

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>William Boyd Alcorn</td> <td>01/23/2013</td> </tr> <tr> <td>Chee-Kiong Ng</td> <td>01/23/2013</td> </tr> <tr> <td>William P. Taylor</td> <td>12/18/2012</td> </tr> </tbody> </table>		Name	Execution Date	William Boyd Alcorn	01/23/2013	Chee-Kiong Ng	01/23/2013	William P. Taylor	12/18/2012
Name	Execution Date								
William Boyd Alcorn	01/23/2013								
Chee-Kiong Ng	01/23/2013								
William P. Taylor	12/18/2012								
RECEIVING PARTY DATA									
Name:	Allegro Microsystems, Inc.								
Street Address:	115 Northeast Cutoff								
City:	Worcester								
State/Country:	MASSACHUSETTS								
Postal Code:	01606								
PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13718549</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13718549				
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Application Number:	13718549								
CORRESPONDENCE DATA									
Fax Number:	7814019966								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
Phone:	7814019988								
Email:	mhw@dc-m.com								
Correspondent Name:	Daly, Crowley, Mofford & Durkee, LLP								
Address Line 1:	354A Turnpike Street								
Address Line 2:	Suite 301A								
Address Line 4:	Canton, MASSACHUSETTS 02021-2714								
ATTORNEY DOCKET NUMBER:	ALLEG-376PUS								
NAME OF SUBMITTER:	Seth A. Milman								
Total Attachments: 4 source=TO_PTO_Assignment#page1.tif source=TO_PTO_Assignment#page2.tif source=TO_PTO_Assignment#page3.tif source=TO_PTO_Assignment#page4.tif									

CH \$40.00 13718549

ASSIGNMENT

Whereas we, the undersigned, William Boyd Alcorn, Chee-Kiong Ng and William P. Taylor hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled: SYSTEMS AND METHODS FOR REDUCTION OF MOTOR JITTER WHILE DRIVING AN ELECTRIC MOTOR, identified as Attorney Docket No. ALLEG-376PUS, and Client Case No. A-2269, which application was executed on December
18, 2012, and filed on Dec. 18 2012 and assigned Application No. 13/718,549. In the event that the execution date, filing date and/or Application No. are not entered above or are incorrect at the time we executed this document, and if such information is deemed necessary, we hereby authorize and request the attorneys at DALY, CROWLEY, MOFFORD & DURKEE, LLP, 354A Turnpike Street, Suite 301A, Canton, MA 02021-2714, to insert above the execution date, filing date and/or Application No. of said application.

Whereas, ALLEGRO MICROSYSTEMS, INC., a Delaware corporation having a place of business at 115 Northeast Cutoff, Worcester, Massachusetts 01606, and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited;

Now, therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

1. Assign, transfer and convey to Assignee the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue, re-examination and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent and any provisional applications from which priority is claimed in said Letters Patent;

2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;

3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

4. Warrant that I have not knowingly conveyed to others any right in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance;

5. Bind my heirs, legal representatives and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to me relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in my control or in the control of my heirs, legal representatives or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

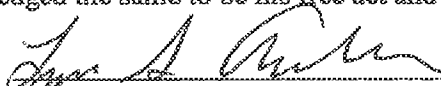
In testimony of which we have each executed this Assignment as an instrument on the date indicated next to our name(s).

Dated: Jan 23 2013 
William Boyd Alcorn

On this _____ day of _____, _____, before me appeared
Day Month Year
William Boyd Alcorn, to me known and known to me to be the person described in and who executed the foregoing instrument, and he acknowledged the same to be his free act and deed.


First Witness Signature
THOMAS ROWAN
First Witness Printed Name

On this 23 day of JAN, 2013, before me appeared
Day Month Year
William Boyd Alcorn, to me known and known to me to be the person described in and who executed the foregoing instrument, and he acknowledged the same to be his free act and deed.


Second Witness Signature
Lyndan S. Amberson
Second Witness Printed Name

Dated: 4/28/2013

[Signature]
Chee-Kiong Ng

On this 28 day of April, 2013, before me appeared

Chee-Kiong Ng, to me known and known to me to be the person described in and who executed the foregoing instrument, and he acknowledged the same to be his free act and deed.

[Signature]
First Witness Signature

THOMAS EOWAN
First Witness Printed Name

On this 23 day of July, 2011, before me appeared

Chee-Kiong Ng, to me known and known to me to be the person described in and who executed the foregoing instrument, and he acknowledged the same to be his free act and deed.

[Signature]
Second Witness Signature

Lyndee S. Ambrose
Second Witness Printed Name

Dated: 18 December 2012

William P. Taylor
William P. Taylor

On this 18 day of December, 2012, before me appeared
Day Month Year
William P. Taylor, to me known and known to me to be the person described in and who executed
the foregoing instrument, and he acknowledged the same to be his free act and deed.

Paul A. David
First Witness Signature
Paul A David
First Witness Printed Name

On this 18 day of December, 2012, before me appeared
Day Month Year
William P. Taylor, to me known and known to me to be the person described in and who executed
the foregoing instrument, and he acknowledged the same to be his free act and deed.

David J. Heas
Second Witness Signature
David J. Heas
Second Witness Printed Name