

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7378802

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
COLD JET, LLC	06/09/2022
RECEIVING PARTY DATA	
Name:	PNC BANK, NATIONAL ASSOCIATION
Street Address:	201 EAST FIFTH STREET
City:	CINCINNATI
State/Country:	OHIO
Postal Code:	45202
PROPERTY NUMBERS Total: 11	
Property Type	Number
Application Number:	29688807
Application Number:	16999633
Application Number:	15961321
Application Number:	17139292
Application Number:	63185467
Application Number:	63312259
Patent Number:	9095956
Patent Number:	8869551
Patent Number:	9931639
Patent Number:	10315862
Patent Number:	10737890
CORRESPONDENCE DATA	
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ATTORNEY DOCKET NUMBER:	1030996.0616036
NAME OF SUBMITTER:	ALEXANDER S. CZANIK
SIGNATURE:	/Alexander S. Czanik/
DATE SIGNED:	06/13/2022
Total Attachments: 10 source=PNC Cold Jet Rider to Security Agreement - Patents#page1.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page2.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page3.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page4.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page5.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page6.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page7.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page8.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page9.tif source=PNC Cold Jet Rider to Security Agreement - Patents#page10.tif	

Supplemental Rider to Security Agreement – Patents



THIS SUPPLEMENTAL RIDER TO SECURITY AGREEMENT – PATENTS (“Rider”) is executed as of June 9, 2022, by and between COLD JET, LLC (the “Grantor”) with an address at 455 Wards Corner Road, Loveland, Ohio 45140 and PNC BANK, NATIONAL ASSOCIATION (the “Bank”), with an address at 201 East Fifth Street, Cincinnati, Ohio 45202. This Rider is incorporated into and made part of that certain Amended and Restated Security Agreement (“Security Agreement”) between the Grantor, certain affiliates of Grantor, and the Bank dated as of the date hereof, and also into certain other financing documents and security agreements executed by and between the Grantor and the Bank or by and between the Borrower (as defined in the Security Agreement) and the Bank (all such documents including this Rider being collectively referred to as “Loan Documents”). All capitalized terms not otherwise defined in this Rider shall have the same meanings ascribed to such terms in the other Loan Documents. This Rider supplements the Rider to Security Agreement executed by Grantor in favor of Bank dated as of April 29, 2014.

As collateral security for the Obligations (as defined in the Security Agreement) under the Loan Documents, the Grantor has agreed to grant a security interest in and to assign to the Bank the Patent Collateral (as hereinafter defined). The Bank desires to have its lien and security interest in such Patent Collateral confirmed by a document identifying such security interest and in such form as may be recorded in the United States Patent and Trademark Office.

NOW, THEREFORE, with the foregoing background deemed incorporated by reference and made part hereof, the parties hereto, intending to be legally bound hereby, covenant and agree as follows:

1. **Grant of Security Interest.** In consideration of and pursuant to the terms of the Security Agreement and for other good, valuable and sufficient consideration, the receipt and sufficiency of which is hereby acknowledged, and to secure the Obligations, the Grantor does hereby assign and grant to the Bank a lien and security interest in (a) all of the Grantor’s right, title and interest in and to (i) the United States Letters Patent and the inventions described and claimed therein set forth on Schedule A hereto and any future patents of Grantor (hereinafter referred to collectively as the “Patents”); (ii) the applications for Letters Patent and the inventions described and claimed therein set forth on Schedule A hereto and any United States Letters Patent which may be issued upon any of said applications and any future patent applications of Grantor (hereinafter referred to collectively as the “Applications”); (iii) any reissue, extension, division or continuation of the Patents or the Applications (such reissues, extensions, divisions and continuations being herein referred to collectively as the “Reissued Patents”); (iv) all future royalties or other fees paid or payment or payments made or to be made to the Grantor in respect of the Patents; and (v) proceeds of any and all of the foregoing (the Patents, Applications, Reissued Patents and Royalties and proceeds being herein referred to collectively as the “Patent Rights”); and (b) all rights, interests, claims and demands that the Grantor has or may have in existing and future profits and damages for past and future infringements of the Patent Rights (such rights, interests, claims and demands being herein called the “Claims”) (the Patent Rights and Claims collectively referred to as the “Patent Collateral”).

