, at any time, upon request, without further or additional consideration but at the expense of said ASSIGNEE, its successors, assigns, or legal representatives, communicate to said ASSIGNEE, its successors, assigns, and legal representatives, any known facts relating to said invention or said application or any patent issuing therefor or therefrom, and testify as to the same in any interference or other litigation proceeding when requested to do so, and aid said ASSIGNEE, its successors, assigns, and legal representatives, in obtaining and enforcing proper protection for said invention in all countries;

ASSIGNOR also does hereby grant the firm of Jenkins & Gilchrist, P.C. of 1445 Ross Avenue, Suite 3200, Dallas, Texas, 75202, or its agents, the power to insert on this assignment any further information, including but not limited to application number(s) and filing date(s), which may be necessary or desirable in order to comply with any rule or request of the United States Patent and Trademark office for the purposes of recording this document.


Executed on the date(s) below indicated:

(1) IN WITNESS WHEREOF, I have hereunto set my hand and seal this  
25TH day of MAY 20 2000.

  
Name: Joseph R. Dempewolf  
Address: 308 Rim Road  
Des Montes, NM 87571

COMMONWEALTH/STATE OF NEW MEXICO  
COUNTY OF Taos

On this 25TH day of MAY, 2000, before me, a  
Notary Public in and for the Commonwealth/State of  
NEW MEXICO, did personally appear the above-named  
JOSEPH R. DEMPFWOLF, to me known and known to me to be the person who  
signed and sealed the foregoing instrument and acknowledged the  
same to be his or her own free act and deed.

  
Notary Public

My Commission Expires: 3/22/2004

(2) IN WITNESS WHEREOF, I have hereunto set my hand and seal this  
24<sup>th</sup> day of May, 2000.

Robert K. Wade

Name: Robert K. Wade  
Address: 2625 NW 31st ST  
Boca Raton, FL 33434

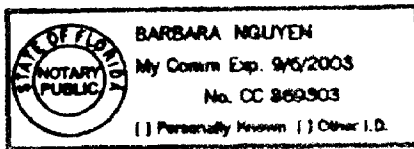
COMMONWEALTH/STATE OF Florida

COUNTY OF Palm Beach

On this 24<sup>th</sup> day of May, 2000, before me, a  
Notary Public in and for the Commonwealth/State of  
Florida, did personally appear the above-named  
Robert Wade, to me known and known to me to be the person who  
signed and sealed the foregoing instrument and acknowledged the  
same to be his or her own free act and deed.

Barbara Nguyen  
Notary Public

My Commission Expires: 9/6/2003



(3) IN WITNESS WHEREOF, I have hereunto set my hand and seal this  
\_\_\_\_\_ day of 5/17/00, 2000.

*I Turner*

\_\_\_\_\_  
Name: Ian Turner  
Address: 25 Winding Brook Drive  
Stratham, NH 03885

COMMONWEALTH/STATE OF New Hampshire  
COUNTY OF Rockingham

On this 17<sup>th</sup> day of May, 2000, before me, a  
Notary Public in and for the Commonwealth/State of  
NH, did personally appear the above-named  
Ian Turner, to me known and known to me to be the person who  
signed and sealed the foregoing instrument and acknowledged the  
same to be his or her own free act and deed.

Joan A. Champagne  
Notary Public  
My Commission Expires: 9/14/01