PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3670833

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	ASSIGNMENT		

CONVEYING PARTY DATA

Name	Execution Date
DAVID W. GILLESPIE	08/29/2013
RAYMOND A. TRENT JR.	09/04/2013
SCOTT J. SHAW	08/26/2013
SHAWN P. DAY	08/24/2013
ANDREW M. ERRINGTON	08/27/2013

RECEIVING PARTY DATA

Name:	SYNAPTICS INCORPORATED
Street Address: 1251 MCKAY DRIVE	
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95131

PROPERTY NUMBERS Total: 1

Property Type	Number				
Application Number:	12880793				

CORRESPONDENCE DATA

Fax Number: (713)228-8778

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 7132288600

Email: ohale@oshaliang.com **Correspondent Name:** ROBERT P. LORD

Address Line 1: 909 FANNIN **SUITE 3500** Address Line 2:

Address Line 4: HOUSTON, TEXAS 77010

ATTORNEY DOCKET NUMBER:	38018/095006
NAME OF SUBMITTER:	KATE OHALE
SIGNATURE:	/Robert P. Lord/
DATE SIGNED:	12/22/2015

Total Attachments: 5

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PATENT REEL: 037353 FRAME: 0622

ASSIGNMENT, CONVEYANCE, AND AGREEMENT - WORLDWIDE

WHEREAS:

I, an undersigned individual whose name and mailing address appear below:

1)	David W. Gillespie		Shawn P. Day	
	1251 McKay Drive	2)	Suites 1707-1715	
	San Jose, CA 95131	-	Level 17, Office Tower	
			Langham Place, 8 Argyle Street	
			Kowloon, Hong Kong	
3)	Raymond A. Trent JR.		Scott J. Shaw	
	1251 McKay Drive	4)	1251 McKay Drive	
	San Jose, CA 95131		San Jose, CA 95131	
5)	Andrew M. Errington		,	
J)	443 Jungang-ri			
	Geochang-enp			
	Geochang-gun			
	Gyeongsangnam-do			
	South Korea	-		
	670-809			

have invented certain invention(s) described in an application for Letters Patent in the United States ("hereinafter the "APPLICATION") enclosed herewith or previously filed on September 10, 2013 under Serial No. 14/023,254; and entitled:

"CAPACITIVE MOUSE" and to be amended to "DEVICE AND METHOD FOR SOLID STATE CAPACITIVE SCROLLING"

WHEREAS, Synaptics Incorporated, a corporation of the State of Delaware, having a place of business at 1251 McKay Drive, San Jose, California 95131 (hereinafter "SYNAPTICS"), desires to acquire the entire right, title, and interest in and to the invention(s) disclosed in the APPLICATION and all embodiments of such invention(s) previously conceived, made, or discovered by me during my employment with or within the scope of my work in any capacity for SYNAPTICS (hereinafter the "INVENTIONS"), and in and to the APPLICATION and any and all other applications for utility patents, utility models, inventor's certificates, and other forms of invention protection or rights for the INVENTIONS in any and all countries and groups of countries (hereinafter collectively the "APPLICATIONS"), and in and to any and all patents, inventors certificates, and other forms of invention protection or rights arising therefrom (hereinafter the "PATENTS").

NOW, THEREPORE, in consideration of good and valuable consideration acknowledged by me to have been received in full from SYNAPTICS:

1. I hereby sell, assign, transfer and convey to SYNAPTICS the entire right, title and interest (a) in and to the INVENTIONS and the APPLICATION; (b) in and to all rights to apply for patents and all other forms of invention protection or rights on the INVENTIONS in any and all countries pursuant to the Paris Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, or otherwise; (c) in and to any and all APPLICATIONS filed and any and all PATENTS granted on the INVENTIONS in any and all countries and groups of countries, including

Synaptics Assignment, Conveyance, and Agreement v. 2012-12-13

each and every application filed and each and every patent granted on any application which is a conventional, division, substitution, continuation, or continuation-in-part of any of the APPLICATIONS; and (d) in and to each and every reissue or extension of any of the PATENTS.