2. **Representations and Warranties.** The Grantor warrants and represents to the Bank that: (a) the Grantor is the true and lawful exclusive owner of the Patent Rights set forth on Schedule A, including all rights and interests herein granted; (b) the Patent Collateral is valid and enforceable; (c) the Grantor has full power and authority to execute and deliver this Rider; (d) the Grantor has no notice of any suits or actions commenced or threatened against it, or notice of claims asserted or threatened against it, with reference to the Patent Rights and the interests granted herein; and (e) the Patent Rights and all interests granted herein are so granted free from all liens, charges, claims, options, licenses, pledges and encumbrances of every kind and character.

3. **Future Interests.** The Grantor further covenants to the Bank that if the Grantor acquires rights to any new Patent Collateral, the provisions of this Rider shall automatically apply thereto and the Grantor shall give the Bank prompt written notice thereof along with an amended Schedule A.

4. **Maintenance of Patent Collateral.** The Grantor further covenants that until all of the Obligations have been satisfied in full, it will (i) not enter into any agreements, including without limitation, license agreements, which are inconsistent with the Grantor's undertakings and covenants under this Rider or which restrict or impair the Bank's rights hereunder, and (ii) maintain the Patent Collateral in full force and effect.

5. **Negative Pledge.** The Grantor shall not sell, assign or further encumber its rights and interest in the Patent Collateral without prior written consent of the Bank.

6. **Remedies Upon Default.** (a) Anything herein contained to the contrary notwithstanding, if and while an Event of Default exists under the Loan Documents, the Grantor hereby agrees that the Bank, as the holder of a security interest, may take such action permitted under the Loan Documents or permitted by law, in its exclusive discretion, to foreclose upon the Patent Collateral covered hereby.

(b) For such purposes, and if an Event of Default occurs under the Loan Documents and while such Event of Default exists, the Grantor hereby authorizes and empowers the Bank to make, constitute and appoint any officer or agent of the Bank as the Bank may select, in its exclusive discretion, as the Grantor's true and lawful attorney-in-fact, with the power to endorse the Grantor's name on all applications, documents, papers and instruments necessary for the Bank to use the Patent Collateral or to grant or issue any exclusive or non-exclusive license under the Patent Collateral to anyone else, or necessary for the Bank to assign, pledge, convey or otherwise transfer title in or dispose of the Patent Collateral itself or to anyone else. The Grantor hereby ratifies all that such attorney shall lawfully do or cause to be done by virtue hereof, except for the gross negligence or willful misconduct of such attorney. This power of attorney shall be irrevocable for the life of this Rider and the Loan Documents, and until all the Obligations are satisfied in full.

(c) The Grantor expressly acknowledges that this Rider may be recorded with the Patent and Trademark Office in Washington, D.C. Contemporaneously herewith, the Grantor shall also execute and deliver to the Bank such documents as the Bank shall reasonably require to permanently assign all rights in the Patent Collateral to the Bank, which documents shall be held by the Bank, in escrow, until the occurrence of an Event of Default hereunder or under the Loan Documents. After such occurrence, the Bank may, at its sole option, record such escrowed documents with the Patent and Trademark Office.

7. **Prosecution of Patent Applications.** (a) The Grantor shall, at its own expense, diligently maintain all patents and diligently file and prosecute all patent applications relating to the inventions described and claimed in the Patent Collateral in the United States Patent and Trademark Office, and shall pay or cause to be paid in their customary fashion all fees and disbursements in connection therewith, and shall not abandon any such application prior to the exhaustion of all administrative and judicial remedies or disclaim or dedicate any Patent without the prior written consent of the Bank. The Grantor shall not abandon any Patent Collateral without the prior written consent of the Bank.

(b) Any and all fees, costs and expenses, including reasonable attorneys' fees of outside counsel and expenses incurred by the Bank in connection with the preparation, modification, enforcement or termination of this Rider and all other documents relating hereto and the consummation of this transaction, the filing and recording of any documents (including all taxes in connection therewith) in public offices, the payment or discharge of any taxes, counsel fees, maintenance fees, encumbrances or costs otherwise incurred in defending or prosecuting any actions or proceedings arising out of or related to the Patent Collateral shall be paid by the Grantor on demand by the Bank.

(c) The Grantor shall have the right to bring suit in the name of the Grantor to enforce the Patent Collateral, in which case the Bank may, at the Bank's option, be joined as a nominal party to such suit if the Bank shall be satisfied that such joinder is necessary and that the Bank is not thereby incurring any risk of liability by

such joinder. The Grantor shall promptly, upon demand, reimburse and indemnify, defend and hold harmless the Bank for all damages, costs and expenses, including reasonable attorneys' fees of outside counsel, incurred by the Bank pursuant to this paragraph and all other actions and conduct of the Grantor with respect to the Patent Rights during the term of this Rider.

