

Form PTO-1595 (Rev. 03/05)  
OMB No. 20651-0027 (exp. 03/30/2005)

9/12/05

09-16-2005



DEPARTMENT OF COMMERCE  
Patent and Trademark Office

RECORDABLE

PATENT 103083112

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)**

- (1) Jaifu Luo
- (2) Rajagopal Sundararaman
- (3) Mehmet Ali Tan

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

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

Execution Date(s) 02 September 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: ESS Technology, Inc.

Internal Address: \_\_\_\_\_

Street Address: 48401 Fremont Boulevard

City: Fremont

State: California

Country: United States Zip: 94538

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)

U.S. Application No. 11/155,296

B. Patent No.(s)

Additional numbers attached?  Yes  No

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

Name: Haynes Beffel & Wolfeld LLP

Internal Address: \_\_\_\_\_

Street Address: P.O. Box 366

City: Half Moon Bay

State: California Zip: 94019

Phone Number: (650) 712-0340

Fax Number: (650) 712-0263

Email Address: \_\_\_\_\_

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

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

- 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 4600  
Expiration Date 05/08

b. Deposit Account Number \_\_\_\_\_

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

**9. Signature:**

*Ernest J. Beffel, Jr.*  
Signature

9 September 2005  
Date

Ernest J. Beffel, Jr.  
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 (703) 306-5995, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

09/13/2005 00000032 11155296  
40.00 08  
1209:31 01 FC:8021

**JOINT TO CORPORATE  
ASSIGNMENT**

WHEREAS, the undersigned,

(1) Jaifu Luo  
22 Parasol  
Irvine, CA 92620  
U.S.A.

(2) Rajagopal Sundararaman  
26552 San Torini  
Mission Viejo, CA 92692  
U.S.A.

(3) Mehmet Ali Tan  
252 Greenmoor  
Irvine, CA 92614  
U.S.A.

hereinafter termed "Inventors", have invented certain new and useful improvements in

**MULTI-STATE AMPLIFIER WITH SWITCHING CIRCUITRY**

and have filed an application for a United States patent disclosing and identifying the above invention on 17 June 2005 as Application No. 11/155,296, OR are filing such an application herewith, and have executed an oath or declaration of inventorship for such application on:

(1) the 2<sup>nd</sup> day of September, 2005;

(2) the 2<sup>nd</sup> day of September, 2005;

(3) the 2<sup>nd</sup> day of September, 2005;

(hereinafter termed "applications"); and

WHEREAS, **ESS Technology, Inc.**, a corporation of California, having a place of business at 48401 Fremont Boulevard, Fremont, CA 94538 (hereinafter termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said applications and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventor (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventors to have been received in full from said Assignee:

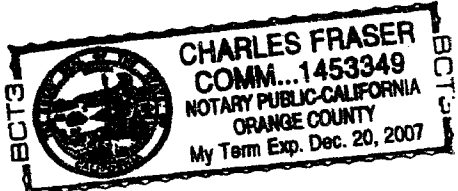
1. Said Inventors do hereby jointly and severally sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said applications and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any

and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.

2. Said Inventors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventor in providing such cooperation shall be paid for by said Assignee.

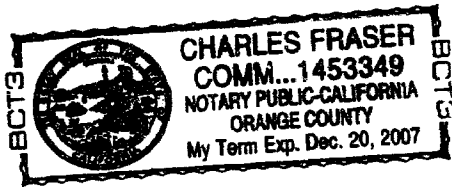
3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, the inventors' respective heirs, legal representatives and assigns.

4. Said Inventors hereby warrant and represent that said inventors have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

<p><u><i>Jaifu Luo</i></u> Jaifu Luo</p> <p><u>Sept. 2, 2005</u> Date</p> 	<p>State of California ) County of <u>Orange</u> )</p> <p>On <u>9/21</u>, 2005, before me, <u>Charles Fraser</u>, personally appeared <input type="checkbox"/> personally known to me or <input checked="" type="checkbox"/> proved to me on the basis of satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/<del>she</del> executed the same in his/<del>her</del> authorized capacity, and that by his/<del>her</del> signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.</p> <p>WITNESS my hand and official seal.</p> <p><u><i>[Signature]</i></u> (Notary Public)</p>
---	---

[Signature]  
Rajagopal Sundararaman

Date September 2, 2005



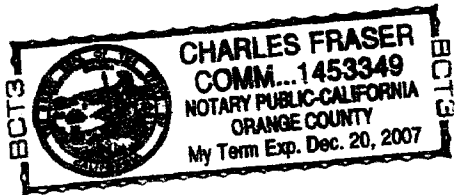
State of California )  
County of Orange )  
On 9-2-, 2005, before me, Charles Fraser  
\_\_\_\_\_, personally appeared  personally  
known to me or  proved to me on the basis of  
satisfactory evidence, to be the person whose name is  
subscribed to the within instrument and acknowledged to  
me that he/~~she~~ executed the same in his/~~her~~ authorized  
capacity, and that by his/~~her~~ signature on the instrument  
the person or the entity upon behalf of which the person  
acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]  
(Notary Public)

[Signature]  
Mehmet Ali Tan

Date September 2, 2005



State of California )  
County of Orange )  
On 9/2/, 2005, before me, Charles Fraser  
\_\_\_\_\_, personally appeared  personally  
known to me or  proved to me on the basis of  
satisfactory evidence, to be the person whose name is  
subscribed to the within instrument and acknowledged to  
me that he/~~she~~ executed the same in his/~~her~~ authorized  
capacity, and that by his/~~her~~ signature on the instrument  
the person or the entity upon behalf of which the person  
acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]  
(Notary Public)