- 2. I hereby covenant and agree to cooperate with SYNAPTICS to enable SYNAPTICS to enable synaptics to enjoy to the fullest extent the right, title and interest to the INVENTIONS herein conveyed in any and all countries and groups of countries. My cooperation shall include prompt production of pertinent facts and documents, giving testimony, executing petitions, oaths, specifications, declarations or other papers, and providing other assistance to the extent deemed necessary or desirable by SYNAPTICS (a) for perfecting in SYNAPTICS the right, title and interest herein conveyed; (b) for prosecuting the APPLICATIONS; (c) for filing and prosecuting substitute, conventional, divisional, continuation, continuation-in-part, or additional applications covering the INVENTIONS; (d) for filing and prosecuting applications for reissuance of any of the PATENTS; (e) in assisting SYNAPTICS in any pre-grant or post-grant proceeding involving any of the INVENTIONS, APPLICATIONS, or PATENTS; and (f) in assisting SYNAPTICS in any court or administrative proceeding involving any of the INVENTIONS, APPLICATIONS, or PATENTS, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, and infringement actions; provided, however, that reasonable expenses incurred by me in providing such cooperation shall be paid for by SYNAPTICS.
- 3. I hereby agree that the terms and covenants of this Assignment, Conveyance, and Agreement (the "AGREEMENT") shall inure to the benefit of SYNAPTICS, its successors, assigns and other legal representatives, and shall be binding upon me, my heirs, my legal representatives, and my assigns.
- I hereby warrant and represent that I have not entered into and will not enter into any assignment, license, contract, or understanding in conflict herewith.
- 5. I hereby agree that all provisions of this AGREEMENT are severable, and that if any provision of this AGREEMENT is deemed invalid or otherwise unenforceable, the remaining provisions of this AGEEMENT shall remain valid, enforceable, and binding, and the invalid or otherwise unenforceable provision shall be deemed to be replaced by a provision that is valid and enforceable and that comes closest to expressing the intent expressed by the invalid or unenforceable provision.
- 6. I hereby agree that this AGREBMENT contains the entire understanding between SYNAPTICS and me relating to the subject matter contained herein, and supersedes all prior and collateral communications and understandings between us.
- 7. In the event that the filing date or application number of the APPLICATION is not entered at the time I execute this document, and if such information is deemed necessary, I hereby authorize SYNAPTICS, its successors and assigns, its legal representatives, or anyone it properly designates to enter above such filing date or application number.

IN WITNESS WHEREOF, I have executed and delivered this instrument to SYNAPTICS on the date indicated below.

IF&L Ref. No. 028.1102D1C4C2

1)	(Signature) // (Signature) // (Printed Name) David W. Gillespie (Date) // (9/2013	2)	(Signature)(Printed Name) Shawn P. Day (Date)
3)	(Signature) /2 / / / / / (Primed Name) Raymond A. Trent JR. (Date) 9/7/2013	4)	(Signature) (Printed Name) Scott J. Shaw (Date) 9-2-6-2013
5)	(Signature)(Printed Name) Andrew M. Errington (Date)		

IF&L Ref. No. 028.1102D1C4C2

1)	(Signature)	2)	(Signature) May
	(Printed Name) David W. Giliespie		(Printed Name) Shawn P. Day
	(Date)		(Date) 8/24/2013
3)	(Signature)	4)	(Signature)
	(Printed Name) Raymond A. Trent JR.		(Printed Name) Scott J, Shaw
	(Date)		(Date)
5)	(Signature)		
	(Printed Name) Andrew M. Errington		
	(Date)		

Synaptics Assignment, Conveyance, and Agreement v. 2012-12-13

Page 3 of 3

IF&L Ref. No. 028.1102D1C4C2

1)	(Signature)	2)	(Signature)
	(Printed Name) David W. Gillospic		(Printed Name) Shawn P. Day
	(Datc)		(Date)
3)	(Signature)	4)	(Signature)
	(Printed Name) Raymond A, Trent JR.		(Printed Name) Scott J. Shaw
	(Date)		(Date)
5)	(Signature)		
	(Printed Name) Andrew M. Errington		
	(Date) 27 AVG 2013		

Synaptics Assignment, Conveyance, and Agreement v. 2012-12-13

- Page 3 of 3

PATENT REEL: 037353 FRAME: 0627