503934068 07/27/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
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

RECEIVING PARTY DATA

Name:	ENTEGRIS, INC.
Street Address:	129 CONCORD ROAD
Internal Address:	BUILDING 2
City:	BILLERICA
State/Country:	MASSACHUSETTS
Postal Code:	01821

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15111591

CORRESPONDENCE DATA

Fax Number: (978)341-0136

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.

Phone: 978-341-0036

Email: kellie.varno@hbsr.com **Correspondent Name:** ALICE O. CARROLL, ESQ.

530 VIRGINIA ROAD, P.O. BOX 9133 Address Line 1:

Address Line 2: HAMILTON, BROOK, SMITH & REYNOLDS, P.C. Address Line 4: CONCORD, MASSACHUSETTS 01742-9133

ATTORNEY DOCKET NUMBER:	3194.1098-003
NAME OF SUBMITTER:	KELLIE J. VARNO
SIGNATURE:	/Kellie J. Varno/
DATE SIGNED:	07/27/2016

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Total Attachments: 5

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Joint

ASSIGNMENT

Rybczynski,	REAS, we, Richard A. Cooke, Wolfram Neff, Carlo Waldfried, Jakub Michael Hanagan and Wade Krull, have invented a certain improvement in 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. [].
WHE	REAS Entegris. Inc. (hereinafter "ASSIGNEE") a corporation organized and

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;

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PATENT REEL: 039272 FRAME: 0151 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: State/Commonwealth of Massellusells County of Middlessex 20 / S, before me, the undersigned notary day of 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 (print name) My Commission expires / / / リール

Noreen Buckley
Notary Public
My Commission Expires
October 14, 2016

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		
State/Commonwealth of Manager County of Manager	Inventor's Signature:	
County of Mandeless On this	State/Commonwealth	Wolfram Neff
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Notary Public Notary		
My Commission expires	acknowledged that he/she signed the	foregoing instrument as his/her free act and deed.
My Commission expires		Notary Public 1/ Mar Buky
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My Commission Expires October 14, 2016

PATENT

Inventor's Signature:	Jakub Rybezynski
State/Commonwealth of Wessering Us County of Whidese	Jákuð Rýbezynski
On this day public, personally appeared	
personally known to	o me, or
proved to me throug	gh satisfactory evidence of identification, which was
to be the person whose name acknowledged that he/she so	Notary Public (print name) My Commission expires (10 / 14 / 32)
Ommonwealth Ommonwealth County of Middlesse	Michael Hanagan
On this day of public, personally appeared	Michael Hahagan,
personally known to	h satisfactory evidence of identification, which was
to be the person whose nam acknowledged that he/she si	e was signed on the foregoing instrument in my presence, and igned the foregoing instrument as his/her free act and deed. Notary Public College (print name)
	My Commission expires 10/14/3016

Noreen Buckley Notary Public My Commission Expires October 14,**4%**TENT

Docket No. 3194.1098-001

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Inventor's Signature:	Wada Call
<u> </u>	Wade Krull
State/Commonwealth of Wesschessess County of Waddlesses	
On this day public, personally appeared	of 2015, before me, the undersigned not li Wade Krulf,
personally known to	o me, or
proved to me throug	gh satisfactory evidence of identification, which was
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TO.	ne was signed on the foregoing instrument in my presence, and
acknowledged that he/she s	signed the foregoing instrument as his/her free act and deed.
	Notary Public 2/ Rus Bulley
	— Nereco Buckley (print n
	My Commission expires 10 / 14 / 2016

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Noreen Buckley Notary Public My Commission Expires October 14, 2018

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