

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4398194

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the RECEIVING PARTY NAME previously recorded on Reel 031729 Frame 0658. Assignor(s) hereby confirms the ASSIGNMENT.
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
RAVI VIG	07/25/2008
P. KARL SCHELLER	07/24/2008
PAUL DAVID	07/28/2008
<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>	01615-0036
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14093787
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(781)401-9966
<i>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.</i>	
<b>Phone:</b>	7814019988
<b>Email:</b>	mmc@dc-m.com
<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-235AUS
<b>NAME OF SUBMITTER:</b>	KERMIT ROBINSON
<b>SIGNATURE:</b>	/Kermit Robinson/
<b>DATE SIGNED:</b>	05/04/2017
<b>Total Attachments: 8</b>	
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## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
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EPAS ID: PAT2639471

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>RAVI VIG</td><td>07/25/2008</td></tr><tr><td>P. KARL SCHELLER</td><td>07/24/2008</td></tr><tr><td>PAUL DAVID</td><td>07/28/2008</td></tr></tbody></table>		Name	Execution Date	RAVI VIG	07/25/2008	P. KARL SCHELLER	07/24/2008	PAUL DAVID	07/28/2008		
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Postal Code:	01615-0036										
PROPERTY NUMBERS Total: 2											
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Fax Number: (781)401-9988											
Phone: 7814019988											
Email: sms@dc-m.com											
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>											
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-235AUS, ALLEG-235BU										
NAME OF SUBMITTER:	KRISTOFFER W. LANGE										

CH 580.00 14093787

## ASSIGNMENT

Whereas we, the undersigned, Ravi Vig, P. Karl Scheller and Paul David hereby have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled APPARATUS AND METHOD FOR PROVIDING AN OUTPUT SIGNAL INDICATIVE OF A SPEED OF ROTATION AND A DIRECTION OF ROTATION OF A FERROMAGNETIC OBJECT, identified as Attorney Docket No. ALLEG-235PUS, and Client Case No. A-2127, which application was executed on July 25, 2008, July 24, 2008 and July 28, 2008, and filed on July 31, 2008 and Assigned Application No. 12/183,367. In the event that the execution date, filing date and/or Application No. are not entered above at the time we executed this document, and if such information is deemed necessary, we hereby authorize and request our 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 01615-0036, 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 on the date indicated next to each of our respective names.

Dated: July 25, 2008

Ravi Vig  
Ravi Vig

On this 25<sup>th</sup> day of July, 2008, before me appeared Ravi Vig, 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.

William P. Taylor  
First Witness Signature

WILLIAM P. TAYLOR  
First Witness Printed Name

On this 25 day of July, 2008, before me appeared Ravi Vig, 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.

Tom Bateman  
Second Witness Signature

Tom Bateman  
Second Witness Printed Name

Dated: 7/24/2008

P. Karl Scheller  
P. Karl Scheller

On this 24<sup>th</sup> day of July, 2008, before me appeared P. Karl Scheller, 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.

William P. Taylor  
First Witness Signature

WILLIAM P. TAYLOR  
First Witness Printed Name

On this 24<sup>th</sup> day of July, 2008, before me appeared P. Karl Scheller, 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

John L. Harrington  
Second Witness Printed Name

Dated: 7/28/08

Paul David  
Paul David

On this 28 day of July, 2008, before me appeared Paul David, 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.

Robert S. Iola  
First Witness Signature

Robert S. Iola  
First Witness Printed Name

On this 28 day of July, 2008, before me appeared Paul David, 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.

Robert A. Nesbitt, Jr.  
Second Witness Signature

ROBERT A. NESBITT, JR.  
Second Witness Printed Name

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