

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3394482

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
GTAT CORPORATION	04/23/2015
RECEIVING PARTY DATA	
Name:	CRYSTAL SYSTEMS INNOVATIONS, LLC
Street Address:	27 CONGRESS STREET
City:	SALEM
State/Country:	MASSACHUSETTS
Postal Code:	01970
PROPERTY NUMBERS Total: 1	
Property Type	Number
Patent Number:	6418921
CORRESPONDENCE DATA	
Fax Number:	(978)927-7477
<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>	
Phone:	9785268111
Email:	gah.docket@gherbster.com
Correspondent Name:	GEORGE A HERBSTER
Address Line 1:	100 CUMMINGS CENTER
Address Line 2:	SUITE 213C
Address Line 4:	BEVERLY, MASSACHUSETTS 01915
ATTORNEY DOCKET NUMBER:	G05-000
NAME OF SUBMITTER:	GEORGE A HERBSTER
SIGNATURE:	/George A Herbster/
DATE SIGNED:	06/12/2015
Total Attachments: 4	
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ASSIGNMENT AND INSTRUMENT OF TRANSFER

This Assignment ("Assignment"), effective **April 27, 2015** ("Effective Date"), is made and entered into by and between **GTAT Corporation**, a Delaware corporation having a place of business at 243 Daniel Webster Highway, Merrimack, NH 03054 USA ("Assignor") and **Crystal Systems Innovations, LLC**, a Massachusetts limited liability company having a place of business at 27 Congress Street, Salem, MA 01970 USA ("Assignee"). The Parties agree as follows:

Assignor is the owner of **U. S. Patent 6,418,921**, issued on July 16, 2002, to Schmid et al., and certain, technology, expired patents, and patent applications and know-how relating thereto as set forth and described on Appendix A (collectively the "Patent").

Assignor is the owner of certain tangible and intangible assets relating to the Patent and Equipment (as that term is defined in an Asset Purchase Agreement between Assignor and Assignee dated April 10th, 2015) and the FAST process, so-called, including, but not limited to, technology, any engineering drawings, schematics or designs relating thereto and all copyrights and other works of authorship therein (to the extent that such drawings or designs exist as of the date of this Agreement), and including work product of consultants and contractors of Assignor and its affiliates (if any such work product exists), know-how, all other copyrights and works of authorship (if existing), trade secrets, inventions, discoveries, processes, developments, methodologies, raw materials, materials of construction, ancillary equipment, tools, parts and accessories, components and consumables, including any improvements, enhancements and modifications related to the foregoing, and all related intellectual property described herein in whatever form or media (collectively, the "Technology").

Assignor desires to sell, assign, convey, transfer and set over its entire right, title and interest in and to the Patent and Technology and any and all other intangible assets relating to the Technology, Patent and inventions described therein, wherever existing and regardless of form or substance, and any and all similar forms of protection relating to all of the foregoing (collectively, the "Property") to Assignee and Assignee is desirous of acquiring all right, title and interest in and to the Property.

NOW, THEREFORE, in consideration of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is acknowledged, Assignor hereby assigns, conveys and transfers to Assignee, its lawful successors and assigns: (i) Assignor's entire right, title and interest in and to the Property throughout the world including any inventions disclosed therein or covered thereby, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors and assigns, for as long as the life and term the Property has been or will be granted, as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment, conveyance and transfer had not been made; (ii) all right, title, and interest in and to any claims or causes of action that Assignor has made or could have made during its ownership of the Property for damages, costs, and fees as well as other remedies by reason of infringement or misappropriation of the Property occurring on or prior to the Effective Date of this Agreement; and (iii) the right to enforce the Property including, but not limited to, the right to sue for past, present and future infringement or misappropriation and to seek and obtain relief and judgment therefore and/or settle any such claims or causes of action and to collect monies owed in connection with such judgment or settlements, all for Assignee's own use and benefit, and for the use of benefit of Assignee's lawful successors and assigns.

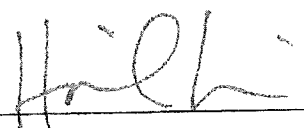
Assignor agrees to undertake and perform, at the expense of the Assignee, all acts and execute all documents necessary or desirable to properly vest full right, title and interest in and to all Property throughout the world in the name of Assignee.

