PATENT

Practitioner's Docket No. LAR-16549-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

CORRECTED ASSIGNMENT (DOCUMENT) COVER SHEET (37 C.F.R. § 3.31)

Attached please find an assignment (document) for recordal.

IDENTIFICATION OF APPLICATION(S) AND/OR PATENT(S) FOR ASSIGNMENT (DOCUMENT) RECORDAL (37 C.F.R. § 3.21 and 37 C.F.R. § 3.31(a)(4))

- 1. This assignment is for the following patent application and/or issued patent:
 - a. National application: SN: 10/943,655, filed on September 8, 2004.

TOTAL NUMBER OF APPLICATIONS AND/OR PATENTS AND TOTAL FEE

- 2. A. The total number of applications and/or patents identified in this cover sheet is: 1.
 - B. The total fee is (37 C.F.R. Section 1.21(h)):

 $1 \times $40.00 = 40.00

C. Payment of fee is made by:

Authorization is hereby made to charge the amount of \$40.00 to Deposit Account No. 14-0116.

Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

Assignment (Document) Cover Sheet--page 1 of 3

NAME OF PARTIES CONVEYING INTEREST (37 C.F.R. § 3.31(a)(1))

3. The parties conveying interest are:

Robert W. Moses Estate of Robert L. Fox Richard L. Chattin Qamar A. Shams

Please note that because Robert L. Fox as named above is deceased, a "Signing by Administrators on Behalf of Deceased Inventor" is also attached.

NAME AND ADDRESS OF PARTY(IES) RECEIVING INTEREST (37 C.F.R. § (a)(2))

4. The rights are being conveyed to:

United States of America as represented by the Administrator of the National Aeronautics and Space Administration
Washington, DC 20546-0001 U.S.

DESCRIPTION OF INTEREST CONVEYED OR TRANSACTION RECORDED (37 C.F.R. § 3.31(a)(3))

5. The accompanying document intends to accomplish an assignment.

NAME AND ADDRESS OF PARTY TO WHOM CORRESPONDENCE SHOULD BE MAILED (37 C.F.R. § 3.31 (a)(5))

Please address correspondence to:

Name:

Robin W. Edwards

Address:

NASA Langley Research Center

MS 141

Hampton, VA 23681-2199

U.S.

Telephone No.:

757-864-3230

DATE ASSIGNMENT (DOCUMENT) EXECUTED (37 C.F.R. § 3.31(a)(7))

7. The attached assignment (document) was executed by Robert W. Moses on January 12, 2005. The attached assignment (document) was executed by Richard L. Chattin on January 11, 2005. The attached assignment (document) was executed by Qamar A. Shams on January 12, 2005. The attached "Signing by Administrators on Behalf of Deceased Inventor" was executed on January 5, 2005, by Melanie L. Fox and Christopher L. Fox.

Assignment (Document) Cover Sheet--page 2 of 3

LANGUAGE OF ASSIGNMENT (DOCUMENT) TO BE RECORDED

8. The attached document is in the English language.

ORIGINAL DOCUMENT OR TRUE COPY SUBMITTED

9. Submitted herewith is the original document.

STATEMENT (37 C.F.R. § 3.31(a)(9)) AND SIGNATURE (37 C.F.R. § 3.31(a)(10))

To the best of my knowledge and belief, the foregoing information is true and correct and any 10. attached copy is a true copy of the original document.

Robin W. Edwards

Robin W. Edwards Registration No. 39,179

NASA Langley Research Center

MS 141

Hampton, VA 23681-2199

U.S.

757-864-3230

Customer No. 23351

TOTAL NUMBER OF PAGES BEING SUBMITTED

The total number of pages being submitted, including documents is: 7 11.

Assignment (Document) Cover Sheet--page 3 of 3

NAME OF PARTIES CONVEYING INTEREST (37 C.F.R. § 3.31(a)(1))

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5. The accompanying document intends to accomplish an assignment.

NAME AND ADDRESS OF PARTY TO WHOM CORRESPONDENCE SHOULD BE MAILED (37 C.F.R. § 3.31 (a)(5))

6. Please address correspondence to:

Name: Robin W. Edwards

Address: NASA Langley Research Center

MS 141

Hampton, VA 23681-2199

U.S.

