PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6991851

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|-------------------|
| NATURE OF CONVEYANCE: | SECURITY INTEREST |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------------------|----------------|
| ADVANSIX INC. | 10/27/2021 |
| ADVANSIX RESINS & CHEMICALS LLC | 10/27/2021 |

RECEIVING PARTY DATA

| Name: | TRUIST BANK, AS ADMINISTRATIVE AGENT |
|-----------------|--------------------------------------|
| Street Address: | 303 PEACHTREE ST., N.E. |
| City: | ATLANTA |
| State/Country: | GEORGIA |
| Postal Code: | 30308 |

PROPERTY NUMBERS Total: 87

| Property Type | Number |
|---------------------|----------|
| Application Number: | 11311604 |
| Application Number: | 10251335 |
| Application Number: | 17154916 |
| Application Number: | 17154914 |
| Application Number: | 17154918 |
| Application Number: | 17154920 |
| Application Number: | 17154919 |
| Application Number: | 16493102 |
| Application Number: | 11933545 |
| Application Number: | 13971999 |
| Application Number: | 13412094 |
| Application Number: | 16982273 |
| Application Number: | 16130055 |
| Application Number: | 16130066 |
| Application Number: | 16490847 |
| Application Number: | 13206980 |
| Application Number: | 13207017 |
| Application Number: | 11622939 |
| Application Number: | 15388999 |
| | |

PATENT REEL: 057940 FRAME: 0794

506945014

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12700827 |
| Application Number: | 13658495 |
| Application Number: | 14273688 |
| Application Number: | 15047057 |
| Application Number: | 15291267 |
| Application Number: | 16161662 |
| Application Number: | 16295724 |
| Application Number: | 13763279 |
| Application Number: | 16493518 |
| Application Number: | 15057640 |
| Application Number: | 13833490 |
| Application Number: | 16649780 |
| Application Number: | 13761642 |
| Application Number: | 13286440 |
| Application Number: | 10121996 |
| Application Number: | 10944315 |
| Application Number: | 10915723 |
| Application Number: | 13432141 |
| Application Number: | 16611384 |
| Application Number: | 12499617 |
| Application Number: | 13678000 |
| Application Number: | 11809050 |
| Application Number: | 10717048 |
| Application Number: | 15279837 |
| Application Number: | 13164194 |
| Application Number: | 09850625 |
| Application Number: | 14204682 |
| Application Number: | 13163861 |
| Application Number: | 12415312 |
| Application Number: | 15650407 |
| Application Number: | 11321575 |
| Application Number: | 14353955 |
| Application Number: | 16612334 |
| Application Number: | 12851363 |
| Application Number: | 10716584 |
| Application Number: | 09554216 |
| Application Number: | 16633155 |
| Application Number: | 13743090 |

| Property Type | Number |
|---------------------|----------|
| Application Number: | 11273411 |
| Application Number: | 13429596 |
| Application Number: | 17115396 |
| Application Number: | 16495048 |
| Application Number: | 17230278 |
| Application Number: | 16990855 |
| Application Number: | 13289700 |
| Application Number: | 11622878 |
| Application Number: | 17177182 |
| Application Number: | 17196874 |
| Application Number: | 17118312 |
| Application Number: | 17196856 |
| Application Number: | 17120032 |
| Application Number: | 17127048 |
| Application Number: | 17196994 |
| Application Number: | 17196998 |
| Application Number: | 17197003 |
| Application Number: | 17120035 |
| Application Number: | 17196893 |
| Application Number: | 17127033 |
| Application Number: | 17196886 |
| Application Number: | 17120040 |
| Application Number: | 17118304 |
| Application Number: | 16981191 |
| Application Number: | 13150699 |
| Application Number: | 11924634 |
| Application Number: | 13026834 |
| Application Number: | 16491082 |
| Application Number: | 17319492 |
| Application Number: | 14263156 |

CORRESPONDENCE DATA

Fax Number: (704)444-1111

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.

7044441000 Phone:

Email: kristen.mims@alston.com **Correspondent Name:** ALSTON & BIRD LLP

ONE SOUTH AT THE PLAZA Address Line 1:

101 SOUTH TRYON STREET, SUITE 4000 Address Line 2:

| Address Line 4: CHA | CHARLOTTE, NORTH CAROLINA 28280-4000 | | | | | | |
|-------------------------|--------------------------------------|--|--|--|--|--|--|
| ATTORNEY DOCKET NUMBER: | 001833/565394 | | | | | | |
| NAME OF SUBMITTER: | KRISTEN MIMS | | | | | | |
| SIGNATURE: | /Kristen Mims/ | | | | | | |
| DATE SIGNED: | 10/27/2021 | | | | | | |

Total Attachments: 90 source=AdvanSix - IP Security Agreement#page1.tif source=AdvanSix - IP Security Agreement#page2.tif source=AdvanSix - IP Security Agreement#page3.tif source=AdvanSix - IP Security Agreement#page4.tif source=AdvanSix - IP Security Agreement#page5.tif source=AdvanSix - IP Security Agreement#page6.tif source=AdvanSix - IP Security Agreement#page7.tif source=AdvanSix - IP Security Agreement#page8.tif source=AdvanSix - IP Security Agreement#page9.tif source=AdvanSix - IP Security Agreement#page10.tif source=AdvanSix - IP Security Agreement#page11.tif source=AdvanSix - IP Security Agreement#page12.tif source=AdvanSix - IP Security Agreement#page13.tif source=AdvanSix - IP Security Agreement#page14.tif source=AdvanSix - IP Security Agreement#page15.tif source=AdvanSix - IP Security Agreement#page16.tif source=AdvanSix - IP Security Agreement#page17.tif source=AdvanSix - IP Security Agreement#page18.tif source=AdvanSix - IP Security Agreement#page19.tif source=AdvanSix - IP Security Agreement#page20.tif source=AdvanSix - IP Security Agreement#page21.tif source=AdvanSix - IP Security Agreement#page22.tif source=AdvanSix - IP Security Agreement#page23.tif source=AdvanSix - IP Security Agreement#page24.tif source=AdvanSix - IP Security Agreement#page25.tif source=AdvanSix - IP Security Agreement#page26.tif source=AdvanSix - IP Security Agreement#page27.tif source=AdvanSix - IP Security Agreement#page28.tif source=AdvanSix - IP Security Agreement#page29.tif source=AdvanSix - IP Security Agreement#page30.tif source=AdvanSix - IP Security Agreement#page31.tif source=AdvanSix - IP Security Agreement#page32.tif source=AdvanSix - IP Security Agreement#page33.tif source=AdvanSix - IP Security Agreement#page34.tif source=AdvanSix - IP Security Agreement#page35.tif source=AdvanSix - IP Security Agreement#page36.tif source=AdvanSix - IP Security Agreement#page37.tif source=AdvanSix - IP Security Agreement#page38.tif source=AdvanSix - IP Security Agreement#page39.tif source=AdvanSix - IP Security Agreement#page40.tif

| source=AdvanSix - IP Security Agreement#page41.tif | |
|---|--|
| source=AdvanSix - IP Security Agreement#page42.tif | |
| source=AdvanSix - IP Security Agreement#page43.tif | |
| source=AdvanSix - IP Security Agreement#page44.tif | |
| source=AdvanSix - IP Security Agreement#page45.tif | |
| source=AdvanSix - IP Security Agreement#page46.tif | |
| source=AdvanSix - IP Security Agreement#page47.tif | |
| source=AdvanSix - IP Security Agreement#page48.tif | |
| source=AdvanSix - IP Security Agreement#page49.tif | |
| source=AdvanSix - IP Security Agreement#page50.tif | |
| source=AdvanSix - IP Security Agreement#page51.tif | |
| source=AdvanSix - IP Security Agreement#page52.tif | |
| source=AdvanSix - IP Security Agreement#page53.tif | |
| source=AdvanSix - IP Security Agreement#page54.tif | |
| source=AdvanSix - IP Security Agreement#page55.tif | |
| source=AdvanSix - IP Security Agreement#page56.tif | |
| source=AdvanSix - IP Security Agreement#page57.tif | |
| source=AdvanSix - IP Security Agreement#page58.tif | |
| source=AdvanSix - IP Security Agreement#page59.tif | |
| source=AdvanSix - IP Security Agreement#page60.tif | |
| source=AdvanSix - IP Security Agreement#page61.tif | |
| source=AdvanSix - IP Security Agreement#page62.tif | |
| source=AdvanSix - IP Security Agreement#page63.tif | |
| source=AdvanSix - IP Security Agreement#page64.tif | |
| source=AdvanSix - IP Security Agreement#page65.tif | |
| source=AdvanSix - IP Security Agreement#page66.tif | |
| source=AdvanSix - IP Security Agreement#page67.tif | |
| source=AdvanSix - IP Security Agreement#page68.tif | |
| source=AdvanSix - IP Security Agreement#page69.tif source=AdvanSix - IP Security Agreement#page70.tif | |
| | |
| source=AdvanSix - IP Security Agreement#page71.tif source=AdvanSix - IP Security Agreement#page72.tif | |
| source=AdvanSix - If Security Agreement#page72.tif | |
| source=AdvanSix - IP Security Agreement#page74.tif | |
| source=AdvanSix - IP Security Agreement#page74.tif | |
| source=AdvanSix - IP Security Agreement#page76.tif | |
| source=AdvanSix - IP Security Agreement#page77.tif | |
| source=AdvanSix - IP Security Agreement#page78.tif | |
| source=AdvanSix - IP Security Agreement#page79.tif | |
| source=AdvanSix - IP Security Agreement#page80.tif | |
| source=AdvanSix - IP Security Agreement#page81.tif | |
| source=AdvanSix - IP Security Agreement#page82.tif | |
| source=AdvanSix - IP Security Agreement#page83.tif | |
| source=AdvanSix - IP Security Agreement#page84.tif | |
| source=AdvanSix - IP Security Agreement#page85.tif | |
| source=AdvanSix - IP Security Agreement#page86.tif | |
| source=AdvanSix - IP Security Agreement#page87.tif | |
| source=AdvanSix - IP Security Agreement#page88.tif | |
| | |

source=AdvanSix - IP Security Agreement#page89.tif source=AdvanSix - IP Security Agreement#page90.tif

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, amended and restated, supplemented or otherwise modified from time to time, this "IP Security Agreement") dated October 27, 2021, is made by the Persons listed on the signature pages hereof (collectively, the "Grantors") and Truist Bank ("Truist"), as Administrative Agent (the "Administrative Agent") for each of the Secured Parties (as defined in the Credit Agreement referred to below).

WHEREAS, AdvanSix Inc., a Delaware corporation, has entered into a Credit Agreement dated as of October 27, 2021 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among the Borrower, the Lenders party thereto, each Swing Line Lender party thereto, each L/C Issuer party thereto, Truist, as Administrative Agent, and the other Agents and the Arrangers party thereto. Terms defined in the Credit Agreement and not otherwise defined herein are used herein as defined in the Credit Agreement.

WHEREAS, as a condition precedent to the making of Loans by the Lenders and the issuance of Letters of Credit by the L/C Issuers under the Credit Agreement and by any Lender pursuant to any Bilateral Letter of Credit Facility and the entry into Secured Hedge Agreements by the Hedge Banks from time to time, each Grantor has executed and delivered that certain Security Agreement dated October 27, 2021 made by the Grantors to the Administrative Agent (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement").

