


Form <b>PTO-1595</b> (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) Tab settings		<b>RECORDATION FORM COVER SHEET</b> <b>PATENTS ONLY</b>		U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.					
1. Name of conveying party(ies): Orbital Sciences Corporation 21839 Atlantic Boulevard Dulles, VA 20166  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			2. Name and address of receiving party(ies) Name: <u>Bank of America, N.A., as Administrative Agent</u>  Internal Address: _____  Street Address: <u>231 S. LaSalle Street</u>  City: <u>Chicago</u> State: <u>IL</u> Zip: <u>60697</u>  Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
3. Nature of conveyance: <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input checked="" type="checkbox"/> Other <u>Notice of Grant of Security Interest</u>  Execution Date: <u>July 10, 2003</u>			4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) _____ B. Patent No.(s) _____ <u>SEE ATTACHED SCHEDULE 1</u>  Additional numbers attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>Steven D. Thomas</u>  Internal Address: _____  Street Address: <u>Moore &amp; Van Allen PLLC</u> <u>2200 W. Main Street, Suite 800</u>  City: <u>Durham</u> State: <u>NC</u> Zip: <u>27705</u>			6. Total number of applications and patents involved: <u>28</u>  7. Total fee (37 CFR 3.41).....\$ <u>1,120.00</u> <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account  8. Deposit account number: <u>50-2316</u>		
DO NOT USE THIS SPACE					
9. Signature.  Steven D. Thomas Name of Person Signing   Signature  August 22, 2003 Date  Total number of pages including cover sheet, attachments, and documents: <u>5</u>					

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

CH \$1120.00 502316 6064319

Schedule 1  
Orbital Sciences Corporation  
U.S. Patents

Issued Patents

METHOD AND SYSTEM FOR REGULATING SWITCHING OF A TRAFFIC LIGHT	6064319	5/16/00
COMMUNICATION SYSTEM HANDOFF OPERATION COMBINING TURBO CODING AND SOFT HANDOFF TECHNIQUES	5978365	11/2/99
ASSET MONITORING SYSTEM AND ASSOCIATED METHOD	5917433	6/29/99
SYSTEM FOR TURBO-CODED SATELLITE DIGITAL AUDIO BROADCASTING	5907582	5/25/99
METHOD AND RECEIVER FOR CODED SATELLITE DIGITAL AUDIO BROADCASTING	5970085	10/19/99
METHOD AND SYSTEM FOR TURBO-CODED SATELLITE DIGITAL AUDIO BROADCASTING	6061387	5/9/00
BATTERY CHARGE CONTROL METHOD	5834923	11/10/98
SHEAR VISCOUS DAMPED HINGE	5546632	8/20/96
METHOD AND SYSTEM FOR FORMATION KEEPING BETWEEN ORBITING SPACECRAFT BY VARYING THEIR BALLISTIC COEFFICIENTS	5806801	9/15/98
SATELLITE HAVING A STACKABLE CONFIGURATION	5522569	6/4/96
SELF-DEPLOYING HELICAL STRUCTURE	5977932	11/2/99
AXIALLY ARRAYED HELICAL ANTENNA	5587719	12/24/96
METHOD FOR INJECTING PAYLOADS INTO ORBIT	5681011	10/28/97
FRANGIBLE JOINT SEPARATION SYSTEM	5390606	2/21/95
METHOD FOR MAKING AN EXPLOSIVE SEPARATION SYSTEM	5535502	7/16/96
METHOD AND APPARATUS FOR DEPLOYING A SATELLITE NETWORK	5199672	4/6/93
RELAY CONTROL ASSEMBLY	4939438	7/3/90
ROCKET-POWERED, AIR-DEPLOYED, LIFT-ASSISTED BOOSTER VEHICLE FOR ORBITAL, SUPRAORBITAL AND SUBORBITAL FLIGHT	4901949	2/20/90
MAJORITY VOTE SEQUENCER	4799140	1/17/89
PAD APPARATUS FOR SUPPORTING A PAYLOAD IN A CRADLE APPARATUS OF A SPACE VEHICLE	4789118	12/6/88
MOBILE BUILDUP APPARATUS FOR TRANSPORTING, SUPPORTING AND PROTECTING SPACE VEHICLE PAYLOADS	4771998	9/20/88
GPS TRIGGERED AUTOMATIC ANNUNCIATION FOR VEHICLES	5808565	9/15/98
DEPLOYABLE HELICAL ANTENNA	5721558	2/24/98
SELF-LATCHING HINGE	5715573	2/10/98
FLEXIBLE FEED LINE FOR AN ANTENNA SYSTEMS	5668565	9/16/97
VEHICLE TRACKING AND SECURITY SYSTEM	5223844	6/29/93
CRADLE APPARATUS FOR SUPPORTING PAYLOADS IN A SPACE VEHICLE	4776539	10/11/88
RECONFIGURABLE STANDARD SWITCH PANEL	4685029	8/4/87

NOTICE  
OF  
GRANT OF SECURITY INTEREST  
IN  
PATENTS

United States Patent and Trademark Office


Ladies and Gentlemen:

Please be advised that pursuant to the Security Agreement dated as of July 10, 2003 (the "Security Agreement") by and among the Grantors party thereto (each an "Grantor" and collectively, the "Grantors") and Bank of America, N.A., as Administrative Agent (the "Administrative Agent") for the holders of the Secured Obligations referenced therein, the undersigned Grantor has granted a continuing security interest in and continuing lien upon, the patents and patent applications set forth on Schedule 1 attached hereto to the Administrative Agent for the ratable benefit of the holders of the Secured Obligations.

The undersigned Grantor and the Administrative Agent, on behalf of the holders of the Secured Obligations, hereby acknowledge and agree that the security interest in the patents and patent applications set forth on Schedule 1 attached hereto (i) may only be terminated in accordance with the terms of the Security Agreement and (ii) is not to be construed as an assignment of any patent or patent application.

Very truly yours,

ORBITAL SCIENCES CORPORATION,  
a Delaware corporation

By:   
Name: Michael R. Williams  
Title: Senior Vice President and Treasurer

Acknowledged and Accepted:

BANK OF AMERICA, N.A., as Administrative Agent

By: \_\_\_\_\_  
Name: Michael Brashler  
Title: Senior Agency Officer

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a Delaware corporation

By: \_\_\_\_\_  
Name:  
Title:

Acknowledged and Accepted:

BANK OF AMERICA, N.A., as Administrative Agent

By:   
Name: Michael Brashler  
Title: Senior Agency Officer

## Schedule 1

## Orbital Sciences Corporation

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