

12-02-1999

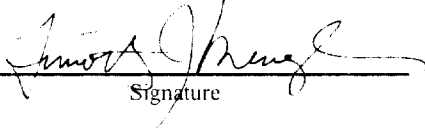
ocket No.: QB99-03

RECORDATION FC PATENT



101212303

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies) Jeffrey A. Masucci Louis Wojnaroski S. Martin Mastenbrook Barry D. Colella John E. Keisling Agnes M. Masucci</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies) Name: <u>Quantum Bridge Communications, Inc.</u> Internal Address: _____ _____ Street Address: <u>One High Street</u> _____ City: <u>North Andover</u> State: <u>MA</u> ZIP: <u>01845</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date <u>11/9/99</u></p>	
<p>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) <u>09/393,800</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>Leo R. Reynolds, Esq.</u> Internal Address: _____ <u>Hamilton, Brook, Smith & Reynolds, P.C.</u> _____ Street Address <u>Two Militia Drive</u> _____ City: <u>Lexington</u> State <u>MA</u> ZIP: <u>02421-4799</u></p>	<p>6. Total number of applications and patents involved: <u>[1]</u> 7. Total Fee (37 C.F.R. 3.41)..... \$ <u>40.00</u> <input checked="" type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to charge any deficiencies or credit any overpayment to deposit account <input type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: <u>08-0380</u> (Attach duplicate copy of this page if paying by deposit account)</p>
DO NOT USE THIS SPACE	
<p>9. Statement and signature. <i>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.</i></p> <p><u>Timothy J. Meagher #39,302</u> Name of Person Signing</p> <p style="text-align: center;"> Signature</p> <p style="text-align: right;"><u>11/22/99</u> Date</p> <p style="text-align: right;">Total number of pages including cover sheet, attachments, and document: <u>[6]</u></p>	

12/01/1999 TTOW11 00000211 09393800

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PATENT
REEL: 010403 FRAME: 0437

Docket No. QB99-03

Joint

ASSIGNMENT

WHEREAS, we, **Jeffrey A. Masucci, Louis Wojnaroski, S. Martin Mastenbrook, Barry D. Colella, John F. Keisling and Agnes M. Masucci** have invented a certain improvement in **METHOD AND SYSTEM FOR PACKET TRANSMISSION OVER PASSIVE OPTICAL NETWORK** described in an application for Letters Patent of the United States, the specification of which:

☐ is being executed on even date herewith and is about to be filed in the United States Patent Office;

☒ was filed on September 10, 1999 as Application No. 09/393,800;

☐ was patented under U.S. Patent No. _____ on _____.

WHEREAS, **Quantum Bridge Communications, Inc.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of **Delaware**, and having a usual place of business at **One High Street, North Andover, Massachusetts 01845** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: _____

Jeffrey A. Masucci
Jeffrey A. Masucci

State/Commonwealth _____

of Massachusetts

County of Essex

Then personally appeared before me the above-named **Jeffrey A. Masucci** and acknowledged that he executed the foregoing instrument as his free act and deed this 9 day of NOVEMBER, 19 99.

(SEAL)

Kathleen E. Moriarty
KATHLEEN E. MORIARTY

Notary Public

(print name)

My Commission expires _____

KATHLEEN E. MORIARTY
Notary Public, Massachusetts
Commission Expires December 31, 2005

Inventor's Signature: _____

Louis Wojnaroski
Louis Wojnaroski

State/Commonwealth

of Massachusetts

County of Essex

Then personally appeared before me the above-named **Louis Wojnaroski** and acknowledged that he executed the foregoing instrument as his free act and deed this 9 day of NOVEMBER, 19 99.

(SEAL)

Kathleen E. Moriarty

Notary Public

KATHLEEN E. MORIARTY

(print name)

My Commission expires _____/_____/_____

KATHLEEN E. MORIARTY
Notary Public
Massachusetts
Commission Expires 01/01/00

Inventor's Signature: _____

S. Martin Mastenbrook
S. Martin Mastenbrook

State/Commonwealth

of Massachusetts

County of Essex

Then personally appeared before me the above-named **S. Martin Mastenbrook** and acknowledged that he executed the foregoing instrument as his free act and deed this 9 day of NOVEMBER, 19 99.

(SEAL)

Kathleen E. Moriarty

Notary Public

KATHLEEN E. MORIARTY

(print name)

My Commission expires _____/_____/_____

KATHLEEN E. MORIARTY
Notary Public
Massachusetts
Commission Expires 01/01/00

Inventor's Signature: _____

Barry D. Colella
Barry D. Colella

State/Commonwealth

of Massachusetts

County of Essex

Then personally appeared before me the above-named **Barry D. Colella** and acknowledged that he executed the foregoing instrument as his free act and deed this 9 day of November, 19 99.

(SEAL)

Kathleen E. Moriarty Notary Public
KATHLEEN E. MORIARTY (print name)
My Commission expires / /

KATHLEEN E. MORIARTY
Notary Public, Massachusetts
December 31, 2005

Inventor's Signature: _____

John F. Keisling
John F. Keisling

State/Commonwealth

of Massachusetts

County of Essex

Then personally appeared before me the above-named **John F. Keisling** and acknowledged that he executed the foregoing instrument as his free act and deed this 9 day of NOVEMBER, 19 99.

(SEAL)

Kathleen E. Moriarty Notary Public
KATHLEEN E. MORIARTY (print name)
My Commission expires / /

KATHLEEN E. MORIARTY
Notary Public, Massachusetts
My Commission Expires December 31, 2005

Inventor's Signature: *A M Masucci*
Agnes M. Masucci

State/Commonwealth
of Massachusetts
County of Essex

Then personally appeared before me the above-named **Agnes M. Masucci** and acknowledged
that she executed the foregoing instrument as her free act and deed this 9 day of
NOVEMBER, 1999.

(SEAL)

Kathleen E Moriarty Notary Public
KATHLEEN E. MORIARTY (print name)
My Commission expires / /

Notary Public
for the State of Massachusetts
My Comm. Expires December 31, 2000