Each party hereby represents and warrants to the other that (i) it has the authority to enter into and perform its obligations under this Assignment and Bill of Sale, (ii) this Assignment and Bill of Sale has

been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms, (iii) it is duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or formation, and (iv) neither the execution of this Assignment and Bill of Sale nor its performance hereunder conflicts with any applicable law, rule or regulation or any other agreement to which it is a party or any obligation to which it is subject.

IN WITNESS WHEREOF, **GTAT CORPORATION** has caused its name to be signed by its duly authorized representative this 23rd day of April, 2015.

GTAT CORPORATION for itself and its affiliates

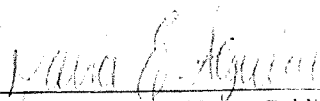
By: 
Name: Hoil Kim
Title: Vice President

NOTARIAL ACKNOWLEDGMENT

STATE OF NEW HAMPSHIRE :

COUNTY OF HILLSBOROUGH :

Sworn to and subscribed before me this 23rd day of April, 2015, a Notary Public in and for the above mentioned county and state, by **Hoil Kim**, Vice President and General Counsel of **GTAT Corporation**.


Maria E. Aguirre, Notary Public
My Commission Expires: December 3, 2019

[NOTARIAL SEAL]

IN WITNESS WHEREOF, CRYSTAL SYSTEMS INNOVATIONS LLC has caused its name to be signed by its duly authorized representative this 28th day of April, 2015.

CRYSTAL SYSTEMS INNOVATIONS, LLC

By: *Frederick Schmid*
Name: Frederick Schmid
Title: President

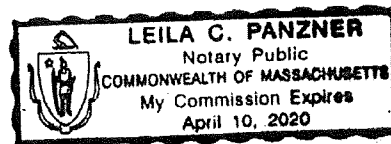
STATE/Commonwealth of Massachusetts :
COUNTY OF Essex :

Sworn to and subscribed before me this 28th day of April, 2015, a Notary Public in and for the above mentioned county and state, by **Frederick Schmid**, President of **Crystal Systems Innovations, LLC**.

Leila C. Panzner
Notary Public

My Commission Expires: April 10, 2020

[NOTARIAL SEAL]



Appendix A

<u>Title</u>	<u>Patent No./ Application No.</u>	<u>Jurisdiction</u>	<u>Filed/ Grant Date</u>	<u>Inventors</u>	<u>Status</u>
Method and Apparatus for Cutting Workpieces	6,418,921	US	07/16/2002	F. Schmid	Granted
Method and Apparatus for Cutting Workpieces	2435688	Canada	09/22/2009	F. Schmid	Granted
Method and Apparatus for Cutting Workpieces	02720839.6	EPC	01/24/2002	F. Schmid	Published / Grant Fee Paid
Method and Apparatus to Produce a Radial Cut Profile	5,842,462	US	12/01/1998	F. Schmid, M. B. Smith	Expired
Shaped Blades	5,438,973	US	08/08/1995	F. Schmid, M. B. Smith, C. P. Khattak	Expired
MultiWafer Slicing with Fixed Abrasive (sic)	4,727,852	US	03/01/1988	F. Schmid, C. P. Khattak, M. B. Smith	Expired
MultiWafer Slicing with Fixed Abrasive	4,646,710	US	03/03/1987	F. Schmid, C. P. Khattak, M. B. Smith	Expired
Process of Forming a Plated Wirepack with Abrasive Particles only in Cutting Surface w Controlled Kerf	4,384,564	US	05/24/1983	M. B. Smith, F. Schmid, C. P. Khattak	Expired
Wire Blades	4,349,178	US	09/14/1982	F. Schmid	Expired
Charging System for Cutting Blade	4,287,869	US	09/08/1981	F. Schmid	Expired
Wire Blades	4,256,079	US	03/17/1981	F. Schmid	Expired
Cutting	4,187,828	US	02/12/1980	F. Schmid	Expired
Process for Forming a Wirepack	4,178,670	US	12/18/1979	F. Schmid	Expired
Process for Cutting Wafers	4,092,972	US	06/06/1978	F. Schmid	Expired