Telephone No.: 757-864-3230

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Assignment (Document) Cover Sheet-page 2 of 3

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9. Submitted herewith is the original document.

STATEMENT (37 C.F.R. § 3.31(a)(9)) AND SIGNATURE (37 C.F.R. § 3.31(a)(10))

10. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Date: July 28, 2005

Robin W. Edwards
Registration No. 39,179

NASA Langley Research Center

MS 141

Hampton, VA 23681-2199

U.S.

757-864-3230

Customer No. 23351

TOTAL NUMBER OF PAGES BEING SUBMITTED

11. The total number of pages being submitted, including documents is: 7

23351

Patent Application



Assignment to the Government (by Government Employee)

Title of Invention:	System And Method	For Monitoring Pi	ezoelectric Material Pe	rformance	
Inventor(s):	Robert W. Moses, Ro	obert L. Fox, Richa	ırd L. Chattin, and Qar	nar A. Shams	
NASA Case No.:	LAR-16549-1	Application No.*:	10/943,655	Filing Date*:	09/08/2004
WHEREAS, the part Government (hereaft Administration;	ies to this Assignment er Gove rnmen t), as re	and Agreement ar presented by the A	e the undersigned invended invended invended in the Na	entor(s) and the Ur tional Aeronautics	nited States and Space
WHEREAS, the mak	ing of this Assignmen	t and Agreement is	in accordance with 37	CFR Part 501; ar	d
WHEREAS, the undo	ersigned inventor(s) ha above-entitled inventi	as (have) executed on,	, on the date(s) indicat	ed below, an appl	cation for United
Assign to the America, its territorie	Government my (our) is and possessions, ar	full and exclusive r nd my (our) entire r	Sovemment, the under ight in and to said inve- ight, title and interest in y patent(s) that may is	intion within the Ui n and to said appli	nited States of cation, and any
with 37 CFR 501.9(d Government choose: accordance with 37 0 irrevocable, royalty-fi), including rights of pr s not to file an applicat CFR 501.9(d), and suc ree license in the inver	riority under the Inti- tion in any foreign o th rights will be sub- ntion with power to	clusive foreign rights in ernational Convention country, I (we) may req ject to the reservation grant licenses for all g n patent which may iss	of Paris (1883), as uest rights in that to the Governmer overnmental purp	amended. If the country, in t of a nonexclusive, pses. The terms of
information to, and (d	expense of the Govern to to cooperate in any this Assignment and	manner with the G	te any document for, (overnment in order to a	b) to deliver any re allow the Governm	equested ent to protect any
*4. Authorize and above when required		of record in the ap	plication to insert the	application numbe	r and filing date
Nolente	W Moses		1/12/05		
(Signature of Inventor)		(Di	ete Assignment Executed,	(Date Applica	tion Executed)
Robert W. Moses		113 Thoma	s Road, Seaford, VA 2	23696	
(Inventor's Typed Name	9)	(Malling Addi	ess - Including Country)		
(Signature of Inventor)		<u> (Di</u>	ate Assignment Executed,) (Date Applica	tion Executed)
Estate of Robert L. F	Fox				
(Inventor's Typed Name		(Mailing Addı	ess - Including Country)		
Pin	101	, -	1/11/05		
(Signature of Inventor)	<u> </u>		ite Assignment Executed)	(Date Applica	tion Executed)
Richard L. Chattin		1	ood Drive, Newport No		
(Inventor's Typed Name	9)		ess - Including Country)	-, <u>-, -, </u>	_

NASA FORM 430 DEC 2000 PREVIOUS EDITIONS ARE OBSOLETE.

