

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6423308

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ROMAN V. DRACHEV	09/11/2014
SANTHANARAGHAVAN PARTHASARATHY	11/30/2020
ANDRIY M. ANDRUKHIV	09/10/2014
DAVID S. LYTTLE	09/12/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	GTAT CORPORATION
<b>Street Address:</b>	5 WENTWORTH DRIVE
<b>Internal Address:</b>	UNIT # 1
<b>City:</b>	HUDSON
<b>State/Country:</b>	NEW HAMPSHIRE
<b>Postal Code:</b>	03051
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17107103
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(617)507-3061
<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>	617-913-1996
<b>Email:</b>	patent@bigiplaw.com, alexandra.goodwin@bigiplaw.com
<b>Correspondent Name:</b>	BEHMKKE INNOVATION GROUP LLC
<b>Address Line 1:</b>	ONE MARINA PARK DRIVE
<b>Address Line 2:</b>	SUITE 1410
<b>Address Line 4:</b>	BOSTON, MASSACHUSETTS 02210
<b>ATTORNEY DOCKET NUMBER:</b>	0150041.C1
<b>NAME OF SUBMITTER:</b>	JONATHON P. WESTERN
<b>SIGNATURE:</b>	/Jonathon P. Western/
<b>DATE SIGNED:</b>	11/30/2020
<b>Total Attachments: 9</b>	

source=0150041C1\_Assignments#page1.tif  
source=0150041C1\_Assignments#page2.tif  
source=0150041C1\_Assignments#page3.tif  
source=0150041C1\_Assignments#page4.tif  
source=0150041C1\_Assignments#page5.tif  
source=0150041C1\_Assignments#page6.tif  
source=0150041C1\_Assignments#page7.tif  
source=0150041C1\_Assignments#page8.tif  
source=0150041C1\_Assignments#page9.tif

## ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, by Roman V. Drachev; Santhanaraghavan Parthasarathy; Andriy M. Andrukhiv; and David S. Lyttle (hereinafter referred to as Assignors), residing at 38 Hawthorne Drive #E303, Bedford, New Hampshire 03110; 2 Normandy Way, Nashua, New Hampshire 03063; 3 Baxter Road, Hollis, New Hampshire 03049; and P.O. Box 763, Amherst, New Hampshire 03031, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in APPARATUS FOR PRODUCING BULK SILICON CARBIDE, set forth in a Patent application for Letters Patent of the United States, filed ~~herewith~~ and September 5, 2014 as U.S. Application Serial No. 14/478,608; and

WHEREAS, GTAT Corporation, a corporation organized under and pursuant to the laws of Delaware having its principal place of business at 243 Daniel Webster Highway, Merrimack, New Hampshire 03054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns that: Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise; that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; and, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

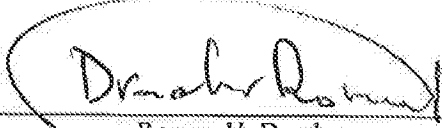
AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

EDWARDS WILDMAN PALMER LLP

All practitioners at Customer Number 21874


AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

  
Roman V. Drachev

Date: September 11, 2014

United States of America )  
State of New Hampshire ) ss.:  
County of Hillsborough )

On this 11th day of September, 2014, before me  
personally came Roman V. Drachev, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

  
Notary Public

JESSICA TROW  
Notary Public-New Hampshire  
My Commission Expires  
October 21, 2014

Andriy M. Andrukhiv  
Andriy M. Andrukhiv

Date: September 10<sup>th</sup>, 2014

United States of America )  
State of New Hampshire ss.:  
County of Hillsborough

On this 10<sup>th</sup> day of September, 2014, before me  
personally came Andriy M. Andrukhiv, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

Shawna M. Bernazzani  
Notary Public

SHAWNA M. BERNAZZANI  
Notary Public, State of New Hampshire  
My Commission Expires Aug. 22, 2017

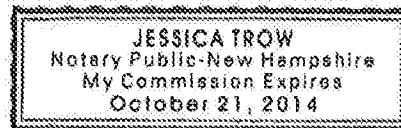
David S. Lyttle  
David S. Lyttle

Date: 9/12/14

United States of America )  
State of New Hampshire ) ss.:  
County of Hillsborough )

On this 12<sup>th</sup> day of September, 2014, before me  
personally came David S. Lyttle, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

Jessica Trow  
Notary Public





## ASSIGNMENT BY INVENTORS

**THIS ASSIGNMENT**, made this by Roman V. Drachev; Santhanaraghavan Parthasarathy; Andriy M. Andrukhiv; and David S. Lyttle (hereinafter referred to as Assignors), residing at 38 Hawthorne Drive #E303, Bedford, New Hampshire 03110; 32 Henry J. Drive, Tewksbury, Massachusetts 01876; 3 Baxter Road, Hollis, New Hampshire 03049; and P.O. Box 763, Amherst, New Hampshire 03031, respectively;

**WHEREAS**, Assignors have invented certain new and useful improvements in **APPARATUS FOR PRODUCING BULK SILICON CARBIDE**, set forth in a Patent application for Letters Patent of the United States, filed September 5, 2014 as U.S. Application Serial No. 14/478,608; and

**WHEREAS**, GTAT Corporation, a corporation organized under and pursuant to the laws of Delaware having its principal place of business at 5 Wentworth Drive, Unit #1, Hudson, New Hampshire 03051 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

**NOW, THEREFORE**, for good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

**AND** for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

**AND** for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns that: Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise; that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; and, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

**AND** Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

**AND** Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

BEHMKE INNOVATION GROUP LLC

All practitioners at Customer Number 127660

**AND** Assignors acknowledge an obligation of assignment of this invention to  
Assignee at the time the invention was made.

Date: 11/30/2020

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



Santhanaraghavan Parthasarathy