# PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date	
Louis V. Dusang Jr.	07/21/2008	
Jeffrey B. Roberts	08/08/2008	

# **RECEIVING PARTY DATA**

Name:	Northrop Grumman Ship Systems, Inc.		
Street Address:	1840 Century Park East		
City:	Los Angeles		
State/Country:	CALIFORNIA		
Postal Code:	90067-2199		

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12245180

# **CORRESPONDENCE DATA**

Fax Number: (704)444-1111

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 704-444-1000

Email: grace.rippy@alston.com

Correspondent Name: Timothy J. Balts
Address Line 1: 101 S. Tryon Street

Address Line 4: Charlotte, NORTH CAROLINA 28280

ATTORNEY DOCKET NUMBER:	034726/346630

NAME OF SUBMITTER: Nathaniel T. Quirk

Total Attachments: 4

source=346630\_Assignment#page1.tif source=346630\_Assignment#page2.tif source=346630\_Assignment#page3.tif

PATENT REEL: 021633 FRAME: 0011 \$40.00

500666420

source=346630\_Assignment#page4.tif

PATENT REEL: 021633 FRAME: 0012

#### **ASSIGNMENT**

WHEREAS, I, Louis V. Dusang, Jr., hereinafter referred to as Assignor have invented certain new and useful improvements METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR FAULT PROTECTION described in provisional application for United States Letters Patent, Application No. 61/081196, filed on July 16, 2008, and described in non-provisional application for United States Letters Patent, Application No. 12/245, 180 filed on 10/03/2008, executed by me/us on the date as stated below; (We hereby authorize and request the Assignee and its Attorney (Alston & Bird LLP) to insert above the application number and filing date of said non-provisional application when known.)

WHEREAS, Northrop Grumman Ship Systems, Inc., a Delaware corporation, having its principal place of business at 1840 Century Park East, Los Angeles, CA 90067-2199, 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 Ship Systems, Inc., and for other good and valuable consideration, the receipt and sufficiency 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, nonprovisionals, continuations, and continuations-in-part thereof, and all United States Letters patent which may be granted thereon and all reissues, reexaminations, and extensions thereof, and all applications for Letters Patent which 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 which 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, nonprovisionals, 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 or could have been held and enjoyed by Assignor had this Assignment not been made.

Assignor hereby further covenants and agrees to communicate to Assignee, its successors, legal representatives and assigns, any and all facts known to Assignor respecting said improvements; to promptly provide Assignor with all documents relating to said improvements, said invention, and said Letters Patent as may be known or accessible to Assignor; to testify as to the same in any interference or litigation or other legal proceedings related thereto; to sign all lawful papers, execute all extensions, continuations, continuations-in-part, divisional and reissue applications; and to make all rightful oaths or declarations and generally do everything possible to aid Assignee, its successors, legal representatives and assigns in obtaining and enforcing all the rights herein conveyed for said improvements in all countries without further compensation, but at the expense of Assignee, its successors, legal representatives and assigns.

IN WITNESS WHEREOF,	the undersigned has executed and delivered this instrument this , 2008, and has executed the referenced patent application on the
21St day of July	, 2008.
Jour VD	Dn
STATE OF MISSISSI DOI	V. Dúsang, Jr.

PATENT REEL: 021633 FRAME: 0013

COUNTY OF Jackson Louis V. Dusang, JR. before me, Louis V. Dusang, Jr., 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 this instrument and acknowledge 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 to be the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my name of the control of th WITNESS my hand and official seal

> **PATENT** REEL: 021633 FRAME: 0014

, personally appeared

#### **ASSIGNMENT**

WHEREAS, I, Jeffrey B. Roberts, hereinafter referred to as Assignor have invented certain new and useful improvements METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR FAULT PROTECTION described in provisional application for United States Letters Patent, Application No. 61/081196, filed on July 16, 2008, and described in non-provisional application for United States Letters Patent, Application No. 12/245, 180 filed on 10/03/2008 which claims priority to provisional application 61/081196, executed by me/us on the date as stated below; (We hereby authorize and request the Assignee and its Attorney (Alston & Bird LLP) to insert above the application number and filing date of said non-provisional application when known.)

WHEREAS, Northrop Grumman Ship Systems, Inc., a Delaware corporation, having its principal place of business at 1840 Century Park East, Los Angeles, CA 90067-2199, 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 the sum of one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency 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, nonprovisionals, continuations, and continuations-in-part thereof, and all United States Letters patent which may be granted thereon and all reissues, reexaminations, and extensions thereof, and all applications for Letters Patent which 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 which 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, nonprovisionals 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 or could have been held and enjoyed by Assignor had this Assignment not been made.

Assignor hereby further covenants and agrees to communicate to Assignee, its successors, legal representatives and assigns, any and all facts known to Assignor respecting said improvements; to promptly provide Assignor with all documents relating to said improvements, said invention, and said Letters Patent as may be known or accessible to Assignor; to testify as to the same in any interference or litigation or other legal proceedings related thereto; to sign all lawful papers, execute all extensions, continuations, continuations-in-part, divisional and reissue applications; and to make all rightful oaths or declarations and generally do everything possible to aid Assignee, its successors, legal representatives and assigns in obtaining and enforcing all the rights herein conveyed for said improvements in all countries without further compensation, but at the expense of Assignee, its successors, legal representatives and assigns.

> PATENT REEL: 021633 FRAME: 0015

STATE O	F _	4QI	-40	)	
COUNTY	OF	Ba	MEUZLIE	( )	88

On & August 2015 before me, ADAM (120MW1), personally appeared Jeffrey B. Roberts, personally known to me – or – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/ere subscribed to this instrument and acknowledge to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(e) on the instrument to be the person(e), or the entity upon behalf of which the person(e) acted, executed the instrument.

WITNESS my hand and official seal

Notary's Signature

(Seal) Commission Explus 8/2/2004

**PATENT** 

**REEL: 021633 FRAME: 0016**