502790113 04/30/2014

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL S. LARSEN	05/30/2013
HENRY C. ABBINK	05/30/2013
THAD G. WALKER	04/09/2014
MICHAEL D. BULATOWICZ	05/30/2013

RECEIVING PARTY DATA

Name:	NORTHROP GRUMMAN SYSTEMS CORPORATION	
Street Address:	1300 EAST NINTH STREET, SUITE 1700	
City:	CLEVELAND	
State/Country:	ОНЮ	
Postal Code:	44114	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13907293

CORRESPONDENCE DATA

Fax Number: (216)621-4072

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US Mail.

Phone: 216-621-2234
Email: rkline@tarolli.com

Correspondent Name: TAROLLI, SUNDHEIM, COVELL & TUMMINO LLP

Address Line 1: 1300 EAST NINTH STREET, SUITE 1700

Address Line 2: CHRISTOPHER P. HARRIS
Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	NG(NSD)021372 US ORD
NAME OF SUBMITTER:	CHRISTOPHER P. HARRIS
SIGNATURE:	/Christopher P Harris/
DATE SIGNED:	04/30/2014

Total Attachments: 4

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PATENT 502790113 REEL: 032792 FRAME: 0782

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ASSIGNMENT

WHEREAS, I, Michael S. Larsen, together with Henry C. Abbink, Thad G. Walker and Michael D. Bulatowicz, hereinafter referred to as Assignor have jointly invented certain new and useful improvements in NUCLEAR MAGNETIC RESONANCE PROBE SYSTEM, described in an application for United States Letters Patent, executed by me on the date as stated below;

WHEREAS, Northrop Grumman Systems Corporation, a Delaware corporation, having its principal place of business at 2980 Fairview Park Drive, Falls Church, VA 22042-4511, United States of America, hereinafter referred to as Assignee, is desirous of acquiring the entire right, title and interest in, to and under said improvements and said application:

NOW, THEREFORE, in consideration of Assignor's obligations to Northrop Grumman Systems Corporation, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, Assignor's entire right, title and interest in, to and under said improvements, and said application and all divisions, renewals, continuations, and continuations-in-part thereof, and all United States Letters patent that may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent that may hereafter be filed for said improvements in any country or countries foreign to the United States, including the full right to claim for any such application the priority benefits of the International Convention for the Protection of Industrial Property and other priority-conferring treaties, and all Letters Patent that may be granted for said improvements in any country or countries foreign to the United States and all extensions, divisions, continuations, continuations-in-part, renewals and reissues thereof; and Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to said Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument;

Assignor hereby acknowledges that at the time of making the improvements herein identified, Assignor was under an obligation to assign to Assignee, Assignor's entire right, title and interest in, to and under said improvements;

Assignor hereby covenants that Assignor has full right to convey the interest herein assigned, and that Assignor has not executed, and will not execute, any agreement in conflict herewith and that Assignee, Northrop Grumman Systems Corporation, its successors, assigns and other legal representatives shall have the right to hold and enjoy for its and their own use and benefit, to the end of the term or terms for which such Letters Patent shall or may be granted, reissued or extended as fully and completely as the same right could have been held and enjoyed by Assignor had this Assignment not been made.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

LAURA LEIGH SAGE
Commission # 1865568
Notary Public - California
Los Angeles County
My Comm. Expires Oct 17, 2013

(SEAL)

11-11	s executed and delivered this instrument this 30th day of enced patent application on the 30th day of
	HENRY CARRINK
STATE OF CALIFORNIA)	TIETAL OF THE STATE
COUNTY OF LOS AWCELES) SS	
subscribed to this instrument and acknowledged to r	personally appeared the factory evidence to be the person(s) whose name(s) is factory evidence to be the person(s) whose name(s) is fare that he/she/they executed the same in his/her/their authorized in the instrument to be the person(s), or the entity upon behalf of
I certify under PENALTY OF PERJURY under the la correct.	ws of the State of California that the foregoing paragraph is true and
WITNESS my hand and official seal.	
Lune Lich Suge	LAURA LEIGH SAGE
Notary's Signature	Commission # 1865568 Notary Public - California Los Angeles County My Comm. Expires Oct 17, 2013
	s executed and delivered this instrument this day of enced patent application on the day of
	THAD G. WALKER
STATE OF CALIFORNIA)	
COUNTY OF) ss	
subscribed to this instrument and acknowledged to	tisfactory evidence to be the person(s) whose name(s) is/are me that he/she/they executed the same in his/her/their authorized in the instrument to be the person(s), or the entity upon behalf of
I certify under PENALTY OF PERJURY under the la correct.	ws of the State of California that the foregoing paragraph is true and
WITNESS my hand and official seal.	
Notary's Signature	(SEAL)

NG(NSD)021372	US	ORD
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IN WITNESS WHEREOF, the undersigned has executed the, 2014.	executed and delivered this instrument this referenced patent application on the	day of day of
STATE OF CALIFORNIA) ss	HENRY C. ABBINK	MATERIAL A
On before me, HENRY C. ABBINK, proved to me on the basis of sa subscribed to this instrument and acknowledged to me capacity(ies), and that by his/her/their signature(s) on the which the person(s) acted, executed the instrument.		
certify under PENALTY OF PERJURY under the laws of correct.	f the State of California that the foregoing paragraph	n is true and
WITNESS my hand and official seal.		
Notary's Signature	(SEAL)	
IN WITNESS WHEREOF, the undersigned has executed the 2014, and has executed the 2014.	xecuted and delivered this instrument this referenced parent application on the THAD G. WALKER	day of day of
Only Of Only before me, The Country Of Count	istactory evidence to be the person(s) whose name that he/she/they executed the same in highwath air	المستحدث والمستحدث
certify under PENALTY OF PERJURY under the laws of correct.	the State of Wisconsin that the foregoing paragraph	is true and
Notary's Signature	NOTARY PUBLIC OF WISCONS	
	exp: June 19,2014	

IN WITNESS WHEREOF, the undersigned has executed and delivered this instrument this
MICHAEL D. BÜLATOWICZ
STATE OF CALIFORNIA)
COUNTY OF LOS ANCELES) SS
On MAY 30, 2013 before me, MUALEIN SALE NOTALY Public, personally appeared MICHAEL D. BULATOWICZ, proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument and acknowledged to me that he/she/they executed the same in his/ber/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.
Laure Leigh Ege
Notary's Signature (SEAL)
LAURA LEIGH SAGE Commission # 1865568 Notary Public - California Los Angeles County My Comm. Expires Oct 17, 2013

PATENT REEL: 032792 FRAME: 0787

RECORDED: 04/30/2014