WHEREAS, under the terms of the Security Agreement, the Grantors have granted to the Administrative Agent, for the benefit of the Secured Parties, a security interest in, among other property, certain intellectual property of the Grantors, and have agreed as a condition thereof to execute this IP Security Agreement for recording with the U.S. Patent and Trademark Office, the U.S. Copyright Office and other governmental authorities.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor agrees as follows:

- 1. <u>Grant of Security</u>. Each Grantor hereby grants to the Administrative Agent, for the benefit of the Secured Parties, a security interest in all of such Grantor's right, title and interest in and to the following, (the "*Collateral*"):
- (a) all patents, patent applications, utility models and statutory invention registrations, all inventions claimed or disclosed therein and all improvements thereto set forth on Schedule A hereto (the "*Patents*");
- (b) the trademark and service mark registrations and applications set forth on Schedule B hereto (provided that no security interest shall be granted in United States intent touse trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use trademark applications under applicable federal law), together with the goodwill symbolized thereby (the "*Trademarks*");

LEGAL02/41138096v2

- (c) all copyrights, including, without limitation, copyrights in Computer Software, internet web sites and the content thereof, whether registered or unregistered set forth on <u>Schedule C</u> hereto (the "*Copyrights*");
- (d) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Grantor accruing thereunder or pertaining thereto;
- (e) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages; and
- (f) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the foregoing or arising from any of the foregoing.
- 2. <u>Security for Obligations</u>. The grant of a security interest in, the Collateral by each Grantor under this IP Security Agreement secures the payment of all Obligations of such Grantor now or hereafter existing or arising under or in respect of the Loan Documents (including, without limitation, any extensions, modifications, substitutions, amendments, amendment and restatements, or renewals of any or all of the foregoing Obligations), whether direct or indirect, absolute or contingent, and whether for principal, reimbursement obligations, interest, premiums, penalties, fees, indemnifications, contract causes of action, costs, expenses or otherwise.
- 3. <u>Recordation</u>. Each Grantor authorizes and requests that the Register of Copyrights, the Commissioner for Patents and Trademarks and any other applicable U.S. government officer record this IP Security Agreement.
- 4. <u>Execution in Counterparts</u>. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.
- 5. <u>Grants, Rights and Remedies</u>. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Administrative Agent with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein.
- 6. <u>Governing Law</u>. This IP Security Agreement and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this IP Security Agreement and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the State of New York.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, each Grantor has caused this IP Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

ADVANSIX INC.,

by

Name: Erin N. Kane

Title: President and Chief Executive Officer

ADVANSIX RESINS & CHEMICALS LLC

by

Name: Erin N. Kane
Title: Manager

[Signature Page - Intellectual Property Security Agreement]

TRUIST BANK, as Administrative Agent

Name: Alexander Harrison

Title: Vice President

[Signature Page - Intellectual Property Security Agreement]

SCHEDULE A

Patents

| <u> Fide:</u> | Appl. No.: | Appl. Date: | Reg. No.: | Reg. Date: | Case Status: | Country: |
|---|-----------------|-------------|----------------|------------|---------------------|---------------------------|
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 3,070,957 | 6/27/2018 | 3,070,957 | 7/13/2021 | Registered/Granted | Canada |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 201880050540.7 | 6/27/2018 | | | Pending | China |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 3661995 | 4/28/2021 | Registered/Granted | European Patent Office |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 2020-505181 | 6/27/2018 | 6902157 | 6/22/2021 | Registered/Granted | Japan |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 10-2020-7005614 | 6/27/2018 | | | Application allowed | Republic of Korea |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 3661995 | 4/28/2021 | Registered/Granted | Belgium |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 602018016296.8 | 4/28/2021 | Registered/Granted | Germany |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 3661995 | 4/28/2021 | Registered/Granted | Spain |

| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 3661995 | 4/28/2021 | Registered/Granted | France |
|--|-------------------|-----------|-----------------|-----------|--------------------|------------------------------|
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 3661995 | 4/28/2021 | Registered/Granted | United Kingdom |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 502021000058970 | 4/28/2021 | Registered/Granted | Italy |
| A PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 18742884.2 | 6/27/2018 | 3661995 | 4/28/2021 | Registered/Granted | Netherlands |
| AMIDE-BASED COMPOUNDS, PRODUCTION, RECOVERY, PURIFICATION AND USES THEREOF | 11/311,604 | 9/21/2002 | 7,482,446 | 1/27/2009 | Registered/Granted | United States of America |
| AMIDE-BASED COMPOUNDS, PRODUCTION, RECOVERY, PURIFICATION AND USES THEREOF | 10/251,335 | 9/21/2002 | 7,022,844 | 4/4/2006 | Registered/Granted | United States of America |
| AMINO ACID SURFACTANTS | 17/154,916 | 1/21/2021 | | | Pending | United States of America |
| AMINO ACID SURFACTANTS | PCT/US2021/014447 | 1/21/2021 | | | Pending | Patent Cooperation Treaty |
| AMINO ACID SURFACTANTS | 17/154,914 | 1/21/2021 | | | Pending | United States of America |
| AMINO ACID SURFACTANTS | PCT/US2021/014457 | 1/21/2021 | | | Pending | Patent Cooperation Treaty |
| AMINO ACID SURFACTANTS | 17/154,918 | 1/21/2021 | | | Pending | United States of America |

| AMINO ACID SURFACTANTS | PCT/US2021/014445 | 1/21/2021 | | | Pending | Patent Cooperation Treaty |
|--|-------------------|------------|-------------|-----------|--------------------|------------------------------|
| AMINO ACID SURFACTANTS | 110101778 | 1/18/2021 | | | Pending | Taiwan |
| AMINO ACID SURFACTANTS | 110101776 | 1/18/2021 | | | Pending | Taiwan |
| AMINO ACID SURFACTANTS | 17/154,920 | 1/21/2021 | | | Pending | United States of America |
| AMINO ACID SURFACTANTS | PCT/US2021/014440 | 1/21/2021 | | | Pending | Patent Cooperation Treaty |
| AMINO ACID SURFACTANTS | 17/154,919 | 1/21/2021 | | | Pending | United States of America |
| AMINO ACID SURFACTANTS | PCT/US2021/014444 | 1/21/2021 | | | Pending | Patent Cooperation Treaty |
| AMINO ACID SURFACTANTS | 110101774 | 1/18/2021 | | | Pending | Taiwan |
| AMMONIUM SULFATE FERTILIZER WITH WATER-SOLUBLE MICRONUTRIENTS | 201980078156.2 | 9/18/2019 | | | Pending | China |
| AMMONIUM SULFATE FERTILIZER WITH WATER-SOLUBLE MICRONUTRIENTS | 19779713.7 | 9/18/2019 | | | Pending | European Patent Office |
| AMMONIUM SULFATE FERTILIZER WITH WATER-SOLUBLE MICRONUTRIENTS | P00202102224 | 9/18/2019 | | | Pending | Indonesia |
| AMMONIUM SULFATE NITRATE | 20030595 | 11/14/2001 | 12423 | 7/16/2009 | Registered/Granted | Belarus |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | European Patent Office |
| AMMONIUM SULFATE NITRATE | 2003-053 | 11/14/2001 | LT5121B | 3/25/2004 | Registered/Granted | Lithuania |
| AMMONIUM SULFATE NITRATE | 2003117467 | 11/14/2001 | RU2279416C2 | 7/10/2006 | Registered/Granted | Russian Federation |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | Belgium |

| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | 60109057.8 | 2/23/2005 | Registered/Granted | Germany |
|--|-----------------|------------|-------------|-----------|---------------------|---------------------------|
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | Spain |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | Finland |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | France |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | United Kingdom |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | 3053350 | 2/23/2005 | Registered/Granted | Greece |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | Netherlands |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | Portugal |
| AMMONIUM SULFATE NITRATE | 01996519.3 | 11/14/2001 | EP1343739B1 | 2/23/2005 | Registered/Granted | Turkey |
| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 18718279.5 | 3/27/2018 | | | Application allowed | European Patent Office |
| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 2018249397 | 3/27/2018 | 2018249397 | 10/8/2020 | Registered/Granted | Australia |
| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 3,056,437 | 3/27/2018 | 3,056,437 | 7/6/2021 | Registered/Granted | Canada |
| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 2019-551451 | 3/27/2018 | | | Pending | Japan |
| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 10-2019-7032299 | 3/27/2018 | 10-2263530 | 6/4/2021 | Registered/Granted | Republic of Korea |

| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 16/493,102 | 3/27/2018 | | | Pending | United States of America |
|--|----------------|-----------|--------------|-----------|---------------------|-----------------------------|
| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 1-2019-05244 | 3/27/2018 | | | Application allowed | Vietnam |
| BRANCHED, TERMINATED POLYAMIDE COMPOSITIONS | 19215464.9 | 3/27/2018 | | | Application allowed | European Patent Office |
| CHEMICALLY AND PHYSICALLY MODIFIED FERTILIZERS, METHODS OF PRODUCTION AND USES THEREOF | 2010-532068 | 11/3/2008 | JP5389038B2 | 10/8/2013 | Registered/Granted | Japan |
| CHEMICALLY AND PHYSICALLY MODIFIED FERTILIZERS, METHODS OF PRODUCTION AND USES THEREOF | 200880114290.5 | 11/3/2008 | CN101842335B | 3/26/2014 | Registered/Granted | China |
| CHEMICALLY AND PHYSICALLY MODIFIED FERTILIZERS, METHODS OF PRODUCTION AND USES THEREOF | 2,703,945 | 11/3/2008 | 2,703,945 | 4/5/2016 | Registered/Granted | Canada |
| CHEMICALLY AND PHYSICALLY MODIFIED FERTILIZERS, METHODS OF PRODUCTION AND USES THEREOF | PI0818135-7 | 11/3/2008 | PI0818135-7 | 4/30/2019 | Registered/Granted | Brazil |
| CHEMICALLY AND PHYSICALLY MODIFIED FERTILIZERS, METHODS OF PRODUCTION AND USES THEREOF | 2008319217 | 11/3/2008 | 2008319217 | 6/14/2012 | Registered/Granted | Australia |

| CHEMICALLY AND PHYSICALLY MODIFIED FERTILIZERS, METHODS OF PRODUCTION AND USES THEREOF | 11/933,545 | 11/1/2007 | 7,785,387 | 8/31/2010 | Registered/Granted | United States of America |
|--|----------------|-----------|------------------|------------|---------------------|-----------------------------|
| CHEMICALLY-MODIFIED MIXED FUELS, METHODS OF PRODUCTION AND USES THEREOF | 13/971,999 | 8/21/2013 | 8,980,802 | 3/17/2015 | Registered/Granted | United States of America |
| CHEMICALLY-MODIFIED MIXED FUELS, METHODS OF PRODUCTION AND USES THEREOF | 13/412,094 | 3/5/2012 | 8,545,580 | 10/1/2013 | Registered/Granted | United States of America |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 17/319,492 | 5/13/2021 | | | Pending | United States of America |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 2016252288 | 4/19/2016 | 2016252288 | 2/13/2020 | Registered/Granted | Australia |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 2,982,405 | 4/19/2016 | | | Application allowed | Canada |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 201680036259.9 | 4/19/2016 | ZL201680036259.9 | 6/8/2021 | Registered/Granted | China |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 2017-554572 | 4/19/2016 | 6860499 | 3/30/2021 | Registered/Granted | Japan |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 2017138273 | 4/19/2016 | 2684086 | 4/3/2019 | Registered/Granted | Russian Federation |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 2019268198 | 4/19/2016 | 2019268198 | 10/29/2020 | Registered/Granted | Australia |
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 202110124556.1 | 4/19/2016 | | | Pending | China |

| COATING COMPOSITION INCLUDING ALKYL OXIMES | 2021-052548 | 4/19/2016 | | | Pending | Japan |
|--|---------------|------------|-----------|-----------|--------------------|---------------------------|
| COATING COMPOSITION INCLUDING ALKYL OXIMES | 42021032833.2 | 4/19/2016 | | | Pending | Hong Kong |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 093135453 | 11/18/2004 | 1378113 | 12/1/2012 | Registered/Granted | Taiwan |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10184956.0 | 11/17/2004 | 2272892 | 5/2/2018 | Registered/Granted | European Patent Office |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04811403.7 | 11/17/2004 | 1692207 | 5/2/2018 | Registered/Granted | European Patent Office |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 2,546,342 | 11/17/2004 | 2,546,342 | 1/13/2015 | Registered/Granted | Canada |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 2,862,454 | 11/17/2004 | 2,862,454 | 9/20/2016 | Registered/Granted | Canada |

| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 200480040149.7 | 11/17/2004 | CN100584875C | 1/27/2010 | Registered/Granted | China |
|--|----------------|------------|-----------------|-----------|--------------------|----------------|
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10184956.0 | 11/17/2004 | 2272892 | 5/2/2018 | Registered/Granted | Germany |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10184956.0 | 11/17/2004 | 2272892 | 5/2/2018 | Registered/Granted | France |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10184956.0 | 11/17/2004 | 2272892 | 5/2/2018 | Registered/Granted | United Kingdom |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10184956.0 | 11/17/2004 | 502018000021359 | 5/2/2018 | Registered/Granted | Italy |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04811403.7 | 11/17/2004 | 1692207 | 5/2/2018 | Registered/Granted | Germany |

| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04811403.7 | 11/17/2004 | 1692207 | 5/2/2018 | Registered/Granted | France |
|--|-------------|------------|-----------------|----------|--------------------|-----------------------------|
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04811403.7 | 11/17/2004 | 1692207 | 5/2/2018 | Registered/Granted | United Kingdom |
| COMPOSITE MATERIAL PRECURSORS AND COMPOSITE MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04811403.7 | 11/17/2004 | 502018000021352 | 5/2/2018 | Registered/Granted | Italy |
| COMPOSITIONS AND METHODS FOR CLEANING AND STRIPPING | 108111129 | 3/29/2019 | | | Pending | Taiwan |
| COMPOSITIONS AND METHODS FOR CLEANING AND STRIPPING | 19716735.6 | 3/27/2019 | | | Pending | European Patent Office |
| COMPOSITIONS AND METHODS FOR CLEANING AND STRIPPING | 2020-552363 | 3/27/2019 | | | Pending | Japan |
| COMPOSITIONS AND METHODS FOR CLEANING AND STRIPPING | 16/982,273 | 3/27/2019 | | | Pending | United States of America |
| COMPOSITIONS AND METHODS FOR CROP DEFENSE | 16/130,055 | 9/13/2018 | | | Pending | United States of America |

| COMPOSITIONS AND METHODS FOR CROP | 18779929.1 | 9/13/2018 | | | Danding | European Patent |
|--|----------------|-----------|--------------|------------|--------------------|-----------------------------|
| DEFENSE | 18//9929.1 | 9/13/2018 | | | Pending | Office |
| COMPOSITIONS AND METHODS FOR CROP NUTRITION | 16/130,066 | 9/13/2018 | | | Pending | United States of America |
| COMPOSITIONS AND METHODS FOR GEL SPINNING OF POLYAMIDES | 16/490,847 | 2/13/2018 | 11,078,601 | 8/3/2021 | Registered/Granted | United States of America |
| COMPOSITIONS AND METHODS FOR GEL SPINNING OF POLYAMIDES | 201880030255.9 | 2/13/2018 | | | Pending | China |
| COMPOSITIONS AND METHODS FOR GEL SPINNING OF POLYAMIDES | 2019-548598 | 2/13/2018 | | | Pending | Japan |
| COMPOSITIONS AND METHODS TO DETECT ILLICIT USES OF FERTILIZERS | 13/206,980 | 8/10/2011 | 8,858,672 | 10/14/2014 | Registered/Granted | United States of America |
| COMPOSITIONS AND METHODS TO DETECT ILLICT USES OF FERTILIZERS | 2013110231 | 8/11/2011 | RU2580346C2 | 4/10/2016 | Registered/Granted | Russian Federation |
| COMPOSITIONS AND METHODS TO DETECT ILLICT USES OF FERTILIZERS | 201180039188.5 | 8/11/2011 | CN103038194B | 12/2/2015 | Registered/Granted | China |
| COMPOSITIONS AND METHODS TO DETER ILLICIT USES OF FERTILIZERS | 201180039139.1 | 8/11/2011 | CN103038193B | 11/25/2015 | Registered/Granted | China |
| COMPOSITIONS AND METHODS TO DETER ILLICIT USES OF FERTILIZERS | 13/207,017 | 8/10/2011 | 8,858,673 | 10/14/2014 | Registered/Granted | United States of America |

| COMPOSITIONS COMPRISING A SOLVENT AND A CROP NUTRITION ACTIVE INGREDIENT | 18779930.9 | 9/13/2018 | | | Pending | European Patent Office |
|--|------------------|-----------|--------------|------------|--------------------|---------------------------|
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 200810354 | 1/13/2007 | UA97238C2 | 1/25/2012 | Registered/Granted | Ukraine |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | SN08.301 | 1/13/2007 | 20503 | 3/4/2010 | Registered/Granted | Tunisia |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 2008132336 | 1/13/2007 | RU2436753C2 | 12/20/2011 | Registered/Granted | Russian Federation |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | MX/a/2008/008908 | 1/13/2007 | 305984 | 12/10/2012 | Registered/Granted | Mexico |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | PI 20082587 | 1/13/2007 | MY-147405-A | 11/30/2012 | Registered/Granted | Malaysia |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | W 00 2008 02338 | 1/13/2007 | | | Pending | Indonesia |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 6098/DELNP/2008 | 1/13/2007 | 271688 | 2/29/2016 | Registered/Granted | India |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | AP 2007 10867 | 1/13/2007 | GEP20125642B | 9/25/2012 | Registered/Granted | Georgia |

| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 07710124.4 | 1/13/2007 | EP1981829B1 | 4/30/2014 | Registered/Granted | European Patent Office |
|--|----------------|-----------|-----------------|-----------|--------------------|---------------------------|
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 200780002275.7 | 1/13/2007 | CN101370751B | 4/24/2013 | Registered/Granted | China |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 2,636,468 | 1/13/2007 | 2,636,468 | 2/25/2014 | Registered/Granted | Canada |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 2007205958 | 1/13/2007 | AU2007205958B2 | 9/1/2011 | Registered/Granted | Australia |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 07710124.4 | 1/13/2007 | EP1981829B1 | 4/30/2014 | Registered/Granted | Germany |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 07710124.4 | 1/13/2007 | EP1981829B1 | 4/30/2014 | Registered/Granted | Spain |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 07710124.4 | 1/13/2007 | EP1981829B1 | 4/30/2014 | Registered/Granted | France |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 07710124.4 | 1/13/2007 | EP1981829B1 | 4/30/2014 | Registered/Granted | United Kingdom |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 07710124.4 | 1/13/2007 | 502014902279832 | 4/30/2014 | Registered/Granted | Italy |
| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 07710124.4 | 1/13/2007 | EP1981829B1 | 4/30/2014 | Registered/Granted | Poland |

| COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 11/622,939 | 1/12/2007 | 8,721,760 | 5/13/2014 | Registered/Granted | United States of America |
|--|----------------|------------|------------------|-----------|--------------------|-----------------------------|
| COMPOSITIONS INCLUDING PVC OR CPVC | 201980081972.9 | 12/9/2019 | | | Pending | China |
| COMPOSITIONS INCLUDING PVC OR CPVC | 19828491.1 | 12/9/2019 | | | Pending | European Patent Office |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 15/388,999 | 12/22/2016 | 10,494,740 | 12/3/2019 | Registered/Granted | United States of America |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 201680075597.3 | 12/22/2016 | ZL201680075597.3 | 2/9/2021 | Registered/Granted | China |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 3394330 | 3/31/2021 | EP Granted | European Patent Office |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | PID201805303 | 12/22/2016 | IDP000070621 | 8/14/2020 | Registered/Granted | Indonesia |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 2018-532785 | 12/22/2016 | 6927979 | 8/10/2021 | Registered/Granted | Japan |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | PI 2018702175 | 12/22/2016 | MY-183674-A | 3/8/2021 | Registered/Granted | Malaysia |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 1801003775 | 12/22/2016 | | | Pending | Thailand |

| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 3394330 | 3/31/2021 | Registered/Granted | Belgium |
|--|------------------|------------|-----------------|-----------|--------------------|-----------------------------|
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 602016055441.0 | 3/31/2021 | Registered/Granted | Germany |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 3394330 | 3/31/2021 | Registered/Granted | Spain |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 3394330 | 3/31/2021 | Registered/Granted | France |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 3394330 | 3/31/2021 | Registered/Granted | United Kingdom |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 502021000050429 | 3/31/2021 | Registered/Granted | Italy |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 16880109.0 | 12/22/2016 | 3394330 | 3/31/2021 | Registered/Granted | Netherlands |
| DUAL-TERMINATED POLYAMIDE FOR HIGH SPEED SPINNING APPLICATION | 105142834 | 12/22/2016 | 105142834 | 8/21/2020 | Registered/Granted | Taiwan |
| ENHANCED BARRIER MULTIFUNCTIONAL COATINGS FOR NYLON FILMS | MX/a/2011/008382 | 2/8/2010 | 326962 | 1/13/2015 | Registered/Granted | Mexico |
| ENHANCED BARRIER MULTIFUNCTIONAL COATINGS FOR NYLON FILMS | 12/700,827 | 2/5/2010 | 8,946,101 | 2/3/2015 | Registered/Granted | United States of America |

| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 201280052939.1 | 10/25/2012 | ZL201280052939.1 | 3/9/2018 | Registered/Granted | China |
|--|------------------|------------|------------------|------------|--------------------|---------------------------|
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 14089762 | 10/25/2012 | 64509 | 9/17/2015 | Registered/Granted | Colombia |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 2771317 | 12/9/2020 | Registered/Granted | European Patent Office |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 2014121157 | 10/25/2012 | 2609779 | 2/3/2017 | Registered/Granted | Russian Federation |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 2014-538999 | 10/25/2012 | 6243340 | 11/17/2017 | Registered/Granted | Japan |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 10-2014-7014091 | 10/25/2012 | 10-2002197 | 7/15/2019 | Registered/Granted | Republic of Korea |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | MX/a/2014/005018 | 10/25/2012 | 354802 | 4/12/2018 | Registered/Granted | Mexico |

| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 1401002296 | 10/25/2012 | | | Pending | Thailand |
|--|------------|------------|----------------|-----------|--------------------|----------------|
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 2771317 | 12/9/2020 | Registered/Granted | Belgium |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 2771317 | 12/9/2020 | Registered/Granted | Switzerland |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 602012073682.8 | 12/9/2020 | Registered/Granted | Germany |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 2771317 | 12/9/2020 | Registered/Granted | Spain |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 2771317 | 12/9/2020 | Registered/Granted | France |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 2771317 | 12/9/2020 | Registered/Granted | United Kingdom |

| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 502021000016430 | 12/9/2020 | Registered/Granted | Italy |
|--|----------------|------------|------------------|------------|--------------------|-----------------------------|
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 12842979.2 | 10/25/2012 | 2771317 | 12/9/2020 | Registered/Granted | Netherlands |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 13/658,495 | 10/23/2012 | 8,772,476 | 7/8/2014 | Registered/Granted | United States of America |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 14/273,688 | 5/9/2014 | 9,221,762 | 12/29/2015 | Registered/Granted | United States of America |
| GAS AND LIQUID PHASE CATALYTIC BECKMANN REARRANGEMENT OF OXIMES TO PRODUCE LACTAMS | 14/263,156 | 4/28/2014 | 9,662,643 | 5/30/2017 | Registered/Granted | United States of America |
| GRANULATOR FEED APPARATUS | 15/047,057 | 2/18/2016 | 9,932,278 | 4/3/2018 | Registered/Granted | United States of America |
| GRANULATOR FEED APPARATUS | 201680027215.X | 3/2/2016 | ZL201680027215.X | 5/18/2021 | Registered/Granted | China |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 3268335 | 5/5/2021 | Registered/Granted | European Patent Office |
| GRANULATOR FEED APPARATUS | 2017135753 | 3/2/2016 | 2685939 | 4/23/2019 | Registered/Granted | Russian Federation |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 3268335 | 5/5/2021 | Registered/Granted | Czech Republic |

| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 602016057409.8 | 5/5/2021 | Registered/Granted | Germany |
|---|------------------|-----------|------------------|-----------|--------------------|-------------------|
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 3268335 | 5/5/2021 | Registered/Granted | Spain |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 3268335 | 5/5/2021 | Registered/Granted | France |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 3268335 | 5/5/2021 | Registered/Granted | United Kingdom |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 502021000064292 | 5/5/2021 | Registered/Granted | Italy |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 3268335 | 5/5/2021 | Registered/Granted | Netherlands |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 3268335 | 5/5/2021 | Registered/Granted | Poland |
| GRANULATOR FEED APPARATUS | 16762152.3 | 3/2/2016 | 2021/012207 | 5/5/2021 | Registered/Granted | Turkey |
| HEAT SEALABLE COATED NYLON | 10-2014-7023536 | 2/27/2013 | 10-2026152 | 9/23/2019 | Registered/Granted | Republic of Korea |
| HEAT SEALABLE COATED NYLON | MX/a/2014/010238 | 2/27/2013 | 357147 | 6/28/2018 | Registered/Granted | Mexico |
| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 2013-557827 | 3/7/2012 | 6185394 | 8/4/2017 | Registered/Granted | Japan |
| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 201280012975.5 | 3/7/2012 | ZL201280012975.5 | 6/16/2017 | Registered/Granted | China |

| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 12758110.6 | 3/7/2012 | 2683762 | 6/27/2018 | Registered/Granted | European Patent Office |
|---|-----------------|----------|--------------|-----------|--------------------|---------------------------|
| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 10-2013-7026739 | 3/7/2012 | 10-1853999 | 4/25/2018 | Registered/Granted | Republic of Korea |
| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 12758110.6 | 3/7/2012 | 602012047850 | 6/27/2018 | Registered/Granted | Germany |
| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 12758110.6 | 3/7/2012 | 2683762 | 6/27/2018 | Registered/Granted | France |

| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 12758110.6 | 3/7/2012 | 2683762 | 6/27/2018 | Registered/Granted | United Kingdom |
|---|------------|------------|-----------------|-----------|--------------------|-----------------------------|
| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 12758110.6 | 3/7/2012 | 502018000028293 | 6/27/2018 | Registered/Granted | Italy |
| HEAT SEALABLE FOOD PACKAGING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 12758110.6 | 3/7/2012 | 2683762 | 6/27/2018 | Registered/Granted | Netherlands |
| HEAT SEALABLE FOOD PACKING FILMS, METHODS FOR THE PRODUCTION THEREOF, AND FOOD PACKAGES COMPRISING HEAT SEALABLE FOOD PACKAGING FILMS | 15/291,267 | 10/12/2016 | 10,435,225 | 10/8/2019 | Registered/Granted | United States of America |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 16/161,662 | 10/16/2018 | 10537884 | 1/21/2020 | Registered/Granted | United States of America |

| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | BR112017012990-6 | 12/9/2015 | 112017012990-6 | 8/3/2021 | Registered/Granted | Brazil |
|--|------------------|-----------|----------------|------------|--------------------|---------------------------|
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | European Patent Office |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 201717019260 | 12/9/2015 | 354107 | 12/21/2020 | Registered/Granted | India |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 2017-552002 | 12/9/2015 | 6559251 | 7/26/2019 | Registered/Granted | Japan |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 2017122224 | 12/9/2015 | 2672912 | 11/21/2018 | Registered/Granted | Russian Federation |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 1701003187 | 12/9/2015 | | | Pending | Thailand |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | Belgium |

| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | Czech Republic |
|--|------------|-----------|-----------------|----------|--------------------|----------------|
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | Germany |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 602015037510.6 | 9/4/2019 | Registered/Granted | Germany |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | France |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | United Kingdom |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 502019000099357 | 9/4/2019 | Registered/Granted | Italy |
| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | Netherlands |

| HIERARCHICAL ALUMINOPHOSPHATES AS CATALYSTS FOR THE BECKMANN REARRANGEMENT | 15870717.4 | 12/9/2015 | 3233804 | 9/4/2019 | Registered/Granted | Poland |
|--|-----------------|-----------|-----------------|------------|--------------------|---------------------------|
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 201209037-9 | 6/3/2011 | SG186237 | 10/9/2016 | Registered/Granted | Singapore |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 10-2012-7033746 | 6/3/2011 | 10-1804596 | 11/28/2017 | Registered/Granted | Republic of Korea |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | W-00 2012 05131 | 6/3/2011 | W-00 2012 05131 | 9/27/2016 | Registered/Granted | Indonesia |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 11792928.1 | 6/3/2011 | 2580181 | 1/8/2020 | EP Granted | European Patent Office |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 2012156422 | 6/3/2011 | RU2562236C2 | 9/10/2015 | Registered/Granted | Russian Federation |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 11792928.1 | 6/3/2011 | 2580181 | 1/8/2020 | Registered/Granted | Belgium |
| IMPROVED METHOD FOR THE DECOMPOSITION OF | 11792928.1 | 6/3/2011 | 602011064527.7 | 1/8/2020 | Registered/Granted | Germany |

| CUMENE HYDROPEROXIDE | | | | | | |
|---|----------------|-----------|-----------------|----------|--------------------|-----------------------------|
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 11792928.1 | 6/3/2011 | 2580181 | 1/8/2020 | Registered/Granted | France |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 11792928.1 | 6/3/2011 | 2580181 | 1/8/2020 | Registered/Granted | United Kingdom |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 11792928.1 | 6/3/2011 | 502020000027949 | 1/8/2020 | Registered/Granted | Italy |
| IMPROVED METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 11792928.1 | 6/3/2011 | 2580181 | 1/8/2020 | Registered/Granted | Netherlands |
| LAMINATE FILM, PACKAGE, AND METHODS FOR OXYGEN- SENSITIVE MATERIALS | 108108565 | 3/14/2019 | | | Pending | Taiwan |
| LAMINATE FILM, PACKAGE, AND METHODS FOR OXYGEN- SENSITIVE MATERIALS | 16/295,724 | 3/7/2019 | | | Pending | United States of America |
| LAMINATE FILM, PACKAGE, AND METHODS FOR OXYGEN- SENSITIVE MATERIALS | 201980029236.9 | 3/7/2019 | | | Pending | China |
| LAMINATE FILM, PACKAGE, AND METHODS FOR OXYGEN- SENSITIVE MATERIALS | 19717008.7 | 3/7/2019 | | | Pending | European Patent Office |

| LAMINATE FILM, PACKAGE, AND METHODS FOR OXYGEN- SENSITIVE MATERIALS | 2020-549652 | 3/7/2019 | | | Pending | Japan |
|---|----------------|-----------|------------------|-----------|--------------------|---------------------------|
| LIGHT STABILIZED POLYAMIDE SUBSTRATE AND PROCESS FOR MAKING | 96925540.5 | 7/26/1996 | EP0843696B1 | 4/21/1999 | EP Granted | European Patent Office |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 201380013909.4 | 3/4/2013 | | | Pending | China |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13761234.7 | 3/4/2013 | 2825300 | 9/9/2020 | Registered/Granted | European Patent Office |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 2,866,122 | 3/4/2013 | 2,866,122 | 4/9/2019 | Registered/Granted | Canada |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 2014137030 | 3/4/2013 | 2614682 | 3/28/2017 | Registered/Granted | Russian Federation |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 201710343696.1 | 3/4/2013 | ZL201710343696.1 | 9/22/2020 | Registered/Granted | China |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13761234.7 | 3/4/2013 | 602013072386.9 | 9/9/2020 | Registered/Granted | Germany |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13761234.7 | 3/4/2013 | 2825300 | 9/9/2020 | Registered/Granted | Spain |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13761234.7 | 3/4/2013 | 2825300 | 9/9/2020 | Registered/Granted | France |

| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13761234.7 | 3/4/2013 | 2825300 | 9/9/2020 | Registered/Granted | United Kingdom |
|--|-----------------|-----------|-----------------|-----------|--------------------|-----------------------------|
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13761234.7 | 3/4/2013 | 502020000112718 | 9/9/2020 | Registered/Granted | Italy |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13761234.7 | 3/4/2013 | 2825300 | 9/9/2020 | Registered/Granted | Netherlands |
| METHOD AND APPARATUS FOR PRILLING WITH PRESSURE CONTROL | 13/763,279 | 2/8/2013 | 8,652,367 | 2/18/2014 | Registered/Granted | United States of America |
| METHOD AND COMPOSITION FOR IMPROVED AGGLOMERATION RESISTANCE OF POLYAMIDE POLYMERS | 18722363.1 | 4/18/2018 | | | Pending | European Patent Office |
| METHOD AND COMPOSITION FOR IMPROVED AGGLOMERATION RESISTANCE OF POLYAMIDE POLYMERS | 10-2019-7031100 | 4/18/2018 | 10-2257775 | 5/24/2021 | Registered/Granted | Republic of Korea |
| METHOD AND COMPOSITION FOR IMPROVED AGGLOMERATION RESISTANCE OF POLYAMIDE POLYMERS | 16/493,518 | 4/18/2018 | | | Pending | United States of America |
| METHOD AND COMPOSITIONS FOR PRODUCING POLYMER BLENDS | 15/057,640 | 3/1/2016 | 9,916,917 | 3/13/2018 | Registered/Granted | United States of America |

| METHOD AND COMPOSITIONS FOR PRODUCING POLYMER BLENDS | 2,876,654 | 6/18/2013 | 2,876,654 | 3/5/2019 | Registered/Granted | Canada |
|---|------------------|-----------|--------------|------------|--------------------|-----------------------------|
| METHOD AND COMPOSITIONS FOR PRODUCING POLYMER BLENDS | MX/a/2014/015613 | 6/18/2013 | 375196 | 9/22/2020 | Registered/Granted | Mexico |
| METHOD AND COMPOSITIONS FOR PRODUCING POLYMER BLENDS | 3,020,132 | 6/18/2013 | 3,020,132 | 10/27/2020 | Registered/Granted | Canada |
| METHOD AND COMPOSITIONS FOR PRODUCING POLYMER BLENDS | 13/833,490 | 3/15/2013 | 9,312,047 | 4/12/2016 | Registered/Granted | United States of America |
| METHOD FOR PREPARING EXTRUDED POLYAMIDE FOAMS | 18786544.9 | 9/25/2018 | | | Pending | European Patent Office |
| METHOD FOR PREPARING EXTRUDED POLYAMIDE FOAMS | P00202002920 | 9/25/2018 | | | Pending | Indonesia |
| METHOD FOR PREPARING EXTRUDED POLYAMIDE FOAMS | 2020-517319 | 9/25/2018 | | | Pending | Japan |
| METHOD FOR PREPARING EXTRUDED POLYAMIDE FOAMS | 16/649,780 | 9/25/2018 | | | Pending | United States of America |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE | 201380013114.3 | 3/1/2013 | CN104203880B | 4/13/2016 | Registered/Granted | China |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE | 13756997.6 | 3/1/2013 | 2822920 | 5/2/2018 | Registered/Granted | European Patent Office |

| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE | 10-2014-7024975 | 3/1/2013 | 10-2039761 | 10/28/2019 | Registered/Granted | Republic of Korea |
|--|-----------------|----------|----------------|------------|-------------------------|-----------------------------|
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE | 2014138162 | 3/1/2013 | 2619117 | 5/12/2017 | Registered/Granted | Russian Federation |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE | | 3/1/2013 | | | Examination in progress | Thailand |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE | 13/761,642 | 2/7/2013 | 8,865,957 | 10/21/2014 | Registered/Granted | United States of America |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE (H29529- 4690 EPC-DE) | 13756997.6 | 3/1/2013 | 602013036909.7 | 5/2/2018 | Registered/Granted | Germany |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE (H29529- 4690 EPC-ES) | 13756997.6 | 3/1/2013 | 2822920 | 5/2/2018 | Registered/Granted | Spain |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE (H29529- 4690 EPC-FR) | 13756997.6 | 3/1/2013 | 2822920 | 5/2/2018 | Registered/Granted | France |
| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE (H29529- 4690 EPC-GB) | 13756997.6 | 3/1/2013 | 2822920 | 5/2/2018 | Registered/Granted | United Kingdom |

| METHOD FOR PRODUCING ALPHA- METHYL STYRENE FROM CUMENE (H29529- 4690 EPC-IT) | 13756997.6 | 3/1/2013 | 502018000021350 | 5/2/2018 | Registered/Granted | Italy |
|--|-------------|-----------|-----------------|-----------|--------------------|---------------------------|
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 2011323438 | 11/2/2011 | 2011323438 | 5/21/2015 | Registered/Granted | Australia |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 2013122694 | 11/2/2011 | RU2581399C2 | 4/20/2016 | Registered/Granted | Russian Federation |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 2013-537775 | 11/2/2011 | 6140609 | 5/12/2017 | Registered/Granted | Japan |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 2,816,677 | 11/2/2011 | 2,816,677 | 8/14/2018 | Registered/Granted | Canada |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | EP Granted | European Patent Office |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 19193477.7 | 11/2/2011 | | | Pending | European Patent Office |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Austria |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Belgium |

| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Switzerland |
|--|------------|-----------|-----------------|-----------|--------------------|----------------|
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Czech Republic |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 602011061681.1 | 8/28/2019 | Registered/Granted | Germany |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Spain |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | France |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | United Kingdom |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 502019000097233 | 8/28/2019 | Registered/Granted | Italy |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Netherlands |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Poland |
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Sweden |

| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 11838722.4 | 11/2/2011 | 2635528 | 8/28/2019 | Registered/Granted | Turkey |
|--|-----------------|-----------|-------------|------------|--------------------|-----------------------------|
| METHOD FOR PRODUCING AMMONIUM SULFATE NITRATE | 13/286,440 | 11/1/2011 | 9,932,277 | 4/3/2018 | Registered/Granted | United States of America |
| METHOD FOR RECOVERY OF PHENOL FROM AQUEOUS STREAMS | 10/121,996 | 4/12/2002 | 6,620,980 | 9/16/2003 | Registered/Granted | United States of America |
| METHOD FOR REDUCING METHYLBENZOFURAN LEVELS IN HIGH PURITY PHENOL | 91106956 | 4/8/2002 | 1229663 | 3/21/2005 | Registered/Granted | Taiwan |
| METHOD FOR REDUCING METHYLBENZOFURAN LEVELS IN HIGH PURITY PHENOL | 10-2003-7002144 | 3/26/2002 | KR549559B1 | 1/27/2006 | Registered/Granted | Republic of Korea |
| METHOD FOR REDUCING METHYLBENZOFURAN LEVELS IN HIGH PURITY PHENOL | 915/MUMNP/2003 | 3/26/2002 | 209324 | 9/10/2007 | Registered/Granted | India |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 94104077 | 2/5/2005 | TWI261587B | 9/11/2006 | Registered/Granted | Taiwan |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 94104094 | 2/5/2005 | I266642 | 11/21/2006 | Registered/Granted | Taiwan |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 588/CHENP/2007 | 2/3/2005 | 239565 | 3/24/2010 | Registered/Granted | India |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 2007-525594 | 2/3/2005 | JP4226056B2 | 12/5/2008 | Registered/Granted | Japan |

| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 10-2007-7005426 | 2/3/2005 | KR101146249B1 | 5/8/2012 | Registered/Granted | Republic of Korea |
|--|-----------------|-----------|---------------|-----------|--------------------|-----------------------------|
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 200580008935.3 | 2/3/2005 | CN1942423B | 5/5/2010 | Registered/Granted | China |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 3486/CHENP/2006 | 2/3/2005 | 238483 | 2/8/2010 | Registered/Granted | India |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 2007-504949 | 2/3/2005 | JP4226054B2 | 12/5/2008 | Registered/Granted | Japan |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 05712667.4 | 2/3/2005 | EP1727779B1 | 10/6/2013 | Registered/Granted | European Patent Office |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 10/944,315 | 9/16/2004 | 7,002,048 | 2/21/2006 | Registered/Granted | United States of America |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 10/915,723 | 8/9/2004 | 7,034,192 | 4/25/2006 | Registered/Granted | United States of America |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712610.4 | 2/3/2005 | EP1776326 | 1/25/2012 | Registered/Granted | Belgium |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 05712610.4 | 2/3/2005 | EP1776326 | 1/25/2012 | Registered/Granted | Germany |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712610.4 | 2/3/2005 | EP1776326 | 1/25/2012 | Registered/Granted | Spain |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712610.4 | 2/3/2005 | EP1776326 | 1/25/2012 | Registered/Granted | France |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712610.4 | 2/3/2005 | EP1776326 | 1/25/2012 | Registered/Granted | United Kingdom |

| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712610.4 | 2/3/2005 | EP1776326 | 1/25/2012 | Registered/Granted | Italy |
|---|------------------|-----------|--------------|------------|--------------------|-----------------------------|
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712610.4 | 2/3/2005 | EP1776326 | 1/25/2012 | Registered/Granted | Poland |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 05712667.4 | 2/3/2005 | EP1727779 | 10/9/2013 | Registered/Granted | Germany |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 05712667.4 | 2/3/2005 | EP1727779 | 10/9/2013 | Registered/Granted | Spain |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712667.4 | 2/3/2005 | EP1727779 | 10/9/2013 | Registered/Granted | France |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 5712667.4 | 2/3/2005 | EP1727779 | 10/9/2013 | Registered/Granted | United Kingdom |
| METHOD FOR REMOVAL OF ACETOL FROM PHENOL | 05712667.4 | 2/3/2005 | EP1727779 | 10/9/2013 | Registered/Granted | Italy |
| METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 13/432,141 | 3/28/2012 | 8,247,616 | 8/21/2012 | Registered/Granted | United States of America |
| METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 201180028747.2 | 6/3/2011 | CN103108855B | 7/22/2015 | Registered/Granted | China |
| METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 2013-514234 | 6/3/2011 | JP5793187B2 | 8/14/2015 | Registered/Granted | Japan |
| METHOD FOR THE DECOMPOSITION OF CUMENE HYDROPEROXIDE | 11398/DELNP/2012 | 6/3/2011 | 304568 | 12/17/2018 | Registered/Granted | India |

| METHOD OF GRANULATION BY HARDENING | 2006132816 | 9/13/2006 | 2416593 | 4/20/2011 | Registered/Granted | Russian Federation |
|---|------------|-----------|-----------|-----------|--------------------|--------------------|
| METHOD/PRODUCING POLYAMIDE CARPET W/FLAME RETARDANCY | 93103267.6 | | EP0559128 | 5/19/1999 | EP Granted | United Kingdom |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 107121752 | 6/25/2018 | I680991 | 1/1/2020 | Registered/Granted | Taiwan |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 18742632.5 | 6/22/2018 | | | Registered/Granted | Belgium |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 18742632.5 | 6/22/2018 | | | Registered/Granted | France |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 18742632.5 | 6/22/2018 | | | Registered/Granted | Germany |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 18742632.5 | 6/22/2018 | | | Registered/Granted | United Kingdom |

| | • | , | • | • | ; | } |
|--|-------------|-----------|-------------|-----------|--------------------|-----------------------------|
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 18742632.5 | 6/22/2018 | | | Registered/Granted | Netherlands |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 2018292248 | 6/22/2018 | 2018292248 | 7/8/2021 | Registered/Granted | Australia |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 2020-520198 | 6/22/2018 | | | Pending | Japan |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS | 16/611,384 | 6/22/2018 | | | Pending | United States of America |
| METHODS AND COMPOSITIONS FOR POLYURETHANE DISPERSIONS USING CAPROLACTAM- DERIVED SOLVENTS - FAST TRACK | 1905203.4 | 6/22/2018 | GB2570067 | 9/16/2020 | Registered/Granted | United Kingdom |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 2011105326 | 7/9/2009 | RU2522353C2 | 5/16/2014 | Registered/Granted | Russian Federation |

| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 2011-518799 | 7/9/2009 | 5731973 | 4/17/2015 | Registered/Granted | Japan |
|---|----------------|----------|--------------|-----------|--------------------|---------------------------|
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 609/DELNP/2011 | 7/9/2009 | 274574 | 7/29/2016 | Registered/Granted | India |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | European Patent Office |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | PCT 102/2011 | 7/9/2009 | 26632 | 4/14/2014 | Registered/Granted | Egypt |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 200980135788.4 | 7/9/2009 | CN102149637B | 1/20/2016 | Registered/Granted | China |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 2,730,992 | 7/9/2009 | 2,730,992 | 12/5/2017 | Registered/Granted | Canada |

| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 2009271213 | 7/9/2009 | 2009271213 | 6/26/2014 | Registered/Granted | Australia |
|---|------------|----------|------------|-----------|--------------------|----------------|
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | Belgium |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | Switzerland |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | Germany |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | France |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | United Kingdom |

| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | Ireland |
|---|------------|------------|-----------|-----------|--------------------|-----------------------------|
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | Netherlands |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | Sweden |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 09798582.4 | 7/9/2009 | 2303778 | 5/2/2018 | Registered/Granted | Turkey |
| METHODS FOR PREPARING COMPOSITIONS COMPRISING AMMONIUM NITRATE DOUBLE SALTS | 12/499,617 | 7/8/2009 | 8,623,315 | 1/7/2014 | Registered/Granted | United States of America |
| METHODS FOR PREPARING POLYAMIDE COMPOSITIONS | 13/678,000 | 11/15/2012 | 8,722,844 | 5/13/2014 | Registered/Granted | United States of America |
| MULTILAYER AIRBAG USING NON-WOVEN FABRIC AND REINFORCED SCRIM | 07784242.5 | 5/31/2007 | 2026967 | 5/2/2018 | Registered/Granted | European Patent Office |
| MULTILAYER AIRBAG USING NON-WOVEN | 11/809,050 | 5/30/2007 | 7,803,724 | 9/28/2010 | Registered/Granted | United States of America |

| FABRIC AND REINFORCED SCRIM | | | | | | |
|--|-----------------|------------|-------------|------------|--------------------|---------------------------|
| MULTI-LAYER FILM/BOTTLE FOR OZONE SCAVENGING | 17929798.1 | 10/26/2017 | | | Pending | European Patent Office |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 093135249 | 11/17/2004 | 1379867 | 12/21/2012 | Registered/Granted | Taiwan |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 201110041787.2 | 11/15/2004 | | | Pending | China |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10174174.2 | 11/15/2004 | EP2253661B1 | 7/31/2013 | Registered/Granted | European Patent Office |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10-2006-7012189 | 11/15/2004 | 101265536 | 5/13/2013 | Registered/Granted | Republic of Korea |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 2852/DELNP/2006 | 11/15/2004 | 254178 | 9/27/2012 | Registered/Granted | India |

| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 200480040598.1 | 11/15/2004 | 200480040598.1 | 4/20/2011 | Registered/Granted | China |
|--|----------------|------------|----------------|-----------|--------------------|----------------|
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 2,546,346 | 11/15/2004 | 2,546,346 | 7/10/2012 | Registered/Granted | Canada |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10174174.2 | 11/15/2004 | EP2253661B1 | 7/31/2013 | Registered/Granted | Germany |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10174174.2 | 11/15/2004 | EP2253661B1 | 7/31/2013 | Registered/Granted | France |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10174174.2 | 11/15/2004 | EP2253661B1 | 7/31/2013 | Registered/Granted | United Kingdom |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10174174.2 | 11/15/2004 | EP2253661B1 | 7/31/2013 | Registered/Granted | Italy |

| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10/717,048 | 11/18/2003 | 7,258,920 | 8/21/2007 | Registered/Granted | United States of America |
|--|------------|------------|-------------|-----------|--------------------|-----------------------------|
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 04801073.0 | 11/15/2004 | EP1699861B1 | 7/9/2014 | EP Granted | European Patent Office |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 04801073.0 | 11/15/2004 | EP1699861B1 | 7/9/2014 | Registered/Granted | Germany |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 04801073.0 | 11/15/2004 | EP1699861B1 | 7/9/2014 | Registered/Granted | France |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 04801073.0 | 11/15/2004 | EP1699861B1 | 7/9/2014 | Registered/Granted | United Kingdom |
| MULTIPHASE FIBER MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 04801073.0 | 11/15/2004 | EP1699861B1 | 7/9/2014 | Registered/Granted | Italy |

| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 15/279,837 | 9/29/2016 | 9,822,052 | 11/21/2017 | Registered/Granted | United States of America |
|--|-------------|-----------|----------------|------------|--------------------|-----------------------------|
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 3356319 | 6/24/2020 | Registered/Granted | European Patent Office |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 2018-516822 | 9/29/2016 | 6771549 | 10/1/2020 | Registered/Granted | Japan |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 2018114734 | 9/29/2016 | 2717342 | 3/23/2020 | Registered/Granted | Russian Federation |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 3356319 | 6/24/2020 | Registered/Granted | Belgium |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 3356319 | 6/24/2020 | Registered/Granted | Czech Republic |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 602016038903.7 | 6/24/2020 | Registered/Granted | Germany |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 3356319 | 6/24/2020 | Registered/Granted | Spain |

| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 3356319 | 6/24/2020 | Registered/Granted | France |
|--|-----------------|-----------|-----------------|------------|--------------------|---------------------------|
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 3356319 | 6/24/2020 | Registered/Granted | United Kingdom |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 502020000089167 | 6/24/2020 | Registered/Granted | Italy |
| NANOPARTICLE CATALYSTS FOR CONVERSION OF CYCLOHEXANOL TO CYCLOHEXANONE | 16852556.6 | 9/29/2016 | 3356319 | 6/24/2020 | Registered/Granted | Netherlands |
| NH3 OXIDIZER GAS DISTRIBUTOR | 9722/DELNP/2013 | 6/18/2012 | 360225 | 3/4/2021 | Registered/Granted | India |
| NH3 OXIDIZER GAS DISTRIBUTOR | 201280030314.5 | 6/18/2012 | CN103619465B | 11/25/2015 | Registered/Granted | China |
| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 2723489 | 7/24/2019 | EP Granted | European Patent Office |
| NH3 OXIDIZER GAS DISTRIBUTOR | 2014-517044 | 6/18/2012 | JP5906311B2 | 3/25/2016 | Registered/Granted | Japan |
| NH3 OXIDIZER GAS DISTRIBUTOR | 2013153150 | 6/18/2012 | 2621772 | 6/7/2017 | Registered/Granted | Russian Federation |
| NH3 OXIDIZER GAS DISTRIBUTOR | 2,836,492 | 6/18/2012 | 2,836,492 | 7/2/2019 | Registered/Granted | Canada |
| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 2723489 | 7/24/2019 | Registered/Granted | Belgium |
| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 602012062299.7 | 7/24/2019 | Registered/Granted | Germany |
| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 2723489 | 7/24/2019 | Registered/Granted | France |

| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 2723489 | 7/24/2019 | Registered/Granted | United Kingdom |
|----------------------------------|-----------------|-----------|-----------------|------------|--------------------|-----------------------------|
| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 502019000084152 | 7/24/2019 | Registered/Granted | Italy |
| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 2723489 | 7/24/2019 | Registered/Granted | Netherlands |
| NH3 OXIDIZER GAS DISTRIBUTOR | 12803283.6 | 6/18/2012 | 2723489 | 7/24/2019 | Registered/Granted | Sweden |
| NH3 OXIDIZER GAS DISTRIBUTOR | 13/164,194 | 6/20/2011 | 8,734,728 | 5/27/2014 | Registered/Granted | United States of America |
| OPTIMIZATION OF CAUSTIC USAGE | 091106960 | 4/8/2002 | NI-204111 | 6/21/2004 | Registered/Granted | Taiwan |
| OPTIMIZATION OF CAUSTIC USAGE | 02801539.8 | 3/26/2002 | ZL02801539.8 | 3/8/2006 | Registered/Granted | China |
| OPTIMIZATION OF CAUSTIC USAGE | 916/MUMNP/2003 | 3/26/2002 | 203773 | 11/15/2006 | Registered/Granted | India |
| OPTIMIZATION OF CAUSTIC USAGE | 2002-587387 | 3/26/2002 | JP3711110B2 | 8/19/2005 | Registered/Granted | Japan |
| OPTIMIZATION OF CAUSTIC USAGE | 10-2003-7000220 | 3/26/2002 | KR100543580B1 | 1/20/2006 | Registered/Granted | Republic of Korea |
| OPTIMIZATION OF CAUSTIC USAGE | 02723625.6 | 3/26/2002 | EP1385810B1 | 9/1/2010 | Registered/Granted | Belgium |
| OPTIMIZATION OF CAUSTIC USAGE | 02723625.6 | 3/26/2002 | EP1385810B1 | 9/1/2010 | Registered/Granted | Germany |
| OPTIMIZATION OF CAUSTIC USAGE | 02723625.6 | 3/26/2002 | EP1385810B1 | 9/1/2010 | Registered/Granted | Spain |
| OPTIMIZATION OF CAUSTIC USAGE | 02723625.6 | 3/26/2002 | EP1385810B1 | 9/1/2010 | Registered/Granted | Finland |
| OPTIMIZATION OF CAUSTIC USAGE | 02723625.6 | 3/26/2002 | EP1385810B1 | 9/1/2010 | Registered/Granted | France |
| OPTIMIZATION OF CAUSTIC USAGE | 02723625.6 | 3/26/2002 | EP1385810B1 | 9/1/2010 | Registered/Granted | Italy |
| OPTIMIZATION OF CAUSTIC USAGE | 02723625.6 | 3/26/2002 | EP1385810B1 | 9/1/2010 | Registered/Granted | Netherlands |
| OPTIMIZATION OF CAUSTIC USAGE | 09/850,625 | 5/7/2001 | 6,667,178 | 12/23/2003 | Registered/Granted | United States of America |

| OXIMATION OF KA OIL BY-PRODUCT | 14773007.1 | 3/12/2014 | 2970075 | 2/20/2019 | Registered/Granted | European Patent Office |
|--|----------------|-----------|-----------------|-----------|--------------------|-----------------------------|
| OXIMATION OF KA OIL BY-PRODUCT | 14773007.1 | 3/12/2014 | 2970075 | 2/20/2019 | Registered/Granted | Belgium |
| OXIMATION OF KA OIL BY-PRODUCT | 14773007.1 | 3/12/2014 | 2970075 | 2/20/2019 | Registered/Granted | Germany |
| OXIMATION OF KA OIL BY-PRODUCT | 14773007.1 | 3/12/2014 | 2970075 | 2/20/2019 | Registered/Granted | France |
| OXIMATION OF KA OIL BY-PRODUCT | 14773007.1 | 3/12/2014 | 2970075 | 2/20/2019 | Registered/Granted | United Kingdom |
| OXIMATION OF KA OIL BY-PRODUCT | 14773007.1 | 3/12/2014 | 502019000031796 | 2/20/2019 | Registered/Granted | Italy |
| OXIMATION OF KA OIL BY-PRODUCT | 14773007.1 | 3/12/2014 | 2970075 | 2/20/2019 | Registered/Granted | Netherlands |
| OXIMATION OF KA OIL BY-PRODUCT | 202010101651.5 | 3/12/2014 | | | Pending | China |
| OXIMATION OF KA OIL BY-PRODUCT | 14/204,682 | 3/11/2014 | 9,382,195 | 7/5/2016 | Registered/Granted | United States of America |
| OXYGEN SCAVENGING HIGH BARRIER POLYAMIDE COMPOSITIONS FOR PACKAGING APPLICATIONS | BR20010110563A | 5/2/2001 | PI0110563-9 | 6/26/2012 | Registered/Granted | Brazil |
| OXYGEN SCAVENGING POLYAMIDE COMPOSITIONS SUITABLE FOR PET BOTTLE APPLICATIONS | 02709583.5 | 2/19/2002 | EP1366119 | 7/25/2007 | Registered/Granted | European Patent Office |
| OXYGEN SCAVENGING POLYAMIDE COMPOSITIONS SUITABLE FOR PET BOTTLE APPLICATIONS | 2002244061 | 2/19/2002 | AU2002244061B2 | 9/9/2004 | Registered/Granted | Australia |

| OXYGEN SCAVENGING POLYAMIDE COMPOSITIONS SUITABLE FOR PET BOTTLE APPLICATIONS | 2709583.5 | 2/19/2002 | EP1366119 | 7/25/2007 | Registered/Granted | Austria |
|---|----------------|-----------|--------------|-----------|--------------------|-----------------------------|
| OXYGEN SCAVENGING POLYAMIDE COMPOSITIONS SUITABLE FOR PET BOTTLE APPLICATIONS | 2709583.5 | 2/19/2002 | EP1366119 | 7/25/2007 | Registered/Granted | Belgium |
| OXYGEN SCAVENGING POLYAMIDE COMPOSITIONS SUITABLE FOR PET BOTTLE APPLICATIONS | 2709583.5 | 2/19/2002 | EP1366119 | 7/25/2007 | Registered/Granted | Switzerland |
| OXYGEN SCAVENGING POLYAMIDE COMPOSITIONS SUITABLE FOR PET BOTTLE APPLICATIONS | 2709583.5 | 2/19/2002 | 60221361.4 | 7/25/2007 | Registered/Granted | Germany |
| OXYGEN SCAVENGING POLYAMIDE COMPOSITIONS SUITABLE FOR PET BOTTLE APPLICATIONS | 2709583.5 | 2/19/2002 | EP1366119 | 7/25/2007 | Registered/Granted | France |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 13/163,861 | 6/20/2011 | 8,268,279 | 9/18/2012 | Registered/Granted | United States of America |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 201080023931.3 | 3/30/2010 | CN102448911B | 6/17/2015 | Registered/Granted | China |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | a201112680 | 3/30/2010 | 104172 | 1/10/2014 | Registered/Granted | Ukraine |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 2010234908 | 3/30/2010 | | | Registered/Granted | Australia |

| PASTILLATION OF AMMONIUM SULFATE NITRATE | 2012-503587 | 3/30/2010 | 6046489 | 11/25/2016 | Registered/Granted | Japan |
|--|-----------------|-----------|-----------------|------------|--------------------|--------------------|
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 2011142093 | 3/30/2010 | RU2537810C2 | 1/10/2015 | Registered/Granted | Russian Federation |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 2,757,445 | 3/30/2010 | 2,757,445 | 10/17/2017 | Registered/Granted | Canada |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | BR2010PI13631 | 3/30/2010 | PI1013631-2 | 7/20/2021 | Registered/Granted | Brazil |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 7554/DELNP/2011 | 3/30/2010 | 300916 | 9/11/2018 | Registered/Granted | India |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 2414307 | 11/6/2019 | Registered/Granted | Belgium |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 602010061832.3 | 11/6/2019 | Registered/Granted | Germany |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 2414307 | 11/6/2019 | Registered/Granted | Spain |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 2414307 | 11/6/2019 | Registered/Granted | France |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 2414307 | 11/6/2019 | Registered/Granted | United Kingdom |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 502020000007327 | 11/6/2019 | Registered/Granted | Italy |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 2414307 | 11/6/2019 | Registered/Granted | Netherlands |

| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 2414307 | 11/6/2019 | Registered/Granted | Sweden |
|--|----------------|-----------|------------------|------------|---------------------|-----------------------------|
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 10762164.1 | 3/30/2010 | 2019/21501 | 11/6/2019 | Registered/Granted | Turkey |
| PASTILLATION OF AMMONIUM SULFATE NITRATE | 12/415,312 | 3/31/2009 | 7,985,393 | 7/26/2011 | Registered/Granted | United States of America |
| PHENOL WITH LOW LEVELS OF METHYLBENZOFURAN | 95918294.0 | 5/3/1995 | EP0764146B1 | 8/4/1999 | EP Granted | European Patent Office |
| POLYAMIDE 6 RESINS CONTAINING A LOW LEVEL OF POLYAMIDE 66 COMONOMER | 15/650,407 | 7/14/2017 | 10,442,928 | 10/15/2019 | Registered/Granted | United States of America |
| POLYAMIDE 6 RESINS CONTAINING A LOW LEVEL OF POLYAMIDE 66 COMONOMER | 2017301624 | 7/14/2017 | 2017301624 | 9/2/2021 | Registered/Granted | Australia |
| POLY AMIDE 6 RESINS CONTAINING A LOW LEVEL OF POLY AMIDE 66 COMONOMER | 201780060051.5 | 7/14/2017 | ZL201780060051.5 | 9/3/2021 | Registered/Granted | China |
| POLY AMIDE 6 RESINS CONTAINING A LOW LEVEL OF POLY AMIDE 66 COMONOMER | PID201900704 | 7/14/2017 | | | Application allowed | Indonesia |
| POLYAMIDE 6 RESINS CONTAINING A LOW LEVEL OF POLYAMIDE 66 COMONOMER | 2019-503993 | 7/14/2017 | 6902092 | 6/22/2021 | Registered/Granted | Japan |
| POLY AMIDE 6 RESINS CONTAINING A LOW LEVEL OF POLY AMIDE 66 COMONOMER | 106125002 | 7/26/2017 | 1644941 | 12/21/2018 | Registered/Granted | Taiwan |

| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 06804291.0 | 9/28/2006 | EP1969061 | 2/1/2012 | Registered/Granted | European Patent Office |
|--|-----------------|-----------|----------------|-----------|--------------------|---------------------------|
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 200680053385.1 | 9/28/2006 | CN101389709B | 10/5/2011 | Registered/Granted | China |
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 10-2008-7018569 | 9/28/2006 | KR101272057B1 | 6/10/2013 | Registered/Granted | Republic of Korea |
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 6804291 | 9/28/2006 | 602006027459.9 | 2/1/2012 | Registered/Granted | Germany |
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 6804291 | 9/28/2006 | EP1969061 | 2/1/2012 | Registered/Granted | Spain |
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 6804291 | 9/28/2006 | EP1969061 | 2/1/2012 | Registered/Granted | France |
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 6804291 | 9/28/2006 | EP1969061 | 2/1/2012 | Registered/Granted | United Kingdom |
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 06804291.0 | 9/28/2006 | EP1969061 | 2/1/2012 | Registered/Granted | Italy |

| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 6804291 | 9/28/2006 | EP1969061 | 2/1/2012 | Registered/Granted | Portugal |
|--|-----------------|------------|--------------|------------|--------------------|-----------------------------|
| POLYAMIDE BLEND COMPOSITION HAVING EXCELLENT GAS BARRIER PERFORMANCE | 11/321,575 | 12/29/2005 | 7,427,430 | 9/23/2008 | Registered/Granted | United States of America |
| POLYAMIDE COMPOSITION FOR LOW TEMPERATURE APPLICATIONS | 14/353,955 | 5/31/2012 | 9,416,270 | 8/16/2016 | Registered/Granted | United States of America |
| POLYAMIDE COMPOSITION FOR LOW TEMPERATURE APPLICATIONS | 11201402052Q | 5/31/2012 | 11201402052Q | 5/26/2016 | Registered/Granted | Singapore |
| POLYAMIDE COMPOSITION FOR LOW TEMPERATURE APPLICATIONS | 201280055824.8 | 5/31/2012 | CN103917600B | 10/12/2016 | Registered/Granted | China |
| POLYAMIDE COMPOSITION FOR LOW TEMPERATURE APPLICATIONS | 1401002621 | 5/31/2012 | | | Pending | Thailand |
| POLYAMIDE COMPOSITION FOR LOW TEMPERATURE APPLICATIONS | 3557/DELNP/2014 | 5/31/2012 | 322500 | 10/10/2019 | Registered/Granted | India |
| POLYAMIDE COMPOSITION, CABLE TIE MADE THEREOF AND ITS MANUFACTURING METHOD | 2013-526293 | 9/3/2010 | JP5764211B2 | 6/19/2015 | Registered/Granted | Japan |
| POLYAMIDE COMPOSITION, CABLE TIE MADE THEREOF AND ITS MANUFACTURING METHOD | 201080068900.X | 9/3/2010 | CN103068692B | 11/25/2015 | Registered/Granted | China |

