Form PTO-1595 (Rev. 08/05) OMB No. 0651-0027 (exp. 6/30/2008) 09 - 1	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office			
1033	08087 :uments or the new address(es) below.			
1. Name of conveying party(ies) James A. Richard	Name: See Attachment Internal Address: NASA Headquarters			
9-1-06	Internal Address: NASA Headquarters			
1-1-0%	mierrial Address. MASA Treatiquations			
Additional name(s) of conveying party(ies) attached? Yes X No				
3. Nature of conveyance/Execution Date(s):	Street Address: 300 E Street SW			
Execution Date(s) September 1, 2006	li			
X Assignment Merger	Other Weshington D.C.			
Security Agreement Change of Name	City: Washington, D.C.			
Joint Research Agreement	State:			
Government Interest Assignment	Country: USA Zip: 20546			
Executive Order 9424, Confirmatory License	21p. 200 10			
Other	Additional name(s) & address(es) attached? \square Yes X No			
4. Application or patent number(s):	document is being filed together with a new application.			
A. Patent Application No.(s)	B. Patent No.(s)			
Additional numbers att	tached? Yes XNo			
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
	involved:1			
concerning document should be mailed: Name: Jerry L. Seemann, NASA/Marshall Space Flight Center	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00			
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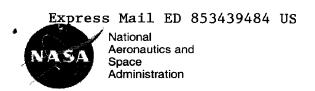
PATENT REEL: 018301 FRAME: 0770

Attachment to Form PTO - 1595 Recordation Form Cover Sheet

Name of Receiving Party:

United States of America as represented by the Administrator of the National Aeronautics and Space Administration

PATENT REEL: 018301 FRAME: 0771



(Inventor's Typed Name)

Assignment to the Government (by Government Employee)

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Magnetostrictive Valv	e Assembly			
James A. Richard				
MFS-32253-1	Application No.*:	Fili	ing Date*:	
ies to this Assignment a ter Government), as rep	and Agreement are the undersi presented by the Administrator	gned inventor(of the National	s) and the U I Aeronautics	nited States and Space
king of this Assignment	and Agreement is in accordance	e with 37 CFR	Part 501; a	nd
ersigned inventor(s) has above-entitled inventio	s (have) executed, on the date n.	(s) indicated be	elow, an app	lication for United
Government my (our) for as and possessions, and	ull and exclusive right in and to d my (our) entire right, title and	said invention interest in and	within the U to said appl	nited States of ication, and any
CFR 501.9(d), including ernment chooses not to ce with 37 CFR 501.9(d cable, royalty-free licens	rights of priority under the Inte file an application in any foreig), and such rights will be subje to in the invention with power to	ernational Conv gn country, I (w ct to the reserv o grant licenses	vention of Pa ve) may requivation to the s for all gove	ris (1883), as lest rights in that Government of a ernmental
c) to cooperate in any m	anner with the Government in	ent for, (b) to o	deliver any re the Governm	equested nent to protect any
I request the attorneys of the state of the			_	er and filing date
				ation Executed)
	1236 White Elephant Ro	ad, Grant, AL	35747	USA
ne)			- -	
	(Date Assignmen	t Executed)	(Date Application	ation Executed)
re)	(Mailing Address - Including	Country)		
	(Date Assignmen	l Executed)	(Date Applica	ation Executed)
	James A. Richard MFS-32253-1 James A. Richard MFS-32253-1 James A. Richard MFS-32253-1 James A. Richard MFS-32253-1 James A. Richard James J. James	Magnetostrictive Valve Assembly James A. Richard MFS-32253-1 Application No.*: ies to this Assignment and Agreement are the undersiter Government), as represented by the Administrator sting of this Assignment and Agreement is in accordance ersigned inventor(s) has (have) executed, on the date(a above-entitled invention. in consideration of employment by the Government, the Government my (our) full and exclusive right in and to is and possessions, and my (our) entire right, title and invation or divisional application(s) and any patent(s) that to the Government my (our) full and exclusive foreign CFR 501.9(d), including rights of priority under the Integerment chooses not to file an application in any foreign cable, royalty-free license in the invention with power to a foreign consultation of the Government, (a) to execute any document of such reservation will appear, where practicable, in the expense of the Government, (a) to execute any document of such reservation will appear, where practicable, in the invention with power to a foreign companies. It request the attorneys of record in the application to inform the application of information and Agreement. It request the attorneys of record in the application to inform the invention of t	Magnetostrictive Valve Assembly James A. Richard MFS-32253-1 Application No.*: Fill ies to this Assignment and Agreement are the undersigned inventor(ster Government), as represented by the Administrator of the National range of this Assignment and Agreement is in accordance with 37 CFF ersigned inventor(s) has (have) executed, on the date(s) indicated be above-entitled invention. In consideration of employment by the Government, the undersigne Government my (our) full and exclusive right in and to said invention is and possessions, and my (our) entire right, title and interest in and result in a consideration or divisional application(s) and any patent(s) that may issue the total total to the Government my (our) full and exclusive foreign rights in and total total total consideration or divisional application(s) and any patent(s) that may issue the consideration of the Government my (our) full and exclusive foreign rights in and consideration or divisional application in any foreign country, I (we with 37 CFR 501.9(d), including rights of priority under the International Consideration or divisional application in any foreign country, I (we with 37 CFR 501.9(d), and such rights will be subject to the reservable, royalty-free license in the invention with power to grant license of such reservation will appear, where practicable, in any foreign patence of the Government, (a) to execute any document for, (b) to cooperate in any manner with the Government in order to allow by this Assignment and Agreement. It request the attorneys of record in the application to insert the application of the Assignment Executed (Mailing Address - Including Country) (Date Assignment Executed) 1236 White Elephant Road, Grant, AL (Mailing Address - Including Country)	James A. Richard MFS-32253-1 Application No.*: Filing Date*: ies to this Assignment and Agreement are the undersigned inventor(s) and the Uter Government), as represented by the Administrator of the National Aeronautics and of this Assignment and Agreement is in accordance with 37 CFR Part 501; as ersigned inventor(s) has (have) executed, on the date(s) indicated below, an appeabove-entitled invention. In consideration of employment by the Government, the undersigned hereby: Government my (our) full and exclusive right in and to said invention within the Utes and possessions, and my (our) entire right, title and interest in and to said application or divisional application(s) and any patent(s) that may issue therefrom. If to the Government my (our) full and exclusive foreign rights in and to said inventor FR 501.9(d), including rights of priority under the International Convention of Paerment chooses not to file an application in any foreign country, I (we) may require with 37 CFR 501.9(d), and such rights will be subject to the reservation to the eable, royalty-free license in the invention with power to grant licenses for all gove of such reservation will appear, where practicable, in any foreign patent which me expense of the Government, (a) to execute any document for, (b) to deliver any receipt to cooperate in any manner with the Government in order to allow the Government of the Signment and Agreement. If request the attorneys of record in the application to insert the application number of the Assignment and Agreement. If request the attorneys of record in the application to insert the application number of the Assignment Executed) (Date Application (Date Application) (Date Assignment Executed) (Date Application)

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RECORDED: 09/01/2006 REEL: 018301 FRAME: 0772