PATENT

National Aeronautics and Space Administration Patent Application

Assignment to the Government (by Government Employee)

		(by Gover	nment Empi	loyee)		
Title of Invention:	System And Method	For Monitoring Pi	ezoele ctric Materia	l Performa	ınce	
Inventor(s):	Robert W. Moses, R	obert L. Fox, Rich	ard L. Chattin, and	Qamar A.	Shams	
NASA Case No.:	LAR-16549-1	Application No.*:	10/943,655	Filin	g Date*:	09/08/2004
WHEREAS, the par Government (herea Administration;	ties to this Assignmen fter Government), as r	t and Agreement at epresented by the <i>i</i>	re the undersigned Administrator of the	inventor(s) National /) and the l Aeronautic	Inited States s and Space
WHEREAS, the ma	king of this Assignmer	nt and Agreement is	s in accordance with	1 37 CFR I	Part 501; a	and
WHEREAS, the und States Patent on the	dersigned inventor(s) h e above-entitled invent	as (have) executed ion.	d, on the date(s) ind	licated bel	ow, an app	olication for United
1. Assign to the America, its territori	i, in consideration of e Government my (our) es and possessions, a nuation or divisional a	i full and exclusive i ind my (our) entire i	right in and to said i right, title and inters	invention v est in and t	vithin the l o said app	United States of dication, and any
with 37 CFR 501.9(Government choose accordance with 37 rrevocable, royalty-	nt to the Government r d), including rights of p es not to file an applica CFR 501.9(d), and su free license in the inve I appear, where practi	priority under the Interior in any foreign ch rights will be sub ention with power to	ternational Convent country, I (we) may oject to the reservat grant licenses for a	ion of Pari request ri tion to the all governr	s (1883), a ghts in tha Governma nental pur	as amended. If the it country, in ent of a nonexclusive, poses. The terms of
information to, and i	expense of the Gover (c) to cooperate in any by this Assignment an	manner with the G	ute any document fo overnment in order	or, (b) to de to allow th	eliver any ne Governi	requested ment to protect any
*4. Authorize an above when require	d request the attorney d.	s of record in the a	oplication to insert t	he applica	tion numb	er and filing date
						•
(Signature of Inventor))		ete Assignment Execu	uted)	(Date Appli	cation Executed)
Robert W. Moses		113 Thoma	as Road, Seaford, V	A 23696		
(Inventor's Typed Nan אינום העבל שטיי	10) parministrate	(Mailing Add	ress - Including Count 505	try)		
(Signature of Inventor)	- v. d. hala te (1551 1761 2 75-	(D	ate Assignment Execu		(Date Applic	cation Executed)
Estate of Robert L.	Fox	1592 Flem VA . 23	ing Road Hage	·,		
 (Inventor's Typed Nan			ress - Including Count	try)		

(Date Assignment Executed)

205 Nicewood Drive, Newport News, VA 23602

(Inventor's Typed Name) (Mailing Address - Including Country)

NASA FORM 430 DEC 2000 PREVIOUS EDITIONS ARE OBSOLETE.

(Signature of Inventor)

Richard L. Chattin

PATENT

(Date Application Executed)

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Title of Invention: System.	And Method For Monitoring Piezoelectric Material Performance
Inventor(s): Robert 1	W. Moses, Robert L. Fox, Richard L. Chattin, and Qamar A. Shams
NASA Case No.: LAR-16	549-1 Application No.*: 10/943,655 Filing Date*: 09/08/2004
2. A. Shau	us <u>01/12/05</u>
(Signature of Inventor)	(Dete Assignment Executed) (Date Application Executed)
Qamar Al. Shams	301 Robinhood Drive, Yorktown, VA 23693
(Inventor's Typed Name)	(Mailing Address - Including Country)
(Signature of Inventor)	(Date Assignment Executed) (Date Application Executed)
(Inventor's Typed Name)	(Mailing Address - Including Country)
(Signature of Inventor)	(Date Assignment Executed) (Date Application Executed)
(Inventor's Typed Name)	(Mailing Address - Including Country)
(Signature of Inventor)	(Date Assignment Executed) (Date Application Executed)
(Inventor's Typed Name)	(Mailing Address - Including Country)
(Signature of Inventor)	(Date Assignment Executed) (Date Application Executed)
(Inventor's Typed Name)	(Mailing Address - Including Country)
(Signature of Inventor)	(Date Assignment Executed) (Date Application Executed)
(Inventor's Typed Name)	(Mailing Address - Including Country)

