

**RECORDATION FORM COVER SHEET  
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)**

- 1. Kirk Hargreaves
- 2. Paul Routley
- 3. Joseph Kurth Reynolds
- 4. David Ely
- 5. Julian Haines

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

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

Execution Date(s) 9/25/06,9/28/06,9/25/06,9/28/06,10/26/06

- Assignment
- Security Agreement
- Joint Research Agreement
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other Record to correct Assignor #2 on Assignment document previously recorded at Reel 018615 Frame 0954
- Merger
- Change of Name

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

Name: Synaptics Incorporated

Internal Address: Suite 130

Street Address: 3120 Scott Blvd.

City: Santa Clara

State: CA

Country: US Zip: 95054

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)  
11/446,323

B. Patent No.(s)

Additional numbers attached?  Yes  No

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

Name: S. Jared Pitts

Internal Address: Ingrassia, Fisher & Lorenz, P.C.

Street Address: 7150 E. Camelback Road, Suite 325

City: Scottsdale

State: AZ Zip: 85251

Phone Number: (480) 385-5060

Fax Number: (480) 328-5061

Email Address: jpitts@ifllaw.com

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

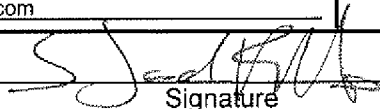
**8. Payment information**

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 50-2091

Authorized User Name S. Jared Pitts

**9. Signature:**

  
Signature

January 19, 2007  
Date

S. Jared Pitts  
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 6

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

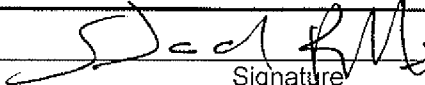
CH \$40.00 502091 11446323

Form PTO-1595 (Rev. 03/05)  
 OMB No. 0651-0027 (exp. 6/30/2005)

U.S. DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office

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 PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<p><b>1. Name of conveying party(ies)</b>                  Kirk Hargreaves      Julian Haines                  Paul Routtley                  Joseph Kurth Reynolds                  David Ely</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><b>3. Nature of conveyance/Execution Date(s):</b>                  Execution Date(s) <u>9/25/06; 9/28/06; 10/26/06</u></p> <p><input checked="" type="checkbox"/> Assignment                      <input type="checkbox"/> Merger  <input type="checkbox"/> Security Agreement              <input type="checkbox"/> Change of Name  <input type="checkbox"/> Joint Research Agreement  <input type="checkbox"/> Government Interest Assignment  <input type="checkbox"/> Executive Order 9424, Confirmatory License  <input type="checkbox"/> Other _____</p>	<p><b>2. Name and address of receiving party(ies)</b>                  Name: <u>SYNAPTICS INCORPORATED</u>                  Internal Address: _____                  _____                  Street Address: <u>3120 Scott Blvd. Ste. 130</u>                  _____                  City: <u>Santa Clara</u>                  State: <u>CA</u>                  Country: <u>UNITED STATES</u>      Zip: <u>95054</u></p> <p>Additional name(s) &amp; address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p><b>4. Application or patent number(s):</b>      <input type="checkbox"/> This document is being filed together with a new application.</p> <p>A. Patent Application No.(s)  <u>11/446,323</u></p> <p>B. Patent No.(s)</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><b>5. Name and address to whom correspondence concerning document should be mailed:</b></p> <p>Name: <u>S. Jared Pitts</u>                  Internal Address: <u>INGRASSIA FISHER &amp; LORENZ, P.C.</u>                  _____                  Street Address: <u>7150 E. CAMELBACK ROAD</u>  <u>SUITE #325</u>                  City: <u>SCOTTSDALE</u>                  State: <u>ARIZONA</u>      Zip: <u>85251</u>                  Phone Number: <u>(480) 385-5060</u>                  Fax Number: <u>(480) 385-5061</u>                  Email Address: <u>jpitts@ifllaw.com</u></p>
<p><b>9. Signature:</b> _____                    _____                  S. Jared Pitts (Reg. No. 38,579)                  Name of Person Signing</p>	<p><b>6. Total number of applications and patents involved:</b> <u>1</u></p> <p><b>7. Total fee (37 CFR 1.21(h) &amp; 3.41)</b> \$ <u>40.00</u></p> <p><input type="checkbox"/> Authorized to be charged by credit card  <input checked="" type="checkbox"/> Authorized to be charged to deposit account  <input type="checkbox"/> Enclosed  <input type="checkbox"/> None required (government interest not affecting title)</p> <p><b>8. Payment Information</b></p> <p>a. Credit Card    Last 4 Numbers _____                  Expiration Date _____</p> <p>b. Deposit Account Number <u>50-2091</u>                  Authorized User Name <u>S. Jared Pitts</u></p> <p style="text-align: right;">Date: <u>8 Dec 2006</u></p> <p>Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; padding: 2px;">5</span></p>

