

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT3980722

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	RICHARD A. COOKE	05/07/2015
	WOLFRAM NEFF	05/07/2015
	CARLO WALDFRIED	05/07/2015
	JAKUB RYBCZYNSKI	05/07/2015
	MICHAEL HANAGAN	05/07/2015
	WADE KRULL	05/07/2015
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	ENTEGRIS, INC.	
<b>Street Address:</b>	129 CONCORD ROAD	
<b>Internal Address:</b>	BUILDING 2	
<b>City:</b>	BILLERICA	
<b>State/Country:</b>	MASSACHUSETTS	
<b>Postal Code:</b>	01821	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	15111591
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(978)341-0136	
<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>	978-341-0036	
<b>Email:</b>	kellie.varno@hbsr.com	
<b>Correspondent Name:</b>	ALICE O. CARROLL, ESQ.	
<b>Address Line 1:</b>	530 VIRGINIA ROAD, P.O. BOX 9133	
<b>Address Line 2:</b>	HAMILTON, BROOK, SMITH & REYNOLDS, P.C.	
<b>Address Line 4:</b>	CONCORD, MASSACHUSETTS 01742-9133	
<b>ATTORNEY DOCKET NUMBER:</b>	3194.1098-003	
<b>NAME OF SUBMITTER:</b>	KELLIE J. VARNO	
<b>SIGNATURE:</b>	/Kellie J. Varno/	
<b>DATE SIGNED:</b>	07/27/2016	

PATENT

**Total Attachments: 5**

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JointASSIGNMENT

WHEREAS, we, **Richard A. Cooke, Wolfram Neff, Carlo Waldfried, Jakub Rybczynski, Michael Hanagan and Wade Krull**, have invented a certain improvement in **Electrostatic Chuck And Method Of Making Same** described in an application for Patent,

- ☐ the specification of which is about to be filed in the United States Patent Office *(use for utility (37 CFR § 1.53(b)) and design filings only)*;
- ☐ is about to be filed in the United States Patent Office as a Provisional Application;
- ☐ the specification of which is United States Application No. [    ], filed [    ];
- ☒ the specification of which is a Patent Cooperation Treaty Application, International Application No. **PCT/US2015/014810**, filed **February 6, 2015**, which designates the United States of America;
- ☐ which was patented under United States Patent No. [    ].

WHEREAS, **Entegris, Inc.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **State of Delaware**, and having a usual place of business at **129 Concord Road, Building 2, Billerica, Massachusetts 01821** desires to confirm its interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for any and all related provisional and nonprovisional, international and national phase applications, including any and all substitution, reissue, divisional, continuation, and continuation-in-part applications, and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; we hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation, continuation-in-part applications, and all related provisional and nonprovisional, international and national phase applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: \_\_\_\_\_

Richard A. Cooke

State/Commonwealth

of Massachusetts

County of Middlesex

On this 7<sup>th</sup> day of May 2015, before me, the undersigned notary public, personally appeared Richard A. Cooke,

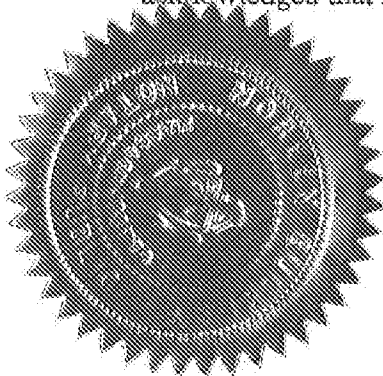
☒ personally known to me, or

☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Notary Public Noreen Buckley  
Noreen Buckley (print name)

My Commission expires 10/14/2016



Noreen Buckley  
 Notary Public  
 My Commission Expires  
 October 14, 2016

Inventor's Signature: \_\_\_\_\_

Wolfram Neff

State/Commonwealth

of Massachusetts

County of Middlesex

On this 7th day of May, 20 15, before me, the undersigned notary public, personally appeared Wolfram Neff,

☒ personally known to me, or

☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Notary Public \_\_\_\_\_

Noreen Buckley (print name)

My Commission expires 10/14 / 2016

Signature: \_\_\_\_\_

Carlo Waldfried

Commonwealth

of Massachusetts

County of Middlesex

On this 7th day of May, 20 15, before me, the undersigned notary public, personally appeared Carlo Waldfried,

☒ personally known to me, or

☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Notary Public \_\_\_\_\_

Noreen Buckley (print name)

My Commission expires 10/14 / 2016

Noreen Buckley

Notary Public

My Commission Expires

October 14, 2016

PATENT

REEL: 039272 FRAME: 0153

Inventor's Signature: Jakub Rybczynski  
Jakub Rybczynski

State/Commonwealth  
of Massachusetts  
County of Middlesex

On this 7th day of May 2015, before me, the undersigned notary  
public, personally appeared Jakub Rybczynski,

- ☒ personally known to me, or  
☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and  
acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Notary Public Noreen Buckley  
Noreen Buckley (print name)  
My Commission expires 10/14/2016

Signature: Michael Hanagan  
Michael Hanagan

Commonwealth  
of Massachusetts  
County of Middlesex

On this 7th day of May 2015, before me, the undersigned notary  
public, personally appeared Michael Hanagan,

- ☒ personally known to me, or  
☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and  
acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Notary Public Noreen Buckley  
Noreen Buckley (print name)  
My Commission expires 10/14/2016

Noreen Buckley  
Notary Public  
My Commission Expires  
October 14, 2016

REEL: 039272 FRAME: 0154

Inventor's Signature: Wade Krull  
Wade Krull

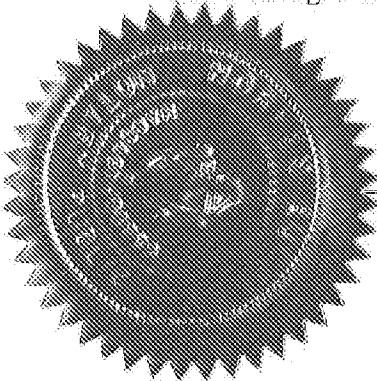
State/Commonwealth  
of Massachusetts  
County of Middlesex

On this 7th day of May, 2015, before me, the undersigned notary  
public, personally appeared Wade Krull,

- ☒ personally known to me, or  
☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and  
acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

Notary Public Noreen Buckley  
Noreen Buckley (print name)  
My Commission expires 10 / 14 / 2016



Noreen Buckley  
Notary Public  
My Commission Expires  
October 14, 2016