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1. Name of conveying party(ies)/Execution Date(s):

Michael J. Holmes
Scott W. Enserink
Jeffrey P. Long

Execution Date(s) April 24, 2003

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

2. Name and address of receiving party(ies)

Name: NORTHROP GRUMMAN CORPORATION

Internal Address: _____

Street Address: 1840 Century Park East

City: Los Angeles

State: CA

Country: USA Zip: 90067-2199

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

3. Nature of conveyance:

- Assignment Merger
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4. Application or patent number(s):

This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

19/422,083

Additional numbers attached? Yes No

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

Name: Patent Counsel

Internal Address: Northrop Grumman Space &

Mission Systems Corp.

Street Address: One Space Park, E1/2041

City: Redondo Beach

State: CA Zip: 90278

Phone Number: (310) 812-1534

Fax Number: _____

Email Address: _____

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

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Authorized User Name Noel F. Heal

9. Signature:

Noel F. Heal
Signature

September 23, 2004
Date

Noel F. Heal, Reg. No. 26,074

Name of Person Signing

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

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Docket No. 000299-804

ASSIGNMENT

For valuable consideration, the adequacy and receipt of which are hereby acknowledged, we Michael J. Holmes, Scott W. Enserink and Jeffrey P. Long, respectively of Long Beach, California, Long Beach, California, and Woburn, Massachusetts, do hereby sell and assign to Northrop Grumman Corporation, One Space Park, Redondo Beach, California, a Delaware corporation, its successors and assigns, the entire right, title and interest in and to the improvements in **EFFICIENT DECODING OF TRELLIS CODED MODULATION WAVEFORM** which has been invented by us, as described in the application for United States Patent which we executed respectively, on April 24, 2003, April 24, 2003, and _____, and any and all applications for patent and patents therefor in any and all countries, including all divisions, reissues, continuations, and extensions thereof, and the right to claim the priority date of the first filed application in the United States, and authorize and request any official whose duty it is to issue patents, to issue any patent on said improvements or resulting therefrom to said Northrop Grumman Corporation, or its successors or assigns, and agree that on request and without further consideration, but at the expense of Northrop Grumman Corporation, we will communicate to Northrop Grumman Corporation or its representatives or nominees any facts known to us respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and generally do everything possible to aid Northrop Grumman Corporation, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

April 24, 2003

Inventor:

M J Holmes

Michael J. Holmes

April 24, 2003

Inventor:

Scott W. Enserink

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Inventor:

Jeffrey P. Long

Docket No. 000299-804

April 24, 2003

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Jeffrey P. Long