

Form PTO-1595 (Rev. 07/05)
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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)

Kesse Ho

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

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

Execution Date(s) October 13, 2006

- ☒ 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: 2230 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)

11/546,689

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: CA/LA1/A109, P. O. Box 956

Street Address: 2230 E. Imperial Highway

City: El Segundo

State: California Zip: 90245

Phone Number: 310-964-4615

Fax Number: 310-964-0941

Email Address: gsgrunebach@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)

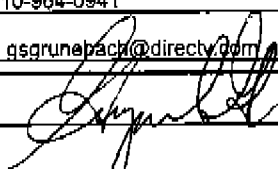
8. Payment Information

a. Credit Card Last 4 Numbers _____
 Expiration Date _____

b. Deposit Account Number 50-0383

Authorized User Name Georgann S. Grunebach

9. Signature:



Signature

November 8, 2006

Date

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

Name of Person Signing

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

3

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

Customer No. 020991

**THEDIRECTVGROUP****ASSIGNMENT**Page 1 of 2
PD-205059


WHEREAS, I, KESSE HO, as below named sole inventor, of the city and state as stated below next to my name, have invented a(an) **DYNAMIC CURRENT SHARING IN KA/KU LNB DESIGN** for which application for Letters Patent of the United States has been executed by me on this day, or (if the following is completed) filed on October 12, 2006 as Serial No. 11/546,689 ; and which application claims benefit of U.S. provisional application with Serial No. 60/726,149 filed on October 12, 2005.

WHEREAS, The **DIRECTV Group, Inc.**, (hereinafter referred to as **DIRECTV**), 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 me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign and transfer to **DIRECTV**, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, 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 therefor 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 **DIRECTV**, 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 **DIRECTV**, its successors, assigns or other legal representatives, upon request and at no cost or expense to me, any facts known by me 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 **DIRECTV**, 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 **DIRECTV**, 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 **DIRECTV**, its successors, assigns or other legal representatives.

ASSIGNMENT
Page 2 of 2
PD-205059

IN WITNESS WHEREOF, I have executed this instrument.

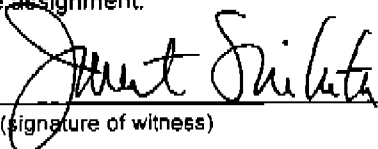
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
KESSE HO		10/13/06
RESIDENCE (CITY AND STATE)		
Westminster, California		

STATEMENT BY WITNESS

I, JANET SHIBATA, whose full post office address is
(name of witness)

2230 E. Imperial Highway, El Segundo, California 90245 was personally present and did see
(address of witness)

KESSE HO, who is known to me, execute the above assignment.


(signature of witness)

FAX COVER SHEET

PLEASE CONFIRM RECEIPT OF THIS FACSIMILE



Attention:	MAIL STOP ASSIGNMENT RECORDATION SERVICES United States Patent and Trademark Office	Facsimile No.	571-273-0140
Pages:	Cover + 1 + 2 = 4	Date:	November 8, 2006
From:	Georgann S. Grunebach Reg. No. 33,179	Facsimile No.	310-964-0941
		Telephone No.	310-964-4615

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Signature)  November 8, 2006
Georgann S. Grunebach, Reg. No. 33,179 (Date of
(Printed Name of Depositor)

Attention: Commissioner for Patents, Mail Stop Assignment Recordation Services

Please find attached Re:

Attorney Docket No. PD-205059

Serial No.: 11/546,689

Filing Date: October 12, 2006

- ASSIGNMENT RECORDATION FORM COVER SHEET (1 page)
- ASSIGNMENT (2 pages)

If you do not receive all pages, or pages are not clear, please call Karen Lum at (310) 964-0735.

The DIRECTV Group, Inc., CA/LA1/A109, P.O. Box 956, 2230 E. Imperial Highway
El Segundo, CA 90245-0956

RECORDED: 11/08/2006

PATENT
REEL: 018501 FRAME: 0155