

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

Assignment ID: PATI469107

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
Smart Sand, Inc.	09/03/2024
CRS Proppants LLC	09/03/2024
Quickthree Technology, LLC	09/03/2024
RECEIVING PARTY DATA	
Company Name:	First-Citizens Bank & Trust Company
Street Address:	11 West 42nd Street
Internal Address:	12th Floor
City:	New York
State/Country:	NEW YORK
Postal Code:	10036
PROPERTY NUMBERS Total: 20	
Property Type	Number
Patent Number:	8939697
Patent Number:	9428094
Patent Number:	9315294
Patent Number:	9878651
Patent Number:	10300828
Patent Number:	10065814
Patent Number:	10301108
Patent Number:	10059535
Patent Number:	10239711
Patent Number:	10457504
Patent Number:	10696475
Patent Number:	10934087
Patent Number:	11267663
Patent Number:	11370498
Patent Number:	11377012
Patent Number:	11548724
Patent Number:	11760584

Property Type	Number
Patent Number:	11971087
Patent Number:	12060235
Application Number:	18732727

CORRESPONDENCE DATA

Fax Number:
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: (215)569-5619
Email: pecsenye@blankrome.com
Correspondent Name: Timothy D. Pecsénye
Address Line 1: One Logan Square, 8th Floor
Address Line 4: Philadelphia, PENNSYLVANIA 19103

ATTORNEY DOCKET NUMBER:	153540-00001
NAME OF SUBMITTER:	KATHERINE HOLLENBECK
SIGNATURE:	KATHERINE HOLLENBECK
DATE SIGNED:	09/03/2024
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 9
source=Patent Security Agreement (FCB-Smart Sand) EXECUTED(150395620.1)#page1.tiff
source=Patent Security Agreement (FCB-Smart Sand) EXECUTED(150395620.1)#page2.tiff
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source=Patent Security Agreement (FCB-Smart Sand) EXECUTED(150395620.1)#page9.tiff

PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of September 3, 2024 (as amended, restated, amended and restated, supplemented and/or otherwise modified from time to time, this “**Patent Security Agreement**”), is made by the entities identified as grantors on the signature pages hereto (individually, a “**Grantor**” and collectively, the “**Grantors**”) in favor of First Citizens Bank & Trust Company, as Agent for the Secured Parties (in such capacity and together with its successors and permitted assigns, the “**Agent**”).

WHEREAS, the Grantor is party to a Guarantee and Collateral Agreement, dated as of September 3, 2024 (as amended, restated, amended and restated, supplemented and/or otherwise modified from time to time, the “**Guarantee and Collateral Agreement**”), between each of the Grantors, the other grantors party thereto and the Agent, pursuant to which the Grantor granted a security interest to the Agent in the Patent Collateral (as defined below) and are required to execute and deliver this Agreement.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor hereby agrees with the Agent as follows:

SECTION 1. DEFINED TERMS

Unless otherwise defined herein, terms defined in the Guarantee and Collateral Agreement and used herein have the meaning given to them in the Guarantee and Collateral Agreement.

SECTION 2. GRANT OF SECURITY INTEREST

The Grantor, as security for the payment and performance in full of the Secured Obligations of the Grantor (including, if the Grantor is a Guarantor, the Secured Obligations of the Grantor arising under the Guaranty), hereby pledges to the Agent, its successors and permitted assigns, for the benefit of the Secured Parties, and hereby grants to the Agent, its successors and permitted assigns, for the benefit of the Secured Parties, a security interest in all right, title or interest in or to any and all of the following assets and properties now owned or at any time hereafter acquired by the Grantor or in which the Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the “**Patent Collateral**”):

(i) all letters patent of the United States in or to which any Grantor now or hereafter owns any right, title or interest therein, all registrations and recordings thereof, and all applications for letters patent of the United States, including registrations, recordings and pending applications in the United States Patent and Trademark Office (“**USPTO**”), including any of the foregoing listed in Schedule A hereto, and all reissues, continuations, divisions, continuations-in-part, renewals, improvements or extensions thereof, and the inventions disclosed or claimed therein, including the right to make, use and/or sell the inventions disclosed or claimed therein,

(ii) all additions and improvements to the foregoing, renewals and extensions thereof, rights to sue or otherwise recover for infringements or other violations thereof,

(iii) all rights corresponding to the foregoing throughout the world, and

(iv) to the extent not otherwise included, all Proceeds, products, accessions, rents and profits of any and all of the foregoing;

provided that, notwithstanding anything to the contrary in this Patent Security Agreement, (a) this Patent Security Agreement shall not constitute a grant of a security interest in (nor shall any pledge, grant or Security Interest attach to) any Excluded Assets, and (b) the Patent Collateral (and any defined term therein) shall not include any Excluded Assets; *provided, further*, that this Patent Security Agreement shall constitute a grant of a security interest in any Proceeds, substitutions or replacements of any Excluded Assets, and any Proceeds, substitutions or replacements of any Excluded Assets shall be included in the Patent Collateral (and any defined term used therein), unless such Proceeds, substitutions or replacements would independently constitute Excluded Assets.

SECTION 3. SECURITY AGREEMENT

The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Agent for the Secured Parties pursuant to the Guarantee and Collateral Agreement, and the Grantor hereby acknowledges and affirms that the rights and remedies of the Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Guarantee and Collateral Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the Guarantee and Collateral Agreement, the provisions of the Guarantee and Collateral Agreement shall control.

