FORM PTO-1619A Expires 06/30/99 ON/B 0651-0027 06-22-2000



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	s: Please record the attached original document(s) or copy(ies).
Submission Type	Conveyance Type
X New	X Assignment Security Agreement
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Correction of PTO Error Reel # Frame #	Merger Other
Corrective Document	U.S. Government (For Use ONLY by U.S. Government Agencies)
Reel # Frame #	Departmental File Secret File
Conveying Party(ies)	Mark if additional names of conveying parties attached Execution Date  Month Day Year
Name (line 1) Durfee, Lawrence A.	05 17 2000
Name (line 2)	Execution Date
Second Party	Month Day Year
Name (line 1) Dull, Wesley T.	05 17 2000
Name (line 2)	09503931
Receiving Party	Mark if additional names of receiving parties attached
Name (line 1) Raytheon Company	If document to be recorded
Marie (line i) Raytheon Company	is an assignment and the receiving party is not
Name (line 2)	domiciled in the United States, an appointment
Address (in t)	of a domestic representative is attached.
Address (line 1) 141 Spring Street	(Designation must be a separate document from
Address (line 2)	Assignment.)
Address (line 3) Lexington	MA 02421
City	State/Country Zip Code
<b>Domestic Representative Name and Ac</b>	Idress Enter for the first Receiving Party only.
Name	
Address (line 1)	
Address (line 2)	
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Mail documents to be recorded with required cover sheet(s) information to:
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## Page 2

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Correspondent Name and Address	Area Code and Telephone Numbe	<b>r</b> 781-659-2288	
Name Daly, Crowley & Moffor	d, LLP		
Address (line 1) P.O. Box 5057			
Address (line 2) Norwell MA 02061-2516			
Address (line 3)			
Address (line 4)			
Pages Enter the total number of procluding any attachment	pages of the attached conveyance doc s.	ument # 3	
Application Number(s) or Patent Nu		if additional numbers attached	
Enter either the Patent Application Number or th	e Patent Number (DO NOT ENTER BOTH numbe	ers for the same property).	
Patent Application Number(s)	Pate	ent Number(s)	
09/503,931			
If this document is being filed together with a <u>new</u> Pasigned by the first named executing inventor.	atent Application, enter the date the patent applic	ation was <u>Month Day Year</u>	
Patent Cooperation Treaty (PCT)	PCT PCT	PCT	
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only if a U.S. Application Numb has not been assigned.	PCT PCT PCT	PCT	
Number of Properties  Enter the total number of properties involved. # 1			
Fee Amount Fee Amoun	nt for Properties Listed (37 CFR 3.41):	\$ 40.00	
Method of Payment: End Deposit Account	closed X Deposit Account		
	dditional fees can be charged to the account.)  Deposit Account Number:	# 500845	
	Authorization to charge additional fees:	Yes X No	
Statement and Signature			
To the best of my knowledge and	belief, the foregoing information is tru	e and correct and any	
	e original document. Charges to depo	on account are authorized, as	
indicated herein.  Donald F. Mofford	Que Cettaghi	5-72-20	
Name of Person Signing	Signature	Date	

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REEL: 010862 FRAME: 0722

## ASSIGNMENT

Whereas I, the undersigned, Lawrence A. Durfee and Wesley T. Dull, hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled, MPRF INTERPULSE PHASE MODULATION FOR MAXIMIZING DOPPLER CLEAR SPACE, identified as Attorney Docket No. RTN-068AUS, which application was executed by us on May 17, 2000, filed on February 14, 2000 assigned Application No. 09/503,931. In the event that the execution date, filing date and/or Application No. are not entered above at the time I execute this document, and if such information is deemed necessary, I hereby authorize and request my attorneys at Daly, Crowley & Mofford, LLP, P.O. Box 5057, Norwell, MA 02061-2516, to insert above the execution date, 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, Massachusetts 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 us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue, re-examination and Convention applications based in whole or in part upon said inventions or discoveries, 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 our names 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;

PATENT REEL: 010862 FRAME: 0723

- 4. Warrant that we 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 we have good right to assign the same to Assignee without encumbrance;
- 5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us 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 us, our 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 us 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 our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing the facts of our 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 our names.

State or Commonwealth of Massachuse	z#s
County Middlesex	-
Dated: 5/17/00	Lawrence A. Durfee
0 41 (24 1 6 44	2000 to form me annual Laurence A. F.

On this 17th day of May, 2000, before me appeared Lawrence A. Durfee, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she acknowledged the same to be his/her free act and deed.

Peter Dulchinos
Notary Public Feter Dulchinos
My Commission Expires Nov. 9, 2001

[seal]

State or Commonwealth of Wassachuset	<u>t</u> >
County Middlesex	_
Dated: May 17, 2000	Wesley T. Dull
On this 17th day of May, known and known to me to be the person de instrument, and he/she acknowledged the san	
	Reb Dulchuso
	Notary Public Peter Dulchinos
[seal]	Notary Public Peter Dulchinos My Commission Expires Nov. 9, 2001

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-3-

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