Form PTO-1595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)	-2006 U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
2916	BANK HANNE SANIA SANIA SANIA SANIA
To the Director of the U.S. Patent ar.	18// documents or the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
DAVID D. CROUCH MICHAEL J. SCHWEIGER	Name: RAYTHEON COMPANY
MICHAEL J. SCHWEIGEN	Internal Address: Intellectual Property & Licensing Dept.
	N − 1
Additional name(s) of conveying party(ies) attached? Yes ✓ No 3. Nature of conveyance/Execution Date(s):	Street Address: 870 Winter Street
Execution Date(s) (1) JULY 31 (2) JULY 31	Guest, tearloon <u>Greviane, guest</u>
✓ Assignment Merger	
Security Agreement Change of Name	City: Waltham
Joint Research Agreement	State: Ma
Government Interest Assignment	
Executive Order 9424, Confirmatory License	Country: USA Zip: 02451-1449
Other	Additional name(s) & address(es) attached? ☐ Yes ✓ No
Additional numbers at 5. Name and address to whom correspondence	tached? Yes No 6. Total number of applications and patents
concerning document should be mailed:	involved: 1
Name: Thomas J. Finn, Esq.	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: Patent Docketing	Authorized to be charged by credit card
	✓ Authorized to be charged to deposit account
Street Address: 2000 E. El Segundo Blvd.	Enclosed
EO/E04/N119	None required (government interest not affecting title)
City: El Segundo	8. Payment Information
State: CA Zip: 90245	a. Credit Card Last 4 Numbers Expiration Date
Phone Number: 310-647-3723	 §
Fax Number:	b. Deposit Account Number 50-0888
Email Address: John_E_Gunther@raytheon.com	Authorized User Name John E. Gunther, E. S.
9. Signature:	8/8/2006 -
Signature	Date
John E. Gunther, Reg. No. 43,649 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:
	t) should be faxed to (571) 273-0140, or mailed to:

PATENT REEL: 018176 FRAME: 0343

ASSIGNMENT

Page 1 of 3 PD-05W231

WHEREAS, I, as below named sole inventor (if only one name is list	ed below) or joint inventor (it piural nar	nes
are listed below) of the city and state as stated below next to my nan	ne, have invented a(an) COHERENT	
NEAR-FIELD ARRAY for which applications for Letters Patent of the	United States has been executed by	me
on this day, or (if the following is completed) filed on	_ as Serial No;	and

WHEREAS, RAYTHEON (hereinafter referred to as RAYTHEON COMPANY), a Delaware Corporation, having its principal place of business in Lexington, Massachusetts is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world;

NOW, THEREFORE, In consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign and transfer to RAYTHEON COMPANY, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, to said application and any and all applications which are continuations, continuations-in-part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said RAYTHEON COMPANY, its successors, assigns or other legal representatives; covenant that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer; and agree to communicate to RAYTHEON COMPANY, its successors, assigns or other legal representatives, upon request and at no cost or expense to me, any facts known by me respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by RAYTHEON COMPANY, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said Letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of RAYTHEON COMPANY, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in RAYTHEON COMPANY, its successors, assigns or other legal representatives.

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PATENT REEL: 018176 FRAME: 0344 IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
DAVID D. CROUCH	121 D. Ul		7/31/06
RESIDENCE (CITY AND STATE)		INVENT	ON AGREEMENT DATE
CORONA, CA		11/25/9	1
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
MICHAEL J. SCHWEIGER	Dishall Dehwey		30 LT 18
REIDENCE (CITY AND STATE)		INVENT	ON AGREEMENT DATE
MORENO VALLEY, CA		12/06/8	3
	LANGENTORIO DIOMATI INC		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
RESIDENCE (CITY AND STATE)		INVENTION	ON AGREEMENT DATE
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
TOLE WAVE OF SOLE OF S	INVERTORIS SIGNATORE	4.	DATE
RESIDENCE (CITY AND STATE)		INVENTION	ON AGREEMENT DATE
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
FULL NAME OF SOLE OR JOINT INVENTOR RESIDENCE (CITY AND STATE)	INVENTOR'S SIGNATURE	INVENTION	DATE ON AGREEMENT DATE
	INVENTOR'S SIGNATURE	INVENTIO	
RESIDENCE (CITY AND STATE)	INVENTOR'S SIGNATURE	INVENTIO	
STATE OF CLAIFORNIA)	INVENTIO	
STATE OF COUNTY OF San Bernard (A) ss:	INVENTIO	
STATE OF CALIFORNIA COUNTY OF San Bernardia On 31 July 2006 befor	ome, R. ASKanase	,a;	ON AGREEMENT DATE
STATE OF CALIFORNIA COUNTY OF San Bernardia On 31 July 2006 before for said State, personally appeared DAVI	ss: e me, R. ASKanase D D. CROUCH, Propersonally known to	,a.}	ON AGREEMENT DATE Notary Public in and broved to me on the
STATE OF CALIFORNIA COUNTY OF San Bernard IA On 31 July 2006 befor for said State, personally appeared DAVI basis of satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence acknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me that he/she/they exceeds the satisfactory evidence to be the peacknowledged to me the satisfactory evidence to be the peacknowledged to the satisfactory evidence to be the peacknowledged to the satisfactory evidence to the satisfactory evidence to the satisfactory evidence to the satisfactory evidence to the satisfactory evide	ss: e me, R. ASKanase D D. CROUCH, Propersonally known to erson(s) whose name(s) is/are subscrite ecuted the same in his/her/their authority.	, a i o me or □ p ped to the w	Notary Public in and broved to me on the ithin instrument and ity(ies), and that by
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PATENT

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ADDENDUM PD-05W231 Page 3 of 3

STATE OF California

COUNTY OF

3006

_ before me,

Askanase

SS:

a Notary Public in and for said State, personally appeared MICHAEL J. SCHWEIGER, personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public

R ASKANASE
Commission # 1564565
Notary Public - California
San Bernardino County
My Comm. Expires Mar 26, 2009

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PATENT REEL: 018176 FRAME: 0346