23351

Practitioner's Docket No. LAR 16549-1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Robert W. Moses, Robert L. Fox, Richard L. Chattin, and Qamar A Shams

Application No.: 10/943,655 Filed: September 8, 2004

For: Sys tem And Method For Monitoring Piezoelectric Material Performance

SIGNING BY ADMINISTRATORS ON BEHALF OF DECEASED INVENTOR (37 CFR 1.42 and 1.43)

I, Christopher L. Fox, hereby declare that I am a citizen of the United States, residing at 318 Hornsbyville Road, Yorktown, VA 23692, and that I am executing and signing the assignment to the government to which this is attached as the administrator of:

the Estate of Robert L. Fox, deceased.

• •	those facts that the inventor is required to state.
Date:/_ 07 - 05	Christopher L. Fox, Administrator

I, Melanie L. Fox, hereby declare that I am a citizen of the United States, residing at 1886 Blakes Cove Lane, Hayes, VA 23072, and that I am executing and signing the declaration to which this is attached as the administrator of:

the Estate of Robert L. Fox, deceased.

That, upon information and belief, I aver those facts that the inventor is required to state.

Date: 1/5/05	mulanie d. Jox, Administrator_
	Melanie L. Fox, Administrator

PATENT REEL: 016579 FRAME: 0132 Practitioner's Docket No. LAR 16549-1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Assignment Services Division P.O. Box 1450 Alexandria, VA 22313-1450

RESUBMISSION OF ASSIGNMENT PAPERS REFUSED FOR RECORDAL (37 C.F.R. § 3.51)

- 1. The PTO has sent a letter to the applicant stating that the Cover Sheet submitted did not provide complete information required for recording. A copy of the PTO letter is attached.
- 2. The document ID number referenced in the PTO letter dated June 17, 2005 is 102922619A.
- 3. The term for resubmission of the papers set in the PTO letter expired on July 16, 2005; accordingly, kindly charge the deposit account as identified in the Assignment Cover Sheet.
- 4. Applicant resubmits the papers refused recordal with the necessary corrections and/or omissions entered on the papers and with new appropriate papers added.
- 5. The following documents are enclosed:

Resubmission of Assignment Papers Refused for Recordal - 2 pages PTO Letter dated June 17, 2005 - 2 pages Corrected Assignment (Document) Cover Sheet - 3 pages (2 copies) Copy of Original Assignment of Invention - 4 pages

6. Recordal is now respectfully requested.

July 28, 2005

Date

Robin W. Edwards
Robin W. Edwards

Registration No. 39,179 NASA Langley Research Center Mail Stop 141 Hampton, VA 23681-2199 757-864-3230

Customer No. 23351

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. § 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

□ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Mail Stop Assignment Services Division, P.O. Box 1450, Alexandria, VA 22313-1450.

FACSIMILE

x transmitted by facsimile to the Patent and Trademark Office,

(703) <u>3</u>06-5995.

Signature

Date: July 28, 2005

Elaine C. McMahon

Practitioner's Docket No. LAR-16549-1

PATENT

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CORRECTED ASSIGNMENT (DOCUMENT) COVER SHEET (37 C.F.R. § 3.31)

Attached please find an assignment (document) for recordal.

IDENTIFICATION OF APPLICATION(S) AND/OR PATENT(S) FOR ASSIGNMENT (DOCUMENT) RECORDAL (37 C.F.R. § 3.21 and 37 C.F.R. § 3.31(a)(4))

- 1. This assignment is for the following patent application and/or issued patent:
 - a. National application: SN: 10/943,655, filed on September 8, 2004.

TOTAL NUMBER OF APPLICATIONS AND/OR PATENTS AND TOTAL FEE

- 2. A. The total number of applications and/or patents identified in this cover sheet is: 1.
 - B. The total fee is (37 C.F.R. Section 1.21(h)):

$$1 \times $40.00 = $40.00$$

C. Payment of fee is made by:

Authorization is hereby made to charge the amount of \$40.00 to Deposit Account No. 14-0116.

Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

351

Assignment (Document) Cover Sheet--page 1 of 3

RECORDED: 07/28/2005

{L0025297;1 }