

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Chee-Kiong Ng	10/20/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Allegro Microsystems, Inc.
<b>Street Address:</b>	115 Northeast Cutoff
<b>City:</b>	Worcester
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01606
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	13278458
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(781)401-9966
<b>Email:</b>	dm@dc-m.com
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Correspondent Name:</b>	Daly, Crowley, Mofford & Durkee, LLP
<b>Address Line 1:</b>	354A Turnpike Street
<b>Address Line 2:</b>	Suite 301A
<b>Address Line 4:</b>	Canton, MASSACHUSETTS 02021-2714
<b>ATTORNEY DOCKET NUMBER:</b>	ALLEG-336PUS
<b>NAME OF SUBMITTER:</b>	Kermit Robinson
<b>Total Attachments: 2</b> source=TO_PTO_Assignment#page1.tif source=TO_PTO_Assignment#page2.tif	

**CH \$40.00 13278458**

## ASSIGNMENT

Whereas I, the undersigned, Chee-Kiong Ng, hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled, MOTOR CONTROL CIRCUIT AND METHOD THAT SYNCHRONIZE A SPEED OF AN ELECTRIC MOTOR TO AN EXTERNAL CLOCK SIGNAL identified as Attorney Docket No. ALLEG-336PUS, and Client Case No. A-2229, which application was executed on 10/20/2011, and filed on 10/21/2011 and Assigned Application No. 13/278,452. In the event that the execution date, filing date and/or Application No. are not entered above at the time I executed this document, and if such information is deemed necessary, I hereby authorize and request my 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 me, receipt and sufficiency of which I hereby acknowledge, I 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 I have executed this Assignment as an instrument on the date indicated next to my name.

Dated: 10/20/2011

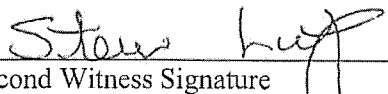
  
Chee-Kiong Ng

On this 20 day of Oct, 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.

  
First Witness Signature

THOMAS ROWAN  
First Witness Printed Name

On this 20 day of OCT, 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.

  
Second Witness Signature

Steven Lotz  
Second Witness Printed Name