| POLYAMIDE TERPOLYMERS FOR MANUFACTURE OF TRANSPARENT ARTICLES | 18727537.5 | 5/8/2018 | | | Pending | European Patent Office |
|---|-------------------|------------|-------------|-----------|--------------------|------------------------------|
| POLYAMIDE TERPOLYMERS FOR MANUFACTURE OF TRANSPARENT ARTICLES | 10-2019-7032861 | 5/8/2018 | 10-2206786 | 1/19/2021 | Registered/Granted | Republic of Korea |
| POLYAMIDE TERPOLYMERS FOR MANUFACTURE OF TRANSPARENT ARTICLES | 16/612,334 | 5/8/2018 | | | Pending | United States of America |
| POLYAMIDE-BASED MASTERBATCH FORMULATION | PCT/US2021/018270 | 2/16/2021 | | | Pending | Patent Cooperation Treaty |
| POL YMER COMPOSITIONS FOR FORMING AN ENAMEL COATING ON A WIRE | PCT/US2020/033941 | 5/21/2020 | | | Pending | Patent Cooperation Treaty |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 12/851,363 | 8/5/2010 | 8,106,116 | 1/31/2012 | Registered/Granted | United States of America |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 093135248 | 11/17/2004 | TWI372160B | 9/11/2012 | Registered/Granted | Taiwan |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10174175.9 | 11/15/2004 | EP2253662B1 | 6/3/2015 | EP Granted | European Patent Office |

| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10-2006-7012190 | 11/15/2004 | KR101123824B1 | 3/15/2012 | Registered/Granted | Republic of Korea |
|---|-----------------|------------|----------------|-----------|--------------------|-------------------|
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 2862/DELNP/2006 | 11/15/2004 | 256759 | 7/25/2013 | Registered/Granted | India |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 200480040596.2 | 11/15/2004 | CN1922254B | 9/28/2011 | Registered/Granted | China |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 2,546,351 | 11/15/2004 | 2,546,351 | 5/8/2012 | Registered/Granted | Canada |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10174175.9 | 11/15/2004 | 602004047320.0 | 6/3/2015 | Registered/Granted | Germany |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10174175.9 | 11/15/2004 | EP2253662B1 | 6/3/2015 | Registered/Granted | France |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10174175.9 | 11/15/2004 | EP2253662B1 | 6/3/2015 | Registered/Granted | United Kingdom |

| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 10174175.9 | 11/15/2004 | EP2253662B1 | 6/3/2015 | Registered/Granted | Italy |
|---|------------------|------------|----------------|-----------|--------------------|-----------------------------|
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04801074.8 | 11/15/2004 | 602004045441.9 | 7/9/2014 | Registered/Granted | Germany |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04801074.8 | 11/15/2004 | EP1694761B1 | 7/9/2014 | Registered/Granted | France |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04801074.8 | 11/15/2004 | EP1694761B1 | 7/9/2014 | Registered/Granted | United Kingdom |
| PRE-FIBER GEL COMPOSITIONS AND MATERIALS, METHODS OF MANUFACTURE AND USES THEREOF | 04801074.8 | 11/15/2004 | EP1694761B1 | 7/9/2014 | Registered/Granted | Italy |
| PRE-FIBER GEL MATERIALS AND COMPOSITIONS, METHODS OF MANUFACTURE AND USES THEREOF | 10/716,584 | 11/18/2003 | 7,790,789 | 9/7/2010 | Registered/Granted | United States of America |
| PREPARATION OF POLYAMIDES | 09/554,216 | 11/24/1998 | 6,429,279 | 8/6/2002 | Registered/Granted | United States of America |
| PRILLING METHOD | PA/a/2006/010999 | 9/26/2006 | 298831 | 5/4/2012 | Registered/Granted | Mexico |
| PRILLING METHOD | 200610146488.4 | 9/26/2006 | CN101152622B | 4/10/2013 | Registered/Granted | China |

| PRILLING METHOD | MX/a/2012/000306 | 9/26/2006 | 307480 | 2/20/2013 | Registered/Granted | Mexico |
|---|------------------|------------|-------------|------------|---------------------|-----------------------------|
| PRILLING METHOD | 2006220429 | 9/21/2006 | 2006220429 | 8/9/2012 | Registered/Granted | Australia |
| PRILLING METHOD | A20060895 | 9/12/2006 | 16931 | 5/21/2013 | Registered/Granted | Belarus |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | European Patent Office |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | Belgium |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | Germany |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | Spain |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | France |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | United Kingdom |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 20190401337 | 2/6/2019 | Registered/Granted | Greece |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | Lithuania |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | Netherlands |
| PRILLING METHOD | 06120372.5 | 9/8/2006 | 1897610 | 2/6/2019 | Registered/Granted | Turkey |
| PRILLING METHOD | 2,558,902 | 9/7/2006 | 2,558,902 | 3/18/2014 | Registered/Granted | Canada |
| PRILLING METHOD | 06270454 | 12/9/2006 | 2297 | 11/10/2009 | Registered/Granted | Saudi Arabia |
| PRILLING METHOD | 566/2006 | 10/30/2006 | 24350 | 2/22/2009 | Registered/Granted | Egypt |
| PRILLING METHOD | SN06.307 | 9/27/2006 | 19564 | 2/5/2008 | Registered/Granted | Tunisia |
| PRILLING METHOD | a200609758 | 9/11/2006 | 91334 | 7/26/2010 | Registered/Granted | Ukraine |
| PROCESS FOR POLYMERIZING CYCLIC OLIGOMERS OF POLYAMIDES | 16/633,155 | 6/27/2018 | | | Pending | United States of America |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | EP Granted | European Patent Office |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 2,863,030 | 1/21/2013 | 2,863,030 | 12/31/2019 | Registered/Granted | Canada |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 2014132446 | 1/21/2013 | | | Application allowed | Russian Federation |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | Registered/Granted | Belgium |

| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | Registered/Granted | Switzerland |
|---|-----------------|------------|--------------|------------|--------------------|-----------------------------|
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | Registered/Granted | Germany |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | Registered/Granted | France |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | Registered/Granted | United Kingdom |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | Registered/Granted | Italy |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | 2809630 | 12/5/2018 | Registered/Granted | Netherlands |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13742876.9 | 1/21/2013 | TR2019/02944 | 12/5/2018 | Registered/Granted | Turkey |
| PROCESS FOR PREPARING AMMONIUM SULFATE NITRATE | 13/743,090 | 1/16/2013 | 9,464,008 | 10/11/2016 | Registered/Granted | United States of America |
| PROCESS FOR RECOVERY OF CUMENE HYDROPEROXIDE DECOMPOSITION PRODUCTS BY DISTILLATION | 200680042369.2 | 11/10/2006 | CN101309901B | 8/15/2012 | Registered/Granted | China |
| PROCESS FOR RECOVERY OF CUMENE HYDROPEROXIDE DECOMPOSITION PRODUCTS BY DISTILLATION | 10-2008-7011173 | 11/10/2006 | 1012157B1 | 1/25/2011 | Registered/Granted | Republic of Korea |

| PROCESS FOR RECOVERY OF CUMENE HYDROPEROXIDE DECOMPOSITION PRODUCTS BY DISTILLATION | 0601005548 | 11/8/2006 | 27953 | 5/26/2010 | Registered/Granted | Thailand |
|---|-----------------|------------|------------------|------------|---------------------|-----------------------------|
| PROCESS FOR RECOVERY OF CUMENE HYDROPEROXIDE DECOMPOSITION PRODUCTS BY DISTILLATION | 95136938 | 10/4/2006 | I311132 | 6/21/2009 | Registered/Granted | Taiwan |
| PROCESS FOR RECOVERY OF CUMENE HYDROPEROXIDE DECOMPOSITION PRODUCTS BY DISTILLATION | 11/273,411 | 11/14/2005 | 7,186,866 | 3/6/2007 | Registered/Granted | United States of America |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 2,864,852 | 3/18/2013 | 2,864,852 | 4/26/2016 | Registered/Granted | Canada |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | BR1120140205035 | 3/18/2013 | | | Application allowed | Brazil |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 201380016096.4 | 3/18/2013 | ZL201380016096.4 | 11/25/2015 | Registered/Granted | China |

| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | European Patent Office |
|---|------------------|-----------|------------------|------------|--------------------|---------------------------|
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 10-2014-7027359 | 3/18/2013 | KR101645608B1 | 7/29/2016 | Registered/Granted | Republic of Korea |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | MX/a/20141011361 | 3/18/2013 | 3373 84 B | 10/14/2014 | Registered/Granted | Mexico |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 11201404865T | 3/18/2013 | 11201404865T | 1/4/2016 | Registered/Granted | Singapore |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Belgium |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Czech Republic |

| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Germany |
|---|------------|-----------|---------|----------|--------------------|----------------|
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Denmark |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Spain |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Finland |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | France |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | United Kingdom |

| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 502017000122693 | 8/2/2017 | Registered/Granted | Italy |
|---|-------------------|-----------|-----------------|-----------|--------------------|------------------------------|
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Netherlands |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13770286.6 | 3/18/2013 | 2831202 | 8/2/2017 | Registered/Granted | Sweden |
| PROCESS FOR REMOVING NITROGEN FROM FUEL STREAMS WITH CAPROLACTAMIUM IONIC LIQUIDS | 13/429,596 | 3/26/2012 | 8,709,236 | 4/29/2014 | Registered/Granted | United States of America |
| PROCESS FOR THE SYNTHESIS OF N- SUBSTITUTED LACTAMS AND AMIDES | 17/115,396 | 12/8/2020 | | | Pending | United States of America |
| PROCESS FOR THE SYNTHESIS OF N- SUBSTITUTED LACTAMS AND AMIDES | PCT/US2020/063790 | 12/8/2020 | | | Pending | Patent Cooperation Treaty |
| SEMI-AROMATIC COPOLYAMIDES BASED ON CAPROLACTAM | 18723135.2 | 4/18/2018 | | | Pending | European Patent Office |
| SEMI-AROMATIC COPOLYAMIDES BASED ON CAPROLACTAM | 10-2019-7031101 | 4/18/2018 | 10-2263527 | 6/4/2021 | Registered/Granted | Republic of Korea |

| SEMI-AROMATIC COPOLYAMIDES BASED ON CAPROLACTAM | 16/495,048 | 4/18/2018 | | | Pending | United States of America |
|--|-------------------|-----------|-------------|------------|--------------------|------------------------------|
| SILOXANE DERIVATIVES OF AMINO ACIDS HAVING SURFACE- ACTIVE PROPERTIES | 17/230,278 | 4/14/2021 | | | Pending | United States of America |
| SILOXANE DERIVATIVES OF AMINO ACIDS HAVING SURFACE- ACTIVE PROPERTIES | 16/990,855 | 8/11/2020 | 11,008,348 | 5/18/2021 | Registered/Granted | United States of America |
| SILOXANE DERIVATIVES OF AMINO ACIDS HAVING SURFACE- ACTIVE PROPERTIES | PCT/US2020/045797 | 8/11/2020 | | | Pending | Patent Cooperation Treaty |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 13/289,700 | 11/4/2011 | 8,814,977 | 8/26/2014 | Registered/Granted | United States of America |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 200810355 | 1/13/2007 | UA97239C2 | 1/25/2012 | Registered/Granted | Ukraine |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | SN08.302 | 1/13/2007 | 20504 | 3/4/2010 | Registered/Granted | Tunisia |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 2008132337 | 1/13/2007 | RU2435748C2 | 12/10/2011 | Registered/Granted | Russian Federation |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | MX/a/2008/008910 | 1/13/2007 | MX337899B | 3/28/2016 | Registered/Granted | Mexico |
| STABILIZED COMPOSITIONS | MY2008PI02588 | 1/13/2007 | MY-151057-A | 3/31/2014 | Registered/Granted | Malay sia |

