

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4427688

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHING-MING TSAI	10/22/2013
SHI-WEI CHENG	10/22/2013
KUN-SHU YANG	10/23/2013
JIA-CHENG HSU	10/23/2013
SHENG-HUAN LIU	10/22/2013
FENG-CHIH HSU	10/28/2013
CRAIG KOKJOHN	10/24/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CABOT MICROELECTRONICS CORPORATION
<b>Street Address:</b>	870 NORTH COMMONS DRIVE
<b>City:</b>	AURORA
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60504
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14440209
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(630)499-2654
<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>	630-375-2033
<b>Email:</b>	CMC_PROSECUTION@CABOTCMP.COM
<b>Correspondent Name:</b>	THOMAS OMHOLT
<b>Address Line 1:</b>	CABOT MICROELECTRONICS CORPORATION
<b>Address Line 2:</b>	870 NORTH COMMONS DRIVE
<b>Address Line 4:</b>	AURORA, ILLINOIS 60504
<b>ATTORNEY DOCKET NUMBER:</b>	100539
<b>NAME OF SUBMITTER:</b>	PATRICIA ROMANELLI
<b>SIGNATURE:</b>	/Patricia Romanelli/
<b>DATE SIGNED:</b>	05/23/2017

PATENT

**Total Attachments: 3**

source=100539P signed US Asg#page1.tif

source=100539P signed US Asg#page2.tif

source=100539P signed US Asg#page3.tif

**ASSIGNMENT**

**WHEREAS**, we, Ching-Ming TSAI, Shi-Wei CHENG, Kun-Shu YANG, Jia-Cheng HSU, Sheng-Huan LIU and Feng-Chih HSU, all of Taiwan R.O.C., and Craig KOKJOHN, of Naperville, Illinois, USA, have invented and own a certain invention entitled **POLISHING PAD WITH OFFSET CONCENTRIC GROOVING PATTERN AND METHOD FOR POLISHING A SUBSTRATE THEREWITH** for which invention we have executed an application (provisional or non-provisional) for a United States patent, filed on 6-November-2012, under Application No. 61/723,226; and

**WHEREAS**, Cabot Microelectronics Corporation, of 870 North Commons Drive, Aurora, Illinois, 60504, (hereinafter referred to as Assignee), is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application;

**NOW, THEREFORE**, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the United States and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, renewals, and extensions) that may be filed in the United States and every foreign country on the invention, and the patents or extensions thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue United States patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

**WE HEREBY AUTHORIZE** the Assignee to insert in this assignment document the filing date and serial number of the application if the date and number are unavailable at the time this document is executed.

**UPON SAID CONSIDERATION**, we convey to the Assignee the right to make application in its own behalf for protection of the invention in countries foreign to the United States and to claim under the International Convention and/or other international arrangement for any such

application the date of the United States application (or any other application on the invention) to gain priority with respect to other applications.

**WE DO HEREBY COVENANT** and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, renewal, or extended patents of the United States or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

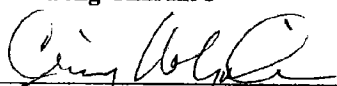
IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

<p>2013/10/22</p> <hr/> <p>Date</p>	<p><i>Ching-Ming Tsai</i></p> <hr/> <p>Ching-Ming TSAI</p>
<p>2013/10/22</p> <hr/> <p>Date</p>	<p><i>Edward Cheng</i></p> <hr/> <p>Shi-Wei CHENG</p>
<p>2013/10/23</p> <hr/> <p>Date</p>	<p><i>Kun-Shu Yang</i></p> <hr/> <p>Kun-Shu YANG</p>
<p>2013/10/23</p> <hr/> <p>Date</p>	<p><i>Jia-Cheng Hsu</i></p> <hr/> <p>Jia-Cheng HSU</p>
<p>2013/10/22</p> <hr/> <p>Date</p>	<p><i>Sheng-Huan Liu</i></p> <hr/> <p>Sheng-Huan LIU</p>

2013/10/28  
Date

2013/10/24  
Date

 Pocket No. 100539P  
Feng-Chih HSU

  
Craig KOKJOHN

\*\*\*\*\*