8. Subject to Security Agreement. This Rider shall be subject to the terms, provisions, and conditions set forth in the Security Agreement and may not be modified without the written consent of the party against whom enforcement is being sought.

9. Inconsistent with Security Agreement. All rights and remedies herein granted to the Bank shall be in addition to any rights and remedies granted to the Bank under the Loan Documents. In the event of an inconsistency between this Rider and the Security Agreement, the language of the Security Agreement shall control. The terms and conditions of the Security Agreement are hereby incorporated herein by reference.

10. Termination of Agreement. Upon payment and performance of all Obligations under the Loan Documents, the Bank shall execute and deliver to the Grantor all documents necessary to terminate the Bank's security interest in the Patent Collateral.

11. Fees and Expenses. Subject to Section 8 of the Loan Agreement, any and all reasonable fees, costs and expenses, of whatever kind or nature, including the reasonable attorneys' fees of outside counsel and legal expenses incurred by the Bank in connection with the preparation of this Rider and all other documents relating hereto and the consummation of this transaction, the filing or recording of any documents (including all taxes in connection therewith) in public offices, the payment or discharge of any taxes, reasonable counsel fees, maintenance fees, encumbrances or costs otherwise incurred in protecting, maintaining, preserving the Patent Collateral, or in defending or prosecuting any actions or proceedings arising out of or related to the Patent Collateral, in each case in accordance with the terms of this Rider, shall be borne and paid by the Grantor on demand by the Bank and until so paid shall be added to the principal amount of the Obligations to the Bank and shall bear interest at the contract rate therefor.

12. Governing Law and Jurisdiction. This Rider has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank's office indicated above is located. **THIS RIDER WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE PARTIES HERETO DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK'S OFFICE INDICATED ABOVE IS LOCATED, INCLUDING WITHOUT LIMITATION THE ELECTRONIC TRANSACTIONS ACT (OR EQUIVALENT) IN SUCH STATE (OR, TO THE EXTENT CONTROLLING, THE LAWS OF THE UNITED STATES OF AMERICA, INCLUDING WITHOUT LIMITATION THE ELECTRONIC SIGNATURES IN GLOBAL AND NATIONAL COMMERCE ACT), EXCEPT THAT THE LAWS OF THE STATE WHERE ANY COLLATERAL IS LOCATED (IF DIFFERENT FROM THE STATE WHERE SUCH OFFICE OF THE BANK IS LOCATED) SHALL GOVERN THE CREATION, PERFECTION, ENFORCEMENT AND FORECLOSURE OF THE LIENS CREATED HEREUNDER ON SUCH PROPERTY OR ANY INTEREST THEREIN.** The Grantor hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank's office indicated above is located; provided that nothing contained in this Rider will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Grantor individually, against any security or against any property of the Grantor within any other county, state or other foreign or domestic jurisdiction to the extent reasonably necessary to obtain a recovery or to otherwise protect or enforce its interests. The Bank and the Grantor agree that the venue provided above is the most convenient forum for both the Bank and the Grantor. The Grantor waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Rider.

13. WAIVER OF JURY TRIAL. EACH OF THE GRANTOR AND THE BANK IRREVOCABLY WAIVES ANY AND ALL RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS RIDER, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS RIDER OR ANY TRANSACTION

CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE GRANTOR AND THE BANK ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

14. **Counterparts.** This Rider may be signed in any number of counterpart copies and by the parties hereto on separate counterparts, but all such copies shall constitute one and the same instrument. Delivery of an executed counterpart of signature page to this Rider by email transmission shall be effective as delivery of an original counterpart. Any party so delivering this Rider by email transmission shall promptly deliver an original counterpart, provided that any failure to do so shall not affect the validity of the counterpart delivered by email transmission.

15. **Electronic Signatures and Records.** Notwithstanding any other provision herein, the Grantor agrees that this Rider, any other amendments thereto and any other information, notice, signature card, agreement or authorization related thereto (each, a “**Communication**”) may, at the Bank’s option, be in the form of an electronic record. Any Communication may, at the Bank’s option, be signed or executed using electronic signatures. For the avoidance of doubt, the authorization under this Section may include, without limitation, use or acceptance by the Bank of a manually signed paper Communication which has been converted into electronic form (such as scanned into PDF format) for transmission, delivery and/or retention.

