

Form PTO-1595 (Rev. 03-11)  
OMB No. 0651-0027 (exp. 04/30/2015)

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

### RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

Northrop Grumman Systems Corporation  
2980 Fairview Park Drive  
Falls Church, VA 22042-4511  
United States of America

Additional name(s) of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**

Name: United States Government

Internal Address: NASA Goddard Space Flight Center

Street Address: 8800 Greenbelt Road

City: Greenbelt

State: Maryland

Country: US Zip 20771

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) November 15, 2013

- Assignment  Merger
- Security Agreement  Change of Name
- Joint Research Agreement
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other \_\_\_\_\_

**4. Application or patent number(s):**

This document is being filed together with a new application.

A. Patent Application No.(s)

14054267

B. Patent No.(s)

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Pam Keelan

Internal Address: P.O. Box 17319

MS A440

Street Address: \_\_\_\_\_

City: Baltimore

State: Maryland Zip: 21203

Phone Number: 410-765-4023

Docket Number: \_\_\_\_\_

Email Address: pamela.keelan@nsc.com

**6. Total number of applications and patents involved:** 1

**7. Total fee (37 CFR 1.21(h) & 3.41) \$** \_\_\_\_\_

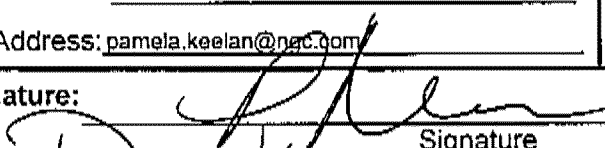
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

**8. Payment Information**

Deposit Account Number \_\_\_\_\_

Authorized User Name \_\_\_\_\_

**9. Signature:**

  
Signature  
Pam Keelan  
Name of Person Signing

6/18/14  
Date

Total number of pages including cover sheet, attachments, and documents:  2

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

**CONFIRMATORY LICENSE**

**APPLICATION FOR:** A Hybrid Loop Element Design for Enhanced High Frequency Reflector/Reflectarray Performance

**INVENTOR:** David SALL ; Gary L. KEMPIC ; Michael E. Cooley ; Thomas H. Hand

**SERIAL NO.:** 14054267

**FILING DATE:** 2013-10-15

**CONTRACT NO.:** NNG12PH43C

**CONTRACTING AGENCY:** NASA

The above identified pending United States patent application includes the invention identified and reported as invention disclosure titled A Hybrid Loop Element Design for Enhanced High Frequency Reflector/Reflectarray Performance, as a "Subject Invention" under the Patent Rights Clause included in Contract number NNG12PH43C. This document is confirmatory of the paid-up license granted to the Government under this contract in this invention, patent application and any resulting patent, and of all other rights acquired by the Government under the contract.

Signed this 15<sup>th</sup> day of November 2013

Northrop Grumman Systems Corporation

By:   
Tiffany McConnell

Title: Assistant Secretary

Business Address:

2980 Fairview Park Drive  
Falls Church, VA 22042-4511  
United States of America

(703) 280-2900

ES-Active