	12-03-2	20M 4	Atty Dkt No.:	
Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2005)			U.S. DEPARTMENT U.S. Patent and	OF COMMERCE Trademark Office
Tab settings ⇔ ⇔ ▼	1028945	573	<u> </u>	
To the Honorable Commissioner of	of Patents and Trademarks:	Please record use au	uned original documents or cop	y thereof.
Name of conveying party(ies):		1	ddress of receiving party(is	~ ~ ~ ~ ~
lan B. Kerfoot James G. Kosalos			Raytheon Compan	
Additional name(s) of conveying party(ies) a	attached? 🖵 Yes 🍱 No			1927
Nature of conveyance:		1		
	□ Merger			
Security Agreement	Change of Name	Street Addre	ss: 870 Winter Street	
Other		City: Wa	altham State: MA	Zip: 02451
Execution Date: 11/23/04; 11/22/04			i(s) & address(es) attached?	_
4. Application number(s) or patent	number(s):	<u>'</u>		
		ication the execut	tion date of the application	11/23/04
If this document is being filed together with a new appli		1		
A. Patent Application No.(s)		B. Patent No	o.(s)	
A. i atent Application No.(3)	Additional numbers at		,	
Name and address of party to w concerning document should be	hom correspondence	ttached? 📮 Yes 🌠	,	s involved: 1
5. Name and address of party to w	hom correspondence mailed:	tached? 📮 Yes 🛍 6. Total number	Į No	
Name and address of party to w concerning document should be Name: Daly, Crowley & M.	hom correspondence mailed: fofford, LLP	tached? 📮 Yes 🛍 6. Total number	No of applications and patents CFR 3.41)\$40.0	
5. Name and address of party to w concerning document should be	hom correspondence mailed: fofford, LLP	6. Total number 7. Total fee (37	No of applications and patents CFR 3.41)\$40.0	0
5. Name and address of party to w concerning document should be Name: Daly, Crowley & M Internal Address:	hom correspondence mailed: flofford, LLP	6. Total number 7. Total fee (37	No of applications and patents CFR 3.41)\$ ded to be charged to deposite	0
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5. Name and address of party to w concerning document should be Name: Daly, Crowley & M Internal Address: Street Address: 275 Turnpike Street	hom correspondence mailed: flofford, LLP eet, Suite 101 Zip:02021-2310	6. Total number 7. Total fee (37 Enclosed Authorize 8. Deposit acco	of applications and patents CFR 3.41)\$40.0 ed to be charged to deposite unt number: 500845	t account
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5. Name and address of party to w concerning document should be Name: Daly, Crowley & M Internal Address: Street Address: 275 Turnpike Street City: Canton State: MA	hom correspondence mailed: flofford, LLP eet, Suite 101 Zip:02021-2310 DO NOT USE	6. Total number 7. Total fee (37 Enclosed Authorize 8. Deposit acco (Attach duplicate	of applications and patents CFR 3.41)\$40.0 ed to be charged to deposit unt number: 500845 copy of this page if paying by de	t account
5. Name and address of party to w concerning document should be Name: Daly, Crowley & M Internal Address: Street Address: Street Address: State: MA 9. Statement and signature. To the best of my knowledge and is a true copy of the original document.	hom correspondence mailed: flofford, LLP eet, Suite 101 Zip:02021-2310 DO NOT USE	6. Total number 7. Total fee (37 Enclosed Authorize 8. Deposit acco (Attach duplicate	of applications and patents CFR 3.41)\$40.0 ed to be charged to deposit unt number: 500845 copy of this page if paying by de	t account
5. Name and address of party to w concerning document should be Name: Daly, Crowley & M Internal Address: Street Address: Street Address: State: MA 9. Statement and signature. To the best of my knowledge and is a true copy of the original document.	hom correspondence mailed: flofford, LLP eet, Suite 101 DO NOT USE to belief, the foregoing is ument. 18,734	6. Total number 7. Total fee (37 Enclosed Authorize 8. Deposit acco (Attach duplicate	of applications and patents CFR 3.41)\$40.0 ed to be charged to deposit unt number: 500845 copy of this page if paying by de	t account

11/30/2004 KBETEMA1 00000005 10997281

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PATENT REEL: 016029 FRAME: 0733

ASSIGNMENT

Whereas we, the undersigned, Ian B. Kerfoot and James G. Kosalos, hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled METHOD AND SYSTEM FOR SYNTHETIC APERTURE SONAR, identified as Attorney Docket No. RTN-229BUS and Client Case No. 03E098 which application was executed on and filed on Alov, 23, 2004 and Assigned Application No.

In the event that the execution date, 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 execution date, filing date and/or Application No. of said application.

Whereas Raytheon Company, a Delaware Corporation having a place of business at 870 Winter Street, Waltham, MA 02451-1449 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 Assignce 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 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;

1

Application No.: Not Yet Assigned Attorney Docket No.: RTN-229BUS

Client Case No.: 03E098

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 Assignce 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 each executed this Assignment on the date indicated next to each of our respective names.

State or	Commonwealth of _	Rhode	Island		
County	Newport			- O	
Dated _	11-23-2004			Ton Kerton	
				Ian B. Kerfoot	

On this 13r day of November, 2004, before me appeared Ian B. Kerfoot, 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.

Diane L ROBERS

Notary Public
Commission Expires 730-05

Application No.: Not Yet Assigned Attorney Docket No.: RTN-229BUS

Client Case No.: 03E098

State or Commonwealth of	
County	
Dated	James G. Kosalos
	2004, before me appeared James G. Kosalos, to me known ped in and who executed the foregoing instrument, and
	Notary Public

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ASSIGNMENT

Whereas Raytheon Company, a Delaware Corporation having a place of business at 870 Winter Street, Waltham, MA 02451-1449 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 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;

1

Application No.: Not Yet Assigned Attorney Docket No.: RTN-229BUS

Client Case No.: 03E098

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 each executed this Assignment on the date indicated next to each of our respective names.

State or Commonwealth of	
County	
Dated	
	Ian B. Kerfoot
	, 2004, before me appeared Ian B. Kerfoot, to me known ibed in and who executed the foregoing instrument, and his/her free act and deed.
	Notary Public

Application No.: Not Yet Assigned Attorney Docket No.: RTN-229BUS

Client Case No.: 03E098

State or Commonwealth of _

f h

County_

Dated 22 NOV. 2004

James G. Kosalos

On this day of November, 2004, before me appeared James G. Kosalos, 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.

Deharch V. McCorrell

Notary Public

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RECORDED: 11/24/2004