3. Nature of conveyance:

Security Agreement

✓ Assignment



Merger

Change of Name

Form PTO-1595 (Rev. 09/04) OMB No. 0651-0027 (exp. 6/30/2005) R 102868	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
To the Director of the U.S. Patent and Trademark Office: Plea	se record the attached documents or the new address(es) below.
1. Name of conveying party(ies)/Execution Date(s):	2. Name and address of receiving party(ies)
QUENTEN E. DUDEN	Name: RAYTHEON COMPANY
ALLAN T. MENSE	Internal Address: Intellectual Property & Licensing
Francisco Bald () revenues a second	
Execution Date(s) 10/13/2004; 10/08/2004	Street Address: WALTHAM WOODS
Additional name(s) of conveying party(ies) attached? Yes No	
3. Nature of conveyance:	870 WINTER STREET

City: WALTHAM

State: MASSACHUSETTS

Government Interest Assignment	Country: USA Zip: 02451-1449	
Executive Order 9424, Confirmatory License	Country: USA Zip: 02451-1449	
Other	Additional name(s) & address(es) attached? Yes Vo	
4. Application or patent number(s): A. Patent Application No.(s)	document is being filed together with a new application. B. Patent No.(s) O - RO - 84 ached? Yes No 10969724	
Additional numbers att		
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:	
Name: THOMAS J. FINN, ESQ.	7. Total fee (37 CFR 1.21(h) & 3.41) \$	
Internal Address: PATENT DOCKETING	Authorized to be charged by credit card	
P. O. BOX 902	✓ Authorized to be charged to deposit account	
Street Address: 2000 E. EL SEGUNDO BLVD.	Enclosed	
EO/E4/N119	None required (government interest not affecting title)	
City: _EL SEGUNDO BLVD.	8. Payment Information	
State: CALIFORNIA Zip: 90245-0902	a. Credit Card Last 4 Numbers Expiration Date	
Phone Number: <u>(520)</u> 794-7980	h Danasit Assaurt Number 50 0000	
Fax Number: (520) 794-3268 / (520) 794-8171	b. Deposit Account Number 50-0888	
Email Address: tjfinn@raytheon.com	Authorized User Name THOMAS J. FINN, ESQ.	
9. Signature: Monno	10-19-04	
Signature	Date	
Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:	
ranic or cross olymny		

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

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> **PATENT REEL: 015915 FRAME: 0970**



filed on	as Serial No	; and	
for Letters Patent	of the United States has been	executed by me on this day, or (if the following is comp	pleted)
DECOMPSING FO	DAM FOR ENCAPSULATING	SPACE-BASED KINETIC OBJECTS for which applic	ations
are listed below) o	of the city and state as stated be	elow next to my name, have invented a(an) CATALYZ	'ED
WHEREAS, I, as I	below named sole inventor (if o	only one name is listed below) or joint inventor (if plural	i names

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: 015915 FRAME: 0971 IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
OUENTENE DUDEN				
QUENTEN E. DUDEN	1 / 5/	}	16-13-04	
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RESIDENCE (CITY AND STATE)	•	INVENTIC	N AGREEMENT DATE	
TUCSON, AZ.		01/31/19	994	
		1		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
ALLAN T. MENSE	Man 7. Meme		10/8/2004	
REIDENCE (CITY AND STATE)		INVENTIC	N AGREEMENT DATE	
GREEN VALLEY, CA,		12/10/20	001	
		<u> </u>		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
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RESIDENCE (CITY AND STATE)		INVENTIC	IN AGREEMENT DATE	
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
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STATE OF July				
COUNTY OF				
1 / 1 a a /				
On Och 13 2007 before me Show C. Jammerman				
a Notary Public in and for said State, personally appeared Scenting Wales				
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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.				
person(s), or the entity upon behalf of which the person(s) acted, executed the manufacturent.				
WITNESS my band and official seal,,,,,				

OFFICIAL SEAL
ALINE C. ZIMMERMAN
NOTARY PUBLIC-ARIZONA
PIMA COUNTY
My Comm. Expires June 09, 2006

Notary Publication C. 3/mmem

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PATENT REEL: 015915 FRAME: 0972

ASSIGNMENT

			ADDENDUM PD-04W076 Page of
STATE OF	zm)) ss:	v
COUNTY OF	ma	91?	
on Oct. S,	2004 before me,	une Zummer	ma,
a Notary Public in and fo	or said State, personally appea	ared Allen T. D	inse
is/are subscribed to the authorized capacity(ies) which the person(s) acted	e within instrument and ackno), and that by his/her/their sign: ed, executed the instrument.	e basis of satisfactory evidence to be the swledged to me that he/she/they execute ature(s) on the instrument the person(s),	ed the same in his/her/their
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PATENT **REEL: 015915 FRAME: 0973**

Notary Public _____

RECORDED: 10/20/2004