SECTION 4. RECORDATION

The Grantor hereby authorizes and requests that the USPTO record this Patent Security Agreement.

SECTION 5. TERMINATION

This Patent Security Agreement shall terminate and the lien on and security interest in the Patent Collateral shall be released upon the termination of the Commitments, the payment in full of all Secured Obligations (other than in respect of Secured Bank Product Obligations and contingent indemnification obligations not yet due and owing) and the expiration or termination of all Letters of Credit (or any L/C Exposure has been cash collateralized, backstopped or deemed reissued under another agreement, in each case, in a manner reasonably satisfactory to the applicable Issuing Bank).

SECTION 6. GOVERNING LAW

THIS PATENT SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

SECTION 7. COUNTERPARTS

This Patent Security Agreement may be executed in one or more counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered


shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

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IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

QUICKTHREE TECHNOLOGY, LLC,
as a Grantor

By: SMART SAND, INC., its sole Member

By: 

Name: Lee E. Beckelman

Title: Chief Financial Officer


[Signature Page to Patent Security Agreement]

PATENT
REEL: 068470 FRAME: 0463

[Signatures Continued from Previous Page]

**FIRST-CITIZENS BANK & TRUST
COMPANY, as Agent**

By:

A handwritten signature in dark ink, appearing to read 'Thomas Mullen', is written over a horizontal line.

Name: Thomas Mullen

Title: Vice President

[Signature Page to Patent Security Agreement]

**PATENT
REEL: 068470 FRAME: 0464**

SCHEDULE A
to
PATENT SECURITY AGREEMENT
PATENTS AND PATENT APPLICATIONS

(See Attached)

Grantor	Title	Application No.	Filing Date	Patent No.	Issue Date
Quickthree Technology, LLC	SELECTIVE ORIENTATION AND BALLAST FOR A TRANSPORTABLE CONTAINER	13285290	10/31/2011	8,939,697	01/27/2015
Quickthree Technology, LLC	TRANSPORT APPARATUS FOR ELONGATE OBJECTS	14131311	02/20/2014	9,428,094	08/30/2016
Quickthree Technology, LLC	VERTICALLY ORIENTED TRANSPORTABLE CONTAINER WITH IMPROVED STABILITY	14234253	04/07/2014	9,315,294	04/19/2016
Quickthree Technology, LLC	VERTICALLY ORIENTED TRANSPORTABLE CONTAINER WITH IMPROVED STABILITY	15063839	03/08/2016	9,878,651	01/30/2018
Quickthree Technology, LLC	VERTICALLY ORIENTED TRANSPORTABLE CONTAINER WITH IMPROVED STABILITY	15848058	12/20/2017	10,300,828	05/28/2019
Quickthree Technology, LLC	TRANSPORTABLE RECEIVING AND STORAGE SYSTEM WITH REDUNDANCY	15079277	03/24/2016	10,065,814	09/04/2018
Quickthree Technology, LLC	SILO DUST COLLECTION	15034697	05/05/2016	10,301,108	05/28/2019
Quickthree Technology, LLC	GRANULAR MATERIAL STORAGE WITH INPUT AND OUTPUT	15026729	04/01/2016	10,059,535	08/28/2018

Quickthree Technology, LLC	TRANSPORTABLE RECEIVING AND STORAGE SYSTEM	16036441	07/16/2018	10,239,711	03/26/2019
Quickthree Technology, LLC	TRANSPORTABLE RECEIVING AND STORAGE SYSTEM	16256369	01/24/2019	10,457,504	10/29/2019
Quickthree Technology, LLC	SILO DUST COLLECTION	16385458	04/16/2019	10,696,475	06/30/2020
Quickthree Technology, LLC	HIGH CAPACITY CONTAINER WITH MULTIPLE DISCHARGE LOCATIONS	16622360	12/13/2019	10,934,087	03/02/2021
Quickthree Technology, LLC	BOTTOM DUMP PNEUMATIC MATERIAL HANDLING SYSTEM	16740578	01/13/2020	11,267,663	03/08/2022
Quickthree Technology, LLC	BOOSTER AXLE AND SYSTEM FOR COUPLING BOOSTER AXLE TO A PAYLOAD	16775645	01/29/2020	11,370,498	06/28/2022
Quickthree Technology, LLC	SILO TRANSPORT SAFE RETRIEVAL SYSTEM	17046778	10/10/2020	11,377,012	07/05/2022
Quickthree Technology, LLC	HIGH CAPACITY CONTAINER WITH MULTIPLE DISCHARGE LOCATIONS	17185590	02/25/2021	11,548,724	01/10/2023
Quickthree Technology, LLC	FLOW CONTROL FOR BOTTOM DUMP PNEUMATIC MATERIAL HANDLING	17370039	07/08/2021	11,760,584	09/19/2023

Quickthree Technology, LLC	MULTI- ACTUATOR ROTATOR ASSEMBLY	17605902	10/22/2021	11,971,087	04/30/2024
Quickthree Technology, LLC	BOTTOM DUMP PNEUMATIC MATERIAL HANDLING SYSTEM	17577600	01/18/2022	12,060,235	08/13/2024
Quickthree Technology, LLC	DISCHARGE HOPPER WITH FLOATING LOAD CELL SUPPORT TO FACILITATE FLOW CONTROL THROUGH PROPPANT HANDLING SYSTEM	18732727	06/04/2024		