	07-17-2	002					
			Atty Dkt No.: RTN-158F				
Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) Tab settings ⇔ ⇔ ♥	1021590 PATENT	43 T SONLY	U.S. DEPARTMENT OF COMMER U.S. Patent and Trademark Of				
	er of Patents and Trademarks:	Please record the attached	l original documents or copy thereof.				
1. Name of conveying party(ies)			ss of receiving party(ies)				
Angelo Puzella, Kenneth S. Komisarek, Joseph M. Crowder, Patricia S. Dupuis,		Name:	Raytheon Company				
Cary 1 : Kingston	7-15-02	Internal Address:					
Additional name(s) of conveying party(ie	»s) attached? 🗆 Yes 🕱 No						
3. Nature of conveyance:							
🕱 Assignment	Merger		444 Carrier a Chan at				
Security Agreement	Security Agreement Change of Name		Street Address: 141 Spring Street				
, ,	Ū		• •				
□ Other							
6/18/02; 6/19/02; 6/18/02; 6/18/02; 6	6/18/02.	City: Lexingto	nState:_MA_Zip:02421				
Execution Date:		Additional name(s) &	address(es) attached? 🗆 Yes 🕱 N				
4. Application number(s) or pate	ent number(s):						
If this document is being filed	together with a new appl	ication, the execution of	date of the application is:				
A. Patent Application No.(s)		B. Patent No.(s)					
10/123,806							
	······	ttached? 🗆 Yes 🕅 No					
5. Name and address of party to whom correspondence concerning document should be mailed: Name:Daly, Crowley & Mofford, LLP Internal Address:		 6. Total number of applications and patents involved: [
						8 Deposit account r	number:
				Street Address: 275 Turnpike Street, Suite 101		8. Deposit account number:	
500845							
City: <u>Canton</u> State:_M	IAZip:02021-2310	(Attach duplicate copy	of this page if paying by deposit account)				
	DO NOT US	SE THIS SPACE					
9. Statement and signature.		to former of the top to	1				
To the best of my knowledge is a true copy of the original d			correct and any attached copy				
\sim	. No.42,562	Jarry Haine Signature	·				
Name of Person Sign	ing 1	Signature	Date				
Total	number of pages including cove						
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REEL: 013080 FRAME: 0754

ASSIGNMENT

Whereas we, the undersigned, Angelo Puzella, Kenneth S. Komisarek, Joseph M. Crowder, Patricia S. Dupuis and Gary P. Kingston hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled, EMBEDDED PLANAR CIRCULATOR identified as Attorney Docket No. RTN-158PUS and Client Case No. 00E086, which application was executed by us on 6/18/02, 6/19/02, 6/18/02, 6/18/02, 6/18/02, filed on April 16, 2002 and assigned Application No. 10/123,806. In the event that the execution date, filing date and/or Application No. are not entered above at the time we execute 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, Massachusetts 02021-2310, 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, 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 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 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 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: 013080 FRAME: 0755

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 # 5

County Middlesex

Dated June 18, 2002

And A

On this 18 ± 4 day of $\mathcal{T}_{40} \mathcal{I}_{10}$, 2002, before me appeared Angelo Puzella, 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.

Seto Derchars Notary Public

Patent Attorney Docket No. RTN-158PUS Client Case No. 00E086

State or Commonwealth of Massachusetts

County Mildlesex

Dated June 19 2002

Kenneth D. Komierch

Kenneth S. Komisarek

On this <u>171</u> day of <u>June</u>, 2002, before me appeared Kenneth Komisarek, 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.

Et Dulchinos Notary Public

State or Commonwealth of _____

County

Dated _____

Joseph M. Crowder

On this day of ______, 2002, before me appeared Joseph Crowder, 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.

Notary Public

Patent Attorney Docket No. RTN-158PUS Client Case No. 00E086

State or Commonwealth of Massachus-He

County Middlesex

Dated

Kenneth S. Komisarek

On this _____ day of _____, 2002, before me appeared Kenneth Komisarek, 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.

Notary Public

State or Commonwealth of <u>Massachusetts</u>

County Middlesex Dated 6/18/02

CARC

Joseph M. Crowder

On this 18th day of June, 2002, before me appeared Joseph Crowder, 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.

it Andehus

Notary Public

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Patent Attorney Docket No. RTN-158PUS Client Case No. 00E086

State or Commonwealth of Massachuse HS

County Middlesex

Dated June 18, 2002

atricia S. Dupuis

On this 16th day of June ____, 2002, before me appeared Patricia Dupuis, 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.

Peto Dulehum Notary Public

State or Commonwealth of Mossachusetts

County Middlesex

Dated June 18, 2002

Garv P.Kingston

On this 18 th day of June, 2002, before me appeared Gary Kingston, 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.

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Notary Public

PATENT REEL: 013080 FRAME: 0759

RECORDED: 07/15/2002