Signature Pages Follow

Signature Page to Supplemental Rider To Security Agreement – Patents

Grantor:

COLD JET, LLC

By: 

Eugene L. Cooke, III
President and Chief Executive Officer


Signature Page to Supplemental Rider To Security Agreement – Patents

Bank:

PNC BANK, NATIONAL ASSOCIATION

By: _____

Christopher T. Belletti
Senior Vice President

A handwritten signature in black ink, appearing to read 'Christopher T. Belletti', is written over a horizontal line. The signature is stylized with a large, sweeping initial 'C'.

SCHEDULE A TO Supplemental RIDER TO SECURITY AGREEMENT - PATENTS

Patents

Country	Application Number	Filing Date	Patent Number	Issue Date	Title
AU	2016229994	3/7/2016	2016229994	5/7/2020	PARTICLE FEEDER
AU	2016341877	10/19/2016	2016341877	4/2/2020	BLAST MEDIA COMMUNUTOR
AU	2019100430	4/24/2019	2019100430	5/15/2019	PARTICLE BLAST APPARATUS
BE	11776673.3	10/19/2011	2630080	2/28/2018	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
BE	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
BR	BR112017018987-9	3/7/2016	BR112017018987-9	10/26/2021	PARTICLE FEEDER
BR	BR112018007773-9	10/19/2016	BR112018007773-9	2/8/2022	BLAST MEDIA COMMUNUTOR
CA	2,749,004	12/29/2009	2,749,004	4/30/2013	BLAST NOZZLE WITH BLAST MEDIA FRAGMENTER
CA	2,934,302	1/15/2015	2,934,302	10/22/2019	BLAST MEDIA FRAGMENTER
CA	2,978,611	3/7/2016	2,978,611	11/9/2021	PARTICLE FEEDER
CA	3,002,564	10/19/2016	3,002,564	4/14/2020	BLAST MEDIA COMMUNUTOR
CH	11776673.3	10/19/2011	2630080	2/28/2018	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
CH	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
CN	200980156844.2	12/29/2009	ZL200980156844.2	6/11/2014	BLAST NOZZLE WITH BLAST MEDIA FRAGMENTER
CN	201180059483.7	10/19/2011	ZL201180059483.7	8/10/2016	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
CN	201580004646.X	1/15/2015	ZL 201580004646.X	9/28/2018	BLAST MEDIA FRAGMENTER
CN	201680023570.X	3/7/2016	ZL201680023570.X	6/30/2020	PARTICLE FEEDER
CN	201680071902.1	10/19/2016	ZL201680071902.1	12/25/2020	BLAST MEDIA COMMUNUTOR
CN	201821603071.0	9/29/2018	ZL201821603071.0	7/19/2019	PARTICLE BLAST SYSTEM AND FEEDER ASSEMBLY THEREOF, FLUID CONTROL VALVE AND ACTUATOR THEREOF
CN	201920922756.X	9/29/2018	ZL201920922756.X	2/18/2020	PARTICLE BLAST SYSTEM AND FEEDER ASSEMBLY THEREOF, FLUID CONTROL VALVE AND ACTUATOR THEREOF
CN	201930591597.5	10/24/2019	CN 306182667 S	11/20/2020	Design: PARTICLE BLAST APPARATUS
CN	201930580911.X	10/24/2019	ZL201930580911.X	2/12/2021	Design II: CONTROL PANEL WITH HANDLES FOR PARTICLE BLAST APPARATUS
CN	201811150050.2	9/29/2018	ZL201811150050.2	2/22/2022	PARTICLE BLAST SYSTEM AND FEEDER ASSEMBLY THEREOF, FLUID CONTROL VALVE AND ACTUATOR THEREOF, AND

