

1.16.01



To the Honorable Commissioner of Patents and Trade...

101593401

Documents or copy thereof.

1. Name of conveying party(ies):

Richard L. Goodson, Steven R. Blackwell, Ayman Ghobrial,
Cynthis Lin

Additional name(s) of conveying party(ies) attached? No

2. Name and address of receiving party(ies)

Name: Adtran, Inc.

Street Address: 901 Explorer Boulevard

City: Huntsville ST: Alabama ZIP 35806

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

3. Nature of conveyance:

Assignment

Execution Date: December 14, 2000

4. Application number(s) or patent number(s):

A. Patent Application No.(s): 09/670,047

Additional numbers attached? Yes No

B. Patent No.(s):

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

Name: WADDEY & PATTERSON

Internal Address: BANK OF AMERICA PLAZA

SUITE 2020

Street Address: 414 UNION STREET

City: NASHVILLE State: TN Zip: 37219

Customer No. 23456

6. Total number of applications and patents involved: 1

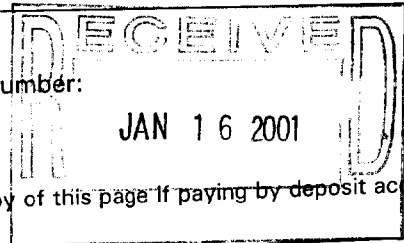
7. Total fee (37 CFR 3.41):..... \$40.00

The fee is enclosed

8. Deposit account number:

23-0035

(Attach duplicate copy of this page if paying by deposit account.)



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.

Mark J. Patterson

Name of Person Signing

Signature

1/11/01
Date

Total number of pages including cover sheet, attachments, and document: 5

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

01/24/2001 6TON11 00000214 09670047

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40.00 OP

ASSIGNMENT

In consideration of the payment of one (\$1.00) dollar, and for other good and valuable consideration, the receipt of which is hereby acknowledged, Richard L. Goodson, Steven R. Blackwell, Ayman Ghobrial, Cynthia Lin, ("Assignors") assign to Adtran, Inc. of Huntsville, Alabama ("Assignee"), their entire right, title, and interest in and to an invention entitled "TIMING LOOP AND METHOD FOR A DIGITAL COMMUNICATIONS SYSTEM" (the "Invention"), and in any and all patents, reissue patents, certificates of inventorship, design registrations, utility models, and the like, that may be granted in the U.S. or in any foreign country with respect to the Invention and improvements thereto, and in any application, including continuations, continuations-in-part, or divisions, that may be filed with respect to the Invention or improvements thereto.

Assignors grant to Assignee the right to add the following information regarding a U.S. patent application to be filed so that this assignment may be recorded in the United States Patent and Trademark Office.

**TIMING LOOP AND METHOD FOR A DIGITAL
COMMUNICATIONS SYSTEM**
(Title of Application)

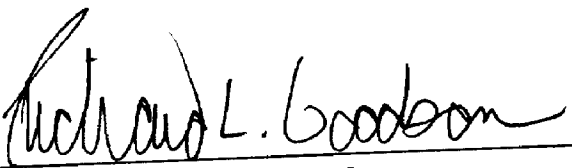
09/670,047
(Serial Number)

September 25, 2000
(Filing Date)

Assignors will, without additional charge to Assignee but at Assignee's expense, cooperate with and assist Assignee such that Assignee may realize and fully enjoy all the rights assigned hereunder, including the preparation and execution of all papers needed by Assignee, and providing such information and assistance as may reasonably be required by Assignee in any administrative or legal proceeding to obtain or protect such rights.

Assignors represent and warrant that they have not transferred, licensed, and/or assigned any interest in the Invention to anyone other than Assignee, and that they have not entered into any contract, assignment, or license conveying any right granted to Assignee hereunder, or that would otherwise conflict with this Assignment.

This Assignment and each of its terms shall be binding on each Assignor, their representatives, heirs and assigns, and shall inure to the benefit of Assignee, its successors, and assigns.


Richard L. Goodson

14 December 2000
Date

STATE OF ALABAMA
COUNTY OF MADISON

Before me, Patricia H. Gill, a Notary Public of the state and county aforesaid, personally appeared Richard L. Goodson, et al, with whom I am personally acquainted, or proved to me on the basis of satisfactory evidence, and who upon oath, acknowledged themselves to be the within named joint Assignor, and that multiple executed the foregoing instrument for the purposes therein contained.

This 14th day of December, 2000.

Patricia H. Gill
Notary Public

My commission expires: 1-5-04

Steven R. Blackwell
Steven R. Blackwell

3 Jan 01
Date

STATE OF ALABAMA
COUNTY OF MADISON

Before me, Patricia H. Gill, a Notary Public of the state and county aforesaid, personally appeared Steven R. Blackwell, with whom I am personally acquainted, or proved to me on the basis of satisfactory evidence, and who upon oath, acknowledged themselves to be the within named joint Assignor, and that multiple executed the foregoing instrument for the purposes therein contained.

This 3rd day of January 2001 ~~December, 2000.~~

Patricia H. Gill
Notary Public

My commission expires: 1-5-04

Ayman K Ghobrial
Ayman Ghobrial

12-14-2000

Date

STATE OF ALABAMA
COUNTY OF MADISON

Before me, Patricia H. Gill, a Notary Public of the state and county aforesaid, personally appeared Ayman Ghobrial, with whom I am personally acquainted, or proved to me on the basis of satisfactory evidence, and who upon oath, acknowledged themselves to be the within named joint Assignor, and that multiple executed the foregoing instrument for the purposes therein contained.

This 14th day of December, 2000.

Patricia H. Gill

Notary Public

My commission expires: 1-5-04

Cynthia Lin
Cynthia Lin

Jan 3, 2001
Date

STATE OF ALABAMA
COUNTY OF MADISON

Before me, Patricia H. Gill, a Notary Public of the state and county aforesaid, personally appeared Cynthia Lin, with whom I am personally acquainted, or proved to me on the basis of satisfactory evidence, and who upon oath, acknowledged themselves to be the within named joint Assignor, and that multiple executed the foregoing instrument for the purposes therein contained.

This 3rd day of January, 2001
December, 2000.

Patricia H. Gill

Notary Public

My commission expires: 1-5-04