

01-31-2002

FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027

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



101965934

*RE*

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

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

**Submission Type**

New *1-18-02*

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

Name (line 1)  Execution Date Month Day Year

Name (line 2)

**Second Party**

Name (line 1)  Execution Date Month Day Year

Name (line 2)

**Receiving Party**

Mark if additional names of receiving parties attached

Name (line 1)   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 2)

Address (line 1)

Address (line 2)

Address (line 3)     
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**

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: 012511 FRAME: 0918**

**Correspondent Name and Address**

Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**Pages**

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

**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)**

<input type="text" value="09/931,636"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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

PCT  PCT  PCT

only if a U.S. Application Number has not been assigned.

PCT  PCT  PCT

**Number of Properties**

Enter the total number of properties involved. #

**Fee Amount**

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

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: #

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.

Christopher S. Daly

3 JAN 02

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

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Month Day Year

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Execution Date  
Month Day Year

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10-5-01



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

Departmental File  Secret File

**Conveying Party(ies)**

Mark if additional names of conveying parties attached

Name (line 1) Woodington, Walter Gordon Execution Date Month Day Year 09 04 2001

Name (line 2) \_\_\_\_\_

**Second Party**

Name (line 1) Delcheccolo, Michael Joseph Execution Date Month Day Year 09 04 2001

Name (line 2) \_\_\_\_\_

**Receiving Party**

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Name (line 1) \_\_\_\_\_

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Address (line 1) \_\_\_\_\_

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Address (line 3) \_\_\_\_\_ City \_\_\_\_\_ State/Country \_\_\_\_\_ Zip Code \_\_\_\_\_

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**Area Code and Telephone Number**

**Name**

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**Address (line 3)**

**Address (line 4)**

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

**Number of Properties** Enter the total number of properties involved. #

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

**Method of Payment:** Enclosed  Deposit Account

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

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**Authorization to charge additional fees:** Yes  No

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Christopher S. Daly

Name of Person Signing

Signature

Date

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

Conveying Party(ies)

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Enter additional Conveying Parties

Name (line 1) Pleva, Joseph S.

Execution Date  
Month Day Year  
09 04 2001

Name (line 2)

Execution Date  
Month Day Year

Name (line 1) Russell, Mark E.

09 07 2001

Name (line 2)

Execution Date  
Month Day Year

Name (line 1) Van Rees, H. Barteld

09 04 2001

Name (line 2)

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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)**



## ASSIGNMENT

Whereas we, the undersigned, Walter Gordon Woodington, Michael Joseph Delcheccolo, Joseph S. Pleva, Mark E. Russell, H. Barteld Van Rees and James T. Hanson, hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled RADAR TRANSMITTER CIRCUITRY AND TECHNIQUES, identified as Attorney Docket No. RTN-145PUS, which application was filed on August 16, 2001 and assigned Application No.09/931,636. In the event that the filing date and/or Application No. are not entered above at the time we executed this document, and if such information is deemed necessary, we hereby authorize and request our attorneys at Daly, Crowley & Mofford, LLP, 275 Turnpike Street, Suite 101, Canton, MA 02021-2310, to insert above the filing date and/or Application No. of said application.

Whereas, RAYTHEON COMPANY, a Massachusetts Corporation having a place of business at 141 Spring Street, Lexington, MA 02421, and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited:

Now, therefore, for valuable consideration furnished by Assignee to me, receipt and sufficiency of which I hereby acknowledge, I hereby, without reservation:

1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said United States patent application, any and all other patent applications on said inventions and discoveries in whatsoever countries, including all utility, divisional, renewal, substitute, continuation, reissue and Convention applications based in whole or in part upon said inventions or discoveries, said United States patent application or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;

2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;

3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

4. Warrant that I have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance;

5. Bind my heirs, legal representatives and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to me relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in my control or in the control of my heirs, legal representatives or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have executed this Assignment as an instrument under seal on the dates indicated next to my name.

State or Commonwealth of Massachusetts

County Middlesex

Dated 9/4/01

Walter Gordon Woodington  
Walter Gordon Woodington

On this 4<sup>th</sup> day of September, 2001, before me appeared Walter Gordon Woodington, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

Pete Dulchinos  
Notary Public


State or Commonwealth of Massachusetts

County Middlesex

Dated 7/4/01

  
Michael Joseph Delcheccolo

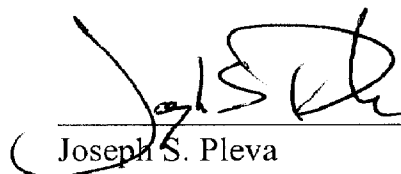
On this 4<sup>th</sup> day of September, 2001, before me appeared Michael Joseph Delcheccolo, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

  
Notary Public

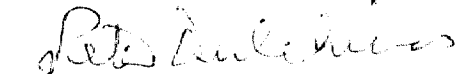
State or Commonwealth of Massachusetts

County Middlesex

Dated 7/4/01

  
Joseph S. Pleva


On this 4<sup>th</sup> day of September, 2001, before me appeared Joseph S. Pleva, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

  
Notary Public


State or Commonwealth of Massachusetts

County Middlesex

Dated 9/7/01

  
Mark E. Russell

On this 7<sup>th</sup> day of September, 2001, before me appeared Mark E. Russell, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

  
Notary Public


State or Commonwealth of Massachusetts

County Middlesex

Dated 9/4/01

  
H. Barteld Van Rees

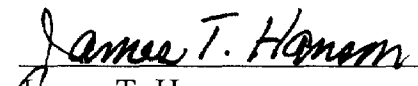
On this 4<sup>th</sup> day of September, 2001, before me appeared H. Barteld Van Rees, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

  
Notary Public


State or Commonwealth of Massachusetts

County Middlesex

Dated 9/7/01

  
James T. Hanson

On this 7<sup>th</sup> day of September, 2001, before me appeared James T. Hanson, to me known and known to me as the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

  
Notary Public