

11-25-2005

Form PTO-1595 (Rev. 07/05)  
OMB No. 0651-0027 (exp. 6/30/2008)U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office103125127  
**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)**James R. Butterworth  
Milton E. Studt II  
Joseph SantoruAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) November 8, 2005; November 14, 2005

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

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

Name: The DIRECTV Group, Inc.

Internal Address: P. O. Box 956

Street Address: 2250 E. Imperial Highway

City: El Segundo

State: California

Country: US Zip: 90245

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

Additional numbers attached? ☐ Yes ☐ No**5. Name and address to whom correspondence concerning document should be mailed:**

Name: The DIRECTV Group, Inc.

Internal Address: RE/R11/A109, P. O. Box 956

Street Address: 2250 E. Imperial Highway

City: El Segundo

State: California Zip: 90245

Phone Number: (310) 964-4615

Fax Number: (310) 964-0941

Email Address: gsrunebach@directv.com

**6. Total number of applications and patents involved: One (1)****7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40**

- ☐ Authorized to be charged by credit card  
☒ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

**8. Payment Information**a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 50-0383

Authorized User Name Georgann S. Grunebach

**9. Signature:**

Signature

November 15, 2005

Date

Georgann S. Grunebach, Reg. No. 33,179

Name of Person Signing

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

4

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

11/23/2005 ECOOPER 00000076 500363 11274771

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**PATENT**  
**REEL: 017259 FRAME: 0741**112919 U.S. PTO  
11/274771



## ASSIGNMENT

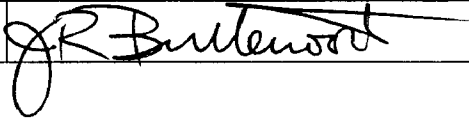
Page 1 of 3  
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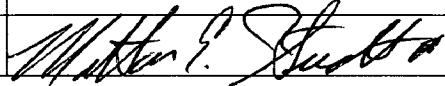
WHEREAS, JAMES R. BUTTERWORTH, MILTON E. STUDT II and JOSEPH SANTORU, as below named joint inventors of the city and state as stated below next to our names, have invented a(an) **ANTENNA POINTING AID** for which application for Letters Patent of the United States has been executed by us on this day, or (if the following is completed) filed on \_\_\_\_\_ as Serial No. \_\_\_\_\_;

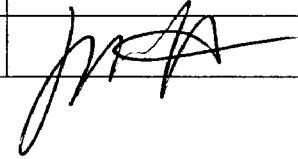
WHEREAS, The DIRECTV Group, Inc. (hereinafter referred to as the "Company"), a Delaware Corporation, having its principal place of business in El Segundo, California, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefore in the United States and throughout the world;

NOW, THEREFORE, in consideration of the obligations voluntarily assumed by us and set forth in invention agreements between us and our employer, effective the date as stated below next to our names, and other good and valuable consideration, receipt of which is hereby acknowledged, we do hereby sell, assign and transfer to the Company, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by us, to said application and any and all applications which are continuations, continuations-in- part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefore in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said Company, its successors, assigns or other legal representatives; covenant that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer; and agree to communicate to the Company, its successors, assigns or other legal representatives, upon request and at no cost or expense to us, any facts known by us respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by the Company, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said Letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of the Company, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining -to said invention, and any and all of said Letters Patent and the title thereto in the Company, its successors, assigns or other legal representatives.

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
JAMES R. BUTTERWORTH RESIDENT (CITY AND STATE)  Rancho Palos Verdes, California		11/8/05

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
MILTON E. STUDD II RESIDENT (CITY AND STATE)  Seal Beach, California		11/14/05

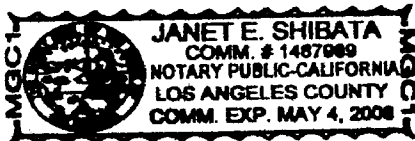
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
JOSEPH SANTORU RESIDENT (CITY AND STATE)  Agoura Hills, California		11/8/05

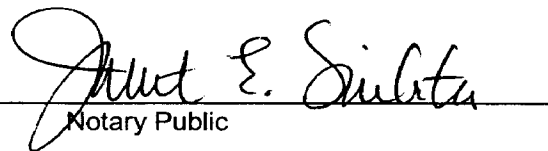
STATE OF CALIFORNIA     )  
                                      )  
COUNTY OF LOS ANGELES    )     SS:

On November 8, 2005, before me, JANET E. SHIBATA, a Notary Public in and for said State, personally appeared: JAMES R. BUTTERWORTH and JOSEPH SANTORU

☒ 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 the within instrument and acknowledged 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 the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



  
Notary Public