FORM PTO-1619A Expires 06/30/99 OMB 0651-0027 12-31-1998



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U.S. Department of Commerce Patent and Trademark Office PATENT

Docket 0446

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Month Day Year Name (line 1) Walls Claudia 12/7/98 Name (line 2) Execution Date Month Day Year Second Party Name (line 1) Nunn, Stephen D. 12/7/98 Name (line 2) Receiving Party Mark if additional names of receiving parties attached If document to be recorded Lockheed Martin Energy Research Corp. Name (line 1) is an assignment and the receiving party is not domiciled in the United Name (line 2) a corporation of Delaware States, an appointment of a domestic Address (line 1) representative is attached. O. Box 2008 (Designation must be a separate document from Address (line 2) Bethel Valley Road Assignment.) Address (line 3) Oak Ridge 37831-6255 Tennessee Domestic Representative Name and Address Enter for the first Receiving Party only. Name Address (line 1) Address (line 2) Address (line 3) Address (line 4) FOR OFFICE USE ONLY

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> PATENT REEL: 9665 FRAME: 0598

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Conveying Pa	rty(ies)	Mark if addition	enal names of conveying	g parties attached	Ď.
Enter additional C	onveying Parties		•	•	Execution Date Month Day Year
Name (line 1)	Janney, Mark A.				12/7/98
Name (line z)					Execution Date
Name (line 1)	McMillan, April D.				Month Day Year
	MONITION, INDIES 5.				12/8/98
Name (line 2)					Execution Date Month Day Year
Name (line 1)	Kirby, Glen H.				12/10/98
Name (line 2)					
Receiving Par	rty(ies)		Mark if additional name	s of receiving na	rtios attached
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FORM PTO- Expires 06/30/99 OMB 0651-0027	-1619B	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Corresponde	ent Name and Addres	Area Code and Telephone Numb	Der 423-574-4178
Name [Joseph A. Marasc	o	
Address (line 1)	Lockheed Martin	Energy Research Corp.	
Address (line 2)	P. O. Box 2009		
Address (line 3)	701 Scarboro Roa	d	
Address (line 4)	Oak Ridge, Tenne	ssee 37831-8243	
Pages	Enter the total number of including any attachme	of pages of the attached conveyance do	ocument # 6
• •	Number(s) or Patent I	· · ·	ark if additional numbers attached
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If this document is	ent Application Number(s	Patent Application, enter the date the patent app	olication was Month Day Year 12/7/98
Ente only	eration Treaty (PCT) r PCT application numbe if a U.S. Application Num not been assigned.		PCT PCT
Number of P	roperties Enter th	e total number of properties involved.	# 1
Fee Amount	Fee Amo	unt for Properties Listed (37 CFR 3.4	1): \$ 40.00
Deposit	Account	Inclosed Deposit Account X f additional fees can be charged to the account.) Deposit Account Number: Authorization to charge additional fees	# 13-1958
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To the attache indicate	best of my knowledge and copy is a true copy of a ded herein.	d belief, the foregoing information is the original document. Charges to dep	
Name	of Person Signing	Signature	Date

PATENT REEL: 9665 FRAME: 0600

ASSIGNMENT

WHEREAS, WE, the below-named inventors whose residence and post office are as stated below, have invented certain new and useful improvements in a

Polymer Gel Molds

for which an application for United States Letters Patent was executed by us on even date herewith, and

WHEREAS, LOCKHEED MARTIN ENERGY RESEARCH CORPORATION., a corporation of the State of Delaware, having an office at Bethel Valley Road, P.O. Box 2008, Oak Ridge, Tennessee 37831-6255, hereinafter called the ASSIGNEE, is desirous of acquiring the entire right, title and interest in the application and invention and to any Letters Patent that may be granted therefor in the United States of America and in any and all foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign to ASSIGNEE the entire right, title and interest in the application and the invention, to all rights of priority thereto pursuant to the International Convention for the Protection of Industrial Property, and in any Letters Patent on the invention that may be granted in the United States of America and in any and all foreign countries, including any and all Letters Patent that are divisions, reissues, continuations, substitutions or extensions of any Letters Patent or applications therefor on the invention.

We hereby authorize and request the Commissioner of the United States Patent and Trademark Office and the officials of any and all foreign countries to issue any and all of said Letters Patent, when granted, to the ASSIGNEE.

Further, we hereby agree to communicate to said ASSIGNEE or its representatives any facts known to us respecting said invention, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, and to make all rightful oaths and generally do everything possible to aid said ASSIGNEE and its representatives to obtain and enforce proper protection for said invention in the United States of America and in any and all foreign countries.

We further agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding on us, our heirs, legal representatives, and assigns.

l

PATENT REEL: 9665 FRAME: 0601

Full name of first inventor: Signature: Wardin A- W	Claudia A. Walls	Date:	2/07/98	
Residence:	Oak Ridge. Tennessee			
Post Office Address:	123 N. Hollywood Circle	Oak Ridge,	Tennessee 37830	

State of Tennessee)
County of Roane)

On this 7 day of DECENSEN, 1998, before me, a Notary Public in and for the County and State aforesaid, appeared Claudia A. Walls to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.

Notarx Public

SEAL

My Commission Expires:

MY COMMISSION EXPIRES JUNE 12, 2002

Full name of second inventor:	Stephen D. Nunn
Signature: Stephen	D. Hunn Date: 12/7/98
Residence:	Knoxville, Tennessee
Post Office Address:	4116 Guinn Road, Knoxville, Tennessee 37931
State of Tennessee) County of Roane)	
County and State aforesaid, appearing whose name is subscribed to	DECEMBER, 19 18, before me, a Notary Public in and for the eared Stephen D. Nunn to me personally known to be the same person the foregoing instrument, and acknowledged that he executed said ary act and for the uses and purposes therein expressed.
WITNESS my hand and SEAL	Notary Public
My Commission Expires:	
MY	COMMISSION EXPIRES

JUNE 12, 2002

3

Full name of third inventor:

Mark A. Janney

Date: 12 7 98

Residence:

Notary Public in and for the county and State aforesaid, appeared Mark A. Janney to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.

MY COMMISSION EXPIRES

JUNE 12, 2002

My Commission Expires:

Full name of fourth inventor:	April D. McMillan		
Signature Gul DM	Millar	Date	12/8/98
Residence:	Knoxville, Tennessee		•
Post Office Address:	1608 Drinnen Road, K	noxville, T	Tennessee 37914
State of Tennessee) County of Roane)			
County and State aforesaid, appe	ared April D. McMillan the foregoing instrume	to me pers	me, a Notary Public in and for the sonally known to be the same person cknowledged that he executed saids therein expressed.
WITNESS my hand and	scal the day and year las	st above giv	fen.
SEAL (
My Commission Expires:	COMMISSION E JUNE 12, 2002	XPIRES	}

Full name of fifth inventor:

Glen H. Kirby

Signature Llen H. Willy

Date 12/10/98

Residence:

Knoxville, Tennessee

Post Office Address:

1506 Fair Drive, Knoxville, Tennessee 37918

IL

State of Tennessee)
County of Roane Champaign

On this 10 Hoday of <u>ecenter</u>, 1998, before me, a Notary Public in and for the County and State aforesaid, appeared <u>Glen H. Kirby</u> to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.

Notary Public

SEAL

My Commission Expires:

"OFFICIAL SEAL"
PEGGY S. MEIER
Notary Public, State of Illinois
My Commission Exp. 05/06/2002