CZ	11776673.3	10/19/2011	2630080	2/28/2018	PARTICLE BLAST METHOD METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
CZ	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
DE	09801894.8	12/29/2009	2391481	9/24/2014	BLAST NOZZLE WITH BLAST MEDIA FRAGMENTER
DE	11776673.3	10/19/2011	2630080	2/28/2018	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
DE	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
DE	202019102301.5	4/24/2019	202019102301	8/13/2019	PARTICLE BLAST APPARATUS METHOD AND APPARATUS FOR
DK	11776673.3	10/19/2011	2630080	2/28/2018	FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
DK	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
ES	11776673.3	10/19/2011	2630080	2/28/2018	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
ES	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
FR	09801894.8	12/29/2009	2391481	9/24/2014	BLAST NOZZLE WITH BLAST MEDIA FRAGMENTER
FR	11776673.3	10/19/2011	2630080	2/28/2018	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
FR	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
GB	03718155.9	4/1/2003	1494836	11/26/2008	FEEDER ASSEMBLY FOR PARTICLE BLAST SYSTEM
GB	11776673.3	10/19/2011	2630080	2/28/2018	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
GB	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
HK	19101916.8	10/19/2016	HK1259494	8/20/2021	BLAST MEDIA COMMUNICATOR
IN	4936/CHENP/2011	12/29/2009	331441	2/6/2020	BLAST NOZZLE WITH BLAST MEDIA FRAGMENTER
IT	11776673.3	10/19/2011	2630080	2/28/2018	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
IT	502019000104004	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
JP	2011-544587	12/29/2009	5615844	9/19/2014	BLAST NOZZLE WITH BLAST MEDIA FRAGMENTER
JP	2013-535040	10/19/2011	5931078	5/13/2016	METHOD AND APPARATUS FOR FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
JP	2016-547073	1/15/2015	6618915	11/22/2019	BLAST MEDIA FRAGMENTER
JP	2017-546835	3/7/2016	6707555	5/22/2020	PARTICLE FEEDER
JP	2018-539260	10/19/2016	6633215	12/20/2019	BLAST MEDIA COMMUNICATOR
JP	2019-002461	7/5/2019	3223933	10/23/2019	PARTICLE BLAST APPARATUS
JP	2019-003333	4/23/2019	3226755	6/25/2020	PARTICLE BLAST APPARATUS
JP	2019-081575	4/23/2019	6905000	6/28/2021	PARTICLE BLAST APPARATUS

KR	10-2017-7028101	3/7/2016	10-2092526	3/18/2020	PARTICLE FEEDER
KR	10-2018-7013412	10/19/2016	10-2142265	8/3/2020	BLAST MEDIA COMMUNICATOR
KR	20-2019-0001702	4/24/2019	20-492080	7/28/2020	PARTICLE BLAST APPARATUS
KR	10-2019-0047961	4/24/2019	10-2140548	7/28/2020	PARTICLE BLAST APPARATUS
KR	10-2020-0093437	4/24/2019	10-2338463	12/8/2021	PARTICLE BLAST APPARATUS
					PARTICLE BLAST CLEANING
MX	07/09201	1/31/2006	307,236	2/6/2013	APARATUS WITH PRESSURIZED CONTAINER
MX	MX/A/2016/009309	1/15/2015	373181	5/11/2020	BLAST MEDIA FRAGMENTER
					METHOD AND APPARATUS FOR
PL	11776673.3	10/19/2011	2630080	2/28/2018	FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
PL	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
RU	2017135225	3/7/2016	2703762	10/22/2019	PARTICLE FEEDER
RU	2018118362	10/19/2016	2710408	12/26/2019	BLAST MEDIA COMMUNICATOR
RU	2019112255	4/23/2019	198175	6/22/2020	PARTICLE BLAST APPARATUS
RU	2019112256	4/23/2019	2754055	8/25/2021	PARTICLE BLAST APPARATUS
					METHOD AND APPARATUS FOR
SK	11776673.3	10/19/2011	2630080	2/28/2018	FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
SK	16710602.0	3/7/2016	3265271	9/11/2019	PARTICLE FEEDER
TW	092109177	4/17/2003	1277487	4/1/2007	FEEDER ASSEMBLY FOR PARTICLE BLAST SYSTEM
TW	099100025	1/4/2010	1457205	10/21/2014	BLAST NOZZLE WITH BLAST MEDIA FRAGMENTER
TW	104101584	1/16/2015	1677376	11/21/2019	BLAST MEDIA FRAGMENTER
TW	105106962	3/7/2016	1657989	5/1/2019	PARTICLE FEEDER
TW	105133784	10/19/2016	1664056	7/1/2019	BLAST MEDIA COMMUNICATOR
					METHOD AND APPARATUS FOR
US	12/121,356	5/15/2008	9,095,956	8/4/2015	FORMING CARBON DIOXIDE PARTICLES INTO A BLOCK
					METHOD AND APPARATUS FOR
US	13/276,937	10/19/2011	8,869,551	10/28/2014	FORMING CARBON DIOXIDE PARTICLES INTO BLOCKS
US	14/596,607	1/14/2015	9,931,639	4/3/2018	BLAST MEDIA FRAGMENTER
US	15/062,842	3/7/2016	10,315,862	6/11/2019	PARTICLE FEEDER
US	16/436,097	6/10/2019	10,737,890	8/11/2020	PARTICLE FEEDER

