

05-10-1999

U.S. Department of Commerce
Patent and Trademark Office
PATENT



101033809

RECORDATION FORM COVER SHEET: 50

PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

☒ New

☐ Resubmission (Non-Recordation)
Document ID#

☐ Correction of PTO Error
Reel # Frame #

☐ Corrective Document
Reel # Frame #

Conveyance Type

☒ Assignment ☐ Security Agreement

☐ License ☐ Change of Name

☐ Merger ☐ Other

U.S. Government
(For Use ONLY by U.S. Government Agencies)

☐ Departmental File ☐ Secret File

Conveying Party(ies)

☒ Mark if additional names of conveying parties attached

Execution Date
Month Day Year
02-24-1999

Execution Date
Month Day Year
02-11-1999

Name (line 1) Terry R. Bloom

Name (line 2)

Second Party

Name (line 1) Richard O. Cooper

Name (line 2)

Receiving Party

☐ Mark if additional names of receiving parties attached

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1) CTS Corporation

Name (line 2)

Address (line 1) 905 N. West Blvd

Address (line 2)

Address (line 3) Elkhart IN / USA 46514
City State/Country Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

FOR OFFICE USE ONLY

05/10/1999 DMGUYEN 00000027 031677 09272189
01 FC:581 40.00 CH

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

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

PATENT
REEL: 9933 FRAME: 0042

Correspondent Name and Address

Area Code and Telephone Number

Name **AI Watkins**

Address (line 1) **Quill & Disc Inc.**

Address (line 2) **30844 NE 1st Ave**

Address (line 3) **St. Joseph, MN 56374**

Address (line 4)

Pages

Enter the total number of pages of the attached conveyance document including any attachments.

5

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

09/272,189

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number
only if a U.S. Application Number
has not been assigned.

PCT PCT PCT
PCT PCT PCT

Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$ **40.00**

Method of Payment:
Deposit Account

Enclosed ☐ Deposit Account ☒

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

03-1677

Authorization to charge additional fees:

Yes ☒ No ☐

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. Charges to deposit account are authorized, as indicated herein.

Albert W. Watkins

Albert W. Watkins

15 APR 99

Name of Person Signing

Signature

Date

**RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY**

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)
City State/Country Zip Code

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)
City State/Country Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Patent Number(s)

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

ASSIGNMENT

WHEREAS, we, Terry R. Bloom, Richard O. Cooper and Robert L. Reinhard of the City of Middlebury, County of Elkhart and State of Indiana; City of Bluffton, County of Wells and State of Indiana; and City of Berne, County of Adams and State of Indiana; respectively have made a certain new and useful invention entitled "Ball Grid Array R-C Network with High Density" for which we are making application for Letters Patent of the United States, which application is being duly executed by us on the ^{11th 13th 24th} day of February, 1999.

WHEREAS, we, the said inventors, are the owner of the entire right, title and interest in and to said invention and said application; and

WHEREAS, CTS CORPORATION, a corporation duly organized under the laws of the State of Indiana and doing business at the City of Elkhart, in the County of Elkhart and State of Indiana, is desirous of acquiring the full and exclusive right, title and interest which we have or may have in and to said invention and said application, including any continuation and any division of said application, and any Letters Patent of the United States and of foreign countries that may be granted for said invention, and any renewal, any reissue and any extension of any such Letters Patent;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for good and valuable consideration, we do hereby sell, assign, transfer and set over unto the said CTS CORPORATION all the right, title and interest which we have or may have in and to said invention and said application and any Letters Patent of the United States and of foreign countries that may be granted for said invention and any renewal, any reissue and any extension of any such Letters Patent; the same to be held and enjoyed by said CTS CORPORATION, its successors, legal representatives and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment had not been made; and we hereby covenant and warrant that we have the full right to convey the entire interest herein assigned and that we have not executed and will not execute any instrument purporting to convey, mortgage, lease or otherwise transfer all, or any part of said interest, to anyone other than said CTS CORPORATION, its successors, legal representatives and assigns.

We authorize and request the Commissioner of Patents of the United States to issue any Letters Patent which may be granted upon the aforesaid application or applications to CTS CORPORATION.

And, for the above recited considerations, we hereby covenant and agree that we will, at the request of said CTS CORPORATION, its successors, legal representatives and assigns, execute any and all renewal, continuation and divisional applications, both United States and foreign, for Letters Patent for said invention; and any and all applications for the renewal, the reissue and the extension of any Letters Patent, both United States and foreign, that may be granted for said invention and do any and all other and further acts to obtain any such Letters Patent, and any renewal, any reissue and any extension of the same that said CTS CORPORATION, its successors, legal representatives and assigns may deem necessary or expedient, without further compensation, but at the expense of said CTS CORPORATION, its successors, legal representatives and assigns.

IN WITNESS WHEREOF, we have hereunto set our hand and seal this 11th & 24th
day of February, 1999.

Terry R. Bloom
Terry R. Bloom

Richard O. Cooper
Richard O. Cooper

Robert L. Reinhard
Robert L. Reinhard

STATE OF INDIANA)
)SS
COUNTY OF ADAMS)

I, Myrtle I. Steiner, Notary Public in and for said County, in the State
aforesaid, do hereby certify that Richard O. Cooper and Robert L. Reinhard, personally known
to me to be the same persons whose names are subscribed to in the foregoing instrument,
appeared before me this day in person and acknowledged that they signed, sealed and
delivered such instrument as their free and voluntary act for the uses and purposes set forth.

GIVEN under my hand and Notarial Seal this 11th day of February, 1999.

Myrtle I. Steiner
Notary Public

(NOTARIAL SEAL)

MYRTLE I. STEINER, NOTARY PUBLIC
My commission expires November 1, 1999

STATE OF INDIANA)
)SS
COUNTY OF Elkhart)

I, Kathryn J. Diller, Notary Public in and for said County, in the State
aforesaid, do hereby certify that Terry R. Bloom, personally known to me to be the same
person whose name is subscribed to in the foregoing instrument, appeared before me this day
in person and acknowledged that he signed, sealed and delivered such instrument as his free
and voluntary act for the uses and purposes set forth.

GIVEN under my hand and Notarial Seal this 24th day of February, 1999.

Kathryn J. Diller
Notary Public

(NOTARIAL SEAL)

KATHRYN J. DILLER
NOTARY PUBLIC STATE OF INDIANA
ELKHART COUNTY
MY COMMISSION EXP. JULY 29, 1999