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

Attorney Docket No.: 028.0051

## Assignment to Synaptics Incorporated

For good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, I/we

David Ely  
Paul Routley  
Joseph Kurth Reynolds  
Julian Haines  
Kirk Hargreaves

do hereby sell, assign, and transfer unto Synaptics Incorporated (hereinafter called "Synaptics"), a Delaware Corporation, having its principal place of business at 3120 Scott Blvd., Suite 130, Santa Clara, CA 95054, USA, and its successors and assigns, the entire and exclusive right, title, and interest in the following:

any and all invention(s) set forth and described in an application for a United States of America patent entitled:

**METHODS AND SYSTEMS FOR DETECTING A CAPACITANCE  
USING SWITCHED CHARGE TRANSFER TECHNIQUES**

         Filed herewith; or

X Serial No.: 11/446,323 filed on date June 3, 2006

and any and all rights emanating from such application and any Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefore, and all improvements and applications for Letters Patent which may be filed based in whole or in part on the aforesaid application and improvements, including, without limitation, any provisional, nonprovisional, continuation, continuation-in-part, continued prosecution, substitute, renewal, extension, divisional, reissue, reexamination, foreign, Patent Cooperation Treaty (PCT), or other patent application, inventor's certificate, or like document, which are hereafter collectively referred to herein as the "Innovations".

And for the above consideration, I/we agree promptly upon request of Synaptics, its successors or assigns, to execute and deliver without further compensation any power of attorney, assignment, application or other papers which may be necessary or desirable to fully secure to Synaptics, its successors and assigns, the Innovation and all intellectual property rights therein, in the United States and in any country foreign thereto, and to cooperate and assist in the prosecution, interference, reexamination, reissue, or other proceedings in the patent office involving said Innovations, and in the adjudication of said Innovations, provided the expenses which may be incurred by me/us in lending such cooperation and assistance are paid by Synaptics.

I/we further warrant and represent to Synaptics, its successors and assigns, that I/we are able to convey an entire interest in the innovations and that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned;

Executed by:

Page 1 of 1

revision. September 12, 2005

**PATENT**  
**REEL: 018795 FRAME: 0205**

Attorney Docket No.: 028.0051

Executed by:

Inventor's Signature: David Ely Date: 28 Sept 06

Inventor's Printed Name: David Ely

Inventor's Signature: Paul Routley Date: 28 September 2006

Inventor's Printed Name: Paul Routley

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Inventor's Printed Name: Joseph Kurth Reynolds

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Inventor's Printed Name: Julian Haines

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Inventor's Printed Name: Kirk Hargreaves

Attorney Docket No.: 028.0051

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Inventor's Printed Name: David Ely

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Inventor's Printed Name: Paul Routley

Inventor's Signature: J Kurth Reynolds Date: 9/25/06

Inventor's Printed Name: Joseph Kurth Reynolds

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Inventor's Printed Name: Julian Haines

Inventor's Signature: Kirk Hargreaves Date: 25 Sept 2006

Inventor's Printed Name: Kirk Hargreaves

Attorney Docket No.: 028.0051

### Assignment to Synaptics Incorporated

For good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, I/we

**Julian Haines**

do hereby sell, assign, and transfer unto Synaptics Incorporated (hereinafter called "Synaptics"), a Delaware Corporation, having its principal place of business at 3120 Scott Blvd., Suite 130, Santa Clara, CA 95054, USA, and its successors and assigns, the entire and exclusive right, title, and interest in the following:

any and all invention(s) set forth and described in an application for a United States of America patent entitled:

#### METHODS AND SYSTEMS FOR DETECTING A CAPACITANCE USING SWITCHED CHARGE TRANSFER TECHNIQUES

         Filed herewith; or

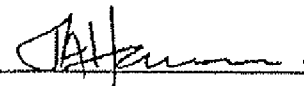
Serial No.: 11/446,323 filed on date June 3, 2006

and any and all rights emanating from such application and any Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefore, and all improvements and applications for Letters Patent which may be filed based in whole or in part on the aforesaid application and improvements, including, without limitation, any provisional, nonprovisional, continuation, continuation-in-part, continued prosecution, substitute, renewal, extension, divisional, reissue, reexamination, foreign, Patent Cooperation Treaty (PCT), or other patent application, inventor's certificate, or like document, which are hereafter collectively referred to herein as the "Innovations".

And for the above consideration, I/we agree without undue delay upon request of Synaptics, its successors or assigns, to execute and deliver without further compensation, except for fair and reasonable hourly charges to compensate for my background reading, verification, legal advice or other necessary expenditure of my time in connection with same, power of attorney, assignment, application or other papers which may be both necessary, fair and reasonable, to fully secure to Synaptics, its successors and assigns, the Innovation and all intellectual property rights therein, in the United States and in any country foreign thereto, and to cooperate and assist in the prosecution, interference, reexamination, reissue, or other proceedings in the patent office involving said Innovations, and in the adjudication of said Innovations, provided the expenses which may be incurred by me/us in lending such cooperation and assistance and fair and reasonable hourly charges for necessary expenditure of my time are paid by Synaptics.

I/we further warrant and represent to Synaptics, its successors and assigns, that I/we are able to convey an entire interest in the innovations and that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned;

Executed by:

Inventor's Signature:  Date: 26 October 2006

Inventor's Printed Name: Julian Haines