Patent Applications

Country	Application Number	Filing Date	Publication Number	Title
AU	2020331970	8/20/2020		PARTICLE BLAST APPARATUS
AU	2019202890	4/24/2019		PARTICLE BLAST APPARATUS
BR	BR202019008176-2	4/22/2019		PARTICLE BLAST APPARATUS
BR	BR112022002931-4	8/20/2020		PARTICLE BLAST APPARATUS
BR	BR102019008177-5	4/22/2019		PARTICLE BLAST APPARATUS
CA		8/20/2020		PARTICLE BLAST APPARATUS
CA	3,040,754	4/23/2019	3,040,754	PARTICLE BLAST APPARATUS

CN	202080059247.4	8/20/2020		PARTICLE BLAST APPARATUS
CN	202111664397.0	9/29/2018		PARTICLE BLAST APPARATUS
EP	15737488.5	1/15/2015	3094449	BLAST MEDIA FRAGMENTER
EP	16791177.5	10/19/2016	3365135	BLAST MEDIA COMMUNUTOR
EP	20764547.4	8/20/2020		PARTICLE BLAST APPARATUS
EP	19170880.9	4/24/2019	3626395	PARTICLE BLAST APPARATUS
HK	19119688.0	10/19/2016	1260011	BLAST MEDIA COMMUNUTOR
HK	42020006857.5	9/29/2018	40016847	PARTICLE BLAST SYSTEM AND FEEDER ASSEMBLY THEREOF, FLUID CONTROL VALVE AND ACTUATOR THEREOF, AND PARTICLE BLAST METHOD
IN	201717033225	3/7/2016	201717033225 A	PARTICLE FEEDER
IN	201817015379	10/19/2016	201817015379 A	BLAST MEDIA COMMUNUTOR
IN	202217012766	8/20/2020		PARTICLE BLAST APPARATUS
IN	201914015939	4/22/2019	201914015939A	PARTICLE BLAST APPARATUS
JP		8/20/2020		PARTICLE BLAST APPARATUS
JP	2021-104671	4/23/2019	2021-177099	PARTICLE BLAST APPARATUS
KR		8/20/2020		PARTICLE BLAST APPARATUS
MX	MX/A/2017/011387	3/7/2016		PARTICLE FEEDER
MX	MX/A/2018/004804	10/19/2016		BLAST MEDIA COMMUNUTOR
MX	MX/u/2019/000197	4/24/2019		FEEDER ASSEMBLY FOR A PARTICLE BLAST APPARATUS
MX	MX/a/2022/002136	8/20/2022		PARTICLE BLAST APPARATUS
MX	MX/a/2019/004733	4/23/2019		PARTICLE BLAST APPARATUS
RU		8/20/2022		PARTICLE BLAST APPARATUS
RU	2021124851	8/23/2021		PARTICLE BLAST APPARATUS
TW	109128484	8/20/2020	202116487	PARTICLE BLAST APPARATUS AND METHOD
TW	108114248	4/24/2019		PARTICLE BLAST APPARATUS
TW	109147191	12/31/2020	202140148	METHOD AND APPARATUS FOR ENHANCED BLAST STREAM
US	29/688,807	4/24/2019		Design: PARTICLE BLAST APPARATUS
US	16/999,633	8/21/2020	US-2021-0053187-A1	PARTICLE BLAST APPARATUS
US	15/961,321	4/24/2018	20190321942	PARTICLE BLAST APPARATUS
US	17/139,292	12/31/2020	US-2021-0197337-A1	METHOD AND APPARATUS FOR ENHANCED BLAST STREAM
US	63/185,467	5/7/2021		METHOD AND APPARATUS FOR FORMING SOLID CARBON DIOXIDE
US	63/312,259	2/21/2022		METHOD AND APPARATUS FOR MINIMIZING ICE BUILD UP WITHIN BLAST NOZZLE AND AT EXIT
WO	PCT/US19/28852	4/24/2019	WO 2019/209907	PARTICLE BLAST APPARATUS
WO	PCT/US20/67643	12/31/2020	WO 2021/138545	METHOD AND APPARATUS FOR ENHANCED BLAST STREAM