| COMPRISING AMMONIUM NITRATE | | | | | | |
|--|-----------------|-----------|------------------|------------|--------------------|---------------------------|
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | W-00 2008 02339 | 1/13/2007 | | | Pending | Indonesia |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 6095/DELNP/2008 | 1/13/2007 | 279018 | 1/9/2017 | Registered/Granted | India |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | AP 2007 10866 | 1/13/2007 | P5876 | 7/10/2013 | Registered/Granted | Georgia |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | European Patent Office |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 07710125.1 | 1/13/2007 | EP1981830B1 | 5/7/2014 | EP Granted | European Patent Office |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 1170/2008 | 1/13/2007 | 29586 | 1/12/2020 | Registered/Granted | Egypt |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 200780002274.2 | 1/13/2007 | ZL200780002274.2 | 12/4/2013 | Registered/Granted | China |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 2,636,486 | 1/13/2007 | 2,636,486 | 11/18/2014 | Registered/Granted | Canada |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | PI0706508-6 | 1/13/2007 | PI0706508-6 | 7/27/2021 | Registered/Granted | Brazil |

| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | a20081042 | 1/13/2007 | 16701 | 9/26/2012 | Registered/Granted | Belarus |
|--|------------------|-----------|-----------------|------------|--------------------|----------------|
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 2007205959 | 1/13/2007 | 2007205959B2 | 8/25/2011 | Registered/Granted | Australia |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 2014-224127 | 1/13/2007 | ЈР5852211В | 12/11/2015 | Registered/Granted | Japan |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 2014-224125 | 1/13/2007 | JP5913527B2 | 4/8/2016 | Registered/Granted | Japan |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | Mx/a/2015/003026 | 1/13/2007 | 382737 | 5/19/2021 | Registered/Granted | Mexico |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 07710125.1 | 1/13/2007 | EP1981830B1 | 5/7/2014 | Registered/Granted | Germany |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 07710125.1 | 1/13/2007 | EP1981830B1 | 5/7/2014 | Registered/Granted | Spain |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 07710125.1 | 1/13/2007 | EP1981830B1 | 5/7/2014 | Registered/Granted | France |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 07710125.1 | 1/13/2007 | EP1981830B1 | 5/7/2014 | Registered/Granted | United Kingdom |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 07710125.1 | 1/13/2007 | 502014902281163 | 5/7/2014 | Registered/Granted | Italy |

| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 07710125.1 | 1/13/2007 | EP1981830B1 | 5/7/2014 | Registered/Granted | Poland |
|--|------------|-----------|-----------------|----------|--------------------|----------------|
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | Belgium |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | Switzerland |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 602007058343.8 | 5/8/2019 | Registered/Granted | Germany |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | | 5/8/2019 | Registered/Granted | Spain |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | France |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | United Kingdom |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | Ireland |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 502019000057672 | 5/8/2019 | Registered/Granted | Italy |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | Netherlands |

| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2325155 | 5/8/2019 | Registered/Granted | Sweden |
|--|-------------------|------------|------------|------------|--------------------|------------------------------|
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11157694.8 | 1/13/2007 | 2019/08995 | 5/8/2019 | Registered/Granted | Turkey |
| STABILIZED COMPOSITIONS COMPRISING AMMONIUM NITRATE | 11/622,878 | 1/12/2007 | 8,075,660 | 12/13/2011 | Registered/Granted | United States of America |
| STAIN RESISTANT POLYAMIDE POLYMERS OBTAINED VIA HIGH END GROUP TERMINATION | 201980088585.8 | 10/23/2019 | | | Pending | China |
| STAIN RESISTANT POLYAMIDE POLYMERS OBTAINED VIA HIGH END GROUP TERMINATION | 19804935.5 | 10/23/2019 | | | Pending | European Patent Office |
| STAIN-RESISTANT BRANCHED POLYAMIDES | 17/177,182 | 2/16/2021 | | | Pending | United States of America |
| STAIN-RESISTANT BRANCHED POLYAMIDES | PCT/US2021/018268 | 2/16/2021 | | | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR AGRICULTURAL PRODUCTS | 17/196,874 | 3/9/2021 | | | Pending | United States of America |
| SURFACTANTS FOR AGRICULTURAL PRODUCTS | PCT/US2021/021569 | 3/9/2021 | | | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR AGRICULTURAL PRODUCTS | 17/118,312 | 12/10/2020 | | | Pending | United States of America |
| SURFACTANTS FOR AGRICULTURAL PRODUCTS | PCT/US2020/064347 | 12/10/2020 | | | Pending | Patent Cooperation Treaty |

| SURFACTANTS FOR CLEANING PRODUCTS | 17/196,856 | 3/9/2021 | Pending | United States of America |
|---|-------------------|------------|---------|------------------------------|
| SURFACTANTS FOR CLEANING PRODUCTS | PCT/US2021/021565 | 3/9/2021 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR CLEANING PRODUCTS | 17/120,032 | 12/11/2020 | Pending | United States of America |
| SURFACTANTS FOR CLEANING PRODUCTS | PCT/US2020/064684 | 12/11/2020 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR ELECTRONICS | 17/127,048 | 12/18/2020 | Pending | United States of America |
| SURFACTANTS FOR ELECTRONICS | PCT/US2020/066031 | 12/18/2020 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR ELECTRONICS PRODUCTS | 17/196,994 | 3/9/2021 | Pending | United States of America |
| SURFACTANTS FOR ELECTRONICS PRODUCTS | PCT/US2021/021595 | 3/9/2021 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR HEALTHCARE PRODUCTS | 17/196,998 | 3/9/2021 | Pending | United States of America |
| SURFACTANTS FOR HEALTHCARE PRODUCTS | PCT/US2021/021596 | 3/9/2021 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR INKS, PAINTS, AND ADHESIVES | 17/197,003 | 3/9/2021 | Pending | United States of America |
| SURFACTANTS FOR INKS, PAINTS, AND ADHESIVES | PCT/US2021/021597 | 3/9/2021 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR INKS, PAINTS, AND ADHESIVES | PCT/US2020/064687 | 2/2/2021 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR INKS, PAINTS, AND ADHESIVES | 17/120,035 | 12/11/2020 | Pending | United States of America |
| SURFACTANTS FOR OIL AND GAS PRODUCTION | 17/196,893 | 3/9/2021 | Pending | United States of America |

| SURFACTANTS FOR OIL AND GAS PRODUCTION | PCT/US2021/021574 | 3/9/2021 | Pending | Patent Cooperation Treaty |
|--|-------------------|------------|---------|------------------------------|
| SURFACTANTS FOR OIL AND GAS PRODUCTION | 17/127,033 | 12/18/2020 | Pending | United States of America |
| SURFACTANTS FOR OIL AND GAS PRODUCTION | PCT/US2020/066027 | 12/18/2020 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR PERSONAL CARE AND COSMETIC PRODUCTS | 17/196,886 | 3/9/2021 | Pending | United States of America |
| SURFACTANTS FOR PERSONAL CARE AND COSMETIC PRODUCTS | PCT/US2021/021571 | 3/9/2021 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR USE IN HEALTHCARE PRODUCTS | 17/120,040 | 12/11/2020 | Pending | United States of America |
| SURFACTANTS FOR USE IN HEALTHCARE PRODUCTS | PCT/US2020/064692 | 12/11/2020 | Pending | Patent Cooperation Treaty |
| SURFACTANTS FOR USE IN PERSONAL CARE AND COSMETIC PRODUCTS | 17/118,304 | 12/10/2020 | Pending | United States of America |
| SURFACTANTS FOR USE IN PERSONAL CARE AND COSMETIC PRODUCTS | PCT/US2020/064345 | 12/10/2020 | Pending | Patent Cooperation Treaty |
| THIXOTROPIC RHEOLOGY MODIFYING AGENT COMPOSITIONS | 108110399 | 3/26/2019 | Pending | Taiwan |
| THIXOTROPIC RHEOLOGY MODIFYING AGENT COMPOSITIONS | 201980036201.8 | 3/25/2019 | Pending | China |
| THIXOTROPIC RHEOLOGY MODIFYING AGENT COMPOSITIONS | 19717028.5 | 3/25/2019 | Pending | European Patent Office |
| THIXOTROPIC RHEOLOGY MODIFYING AGENT COMPOSITIONS | 2020-551843 | 3/25/2019 | Pending | Japan |

| THIXOTROPIC RHEOLOGY MODIFYING AGENT COMPOSITIONS | 16/981,191 | 3/25/2019 | | | Pending | United States of America |
|--|------------------|-----------|------------------|------------|--------------------|-----------------------------|
| ULTRA HIGH OXYGEN BARRIER FILMS AND ARTICLES MADE THEREFROM | 2002255671 | 3/8/2002 | AU2002255671B2 | 9/2/2004 | Registered/Granted | Australia |
| ULTRA HIGH OXYGEN BARRIER FILMS AND ARTICLES MADE THEREFROM | 02809400.X | 3/8/2002 | CN1328042C | 7/25/2007 | Registered/Granted | China |
| ULTRA HIGH OXYGEN BARRIER FILMS AND ARTICLES MADE THEREFROM | 91104393 | 3/8/2002 | NI-203804 | 6/21/2004 | Registered/Granted | Taiwan |
| VARIABLE-ORIFICE PRILL PLATE | 201180032485.7 | 6/24/2011 | ZL201180032485.7 | 2/25/2015 | Registered/Granted | China |
| VARIABLE-ORIFICE PRILL PLATE | BR112012033327-5 | 6/24/2011 | BR112012033327-5 | 12/26/2018 | Registered/Granted | Brazil |
| VARIABLE-ORIFICE PRILL PLATE | 11810071.8 | 6/24/2011 | 2588224 | 5/2/2018 | Registered/Granted | European Patent Office |
| VARIABLE-ORIFICE PRILL PLATE | 2012157022 | 6/24/2011 | 2558600 | 7/6/2015 | Registered/Granted | Russian Federation |
| VARIABLE-ORIFICE PRILL PLATE | 11810071.8 | 6/24/2011 | 602011048097.9 | 5/2/2018 | Registered/Granted | Germany |
| VARIABLE-ORIFICE PRILL PLATE | 11810071.8 | 6/24/2011 | 2588224 | 5/2/2018 | Registered/Granted | Spain |
| VARIABLE-ORIFICE PRILL PLATE | 11810071.8 | 6/24/2011 | 2588224 | 5/2/2018 | Registered/Granted | France |
| VARIABLE-ORIFICE PRILL PLATE | 11810071.8 | 6/24/2011 | 2588224 | 5/2/2018 | Registered/Granted | United Kingdom |
| VARIABLE-ORIFICE PRILL PLATE | 11810071.8 | 6/24/2011 | 2588224 | 5/2/2018 | Registered/Granted | Italy |
| VARIABLE-ORIFICE PRILL PLATE | 11810071.8 | 6/24/2011 | 2588224 | 5/2/2018 | Registered/Granted | Netherlands |

| VARIABLE-ORIFICE PRILL PLATE | 13/150,699 | 6/1/2011 | 8,329,073 | 12/11/2012 | Registered/Granted | United States of America |
|---|----------------|------------|-------------|------------|--------------------|-----------------------------|
| VISCOSITY CONTROL OF PARTICLE FORMATION BY ADJUSTING AGITATION SPEED | 11/924,634 | 10/26/2007 | 7,575,365 | 8/18/2009 | Registered/Granted | United States of America |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 13/026,834 | 2/14/2011 | 8,652,277 | 2/18/2014 | Registered/Granted | United States of America |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 2011103258 | 7/9/2009 | RU2515379C2 | 5/10/2014 | Registered/Granted | Russian Federation |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 2011-518798 | 7/9/2009 | 5596682 | 8/15/2014 | Registered/Granted | Japan |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 620/DELNP/2011 | 7/9/2009 | 285486 | 7/28/2017 | Registered/Granted | India |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | European Patent Office |

| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | PCT 101/2011 | 7/9/2009 | EG26334A | 8/19/2013 | Registered/Granted | Egypt |
|---|----------------|----------|--------------|-----------|--------------------|-------------|
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 200980135789.9 | 7/9/2009 | CN102149656B | 6/22/2016 | Registered/Granted | China |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 2,731,093 | 7/9/2009 | 2,731,093 | 2/9/2016 | Registered/Granted | Canada |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 2009311605 | 7/9/2009 | 2009311605 | 6/12/2014 | Registered/Granted | Australia |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | Belgium |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | Switzerland |

| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 602009057875.8 | 4/10/2019 | Registered/Granted | Germany |
|---|------------|----------|-----------------|-----------|--------------------|----------------|
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | Spain |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | France |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | United Kingdom |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | Ireland |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 502019000050763 | 4/10/2019 | Registered/Granted | Italy |

| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | Netherlands |
|---|-----------------|-----------|------------------|-----------|---------------------|---------------------------|
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2315736 | 4/10/2019 | Registered/Granted | Sweden |
| WEAKLY OXIDIZING AMMONIUM NITRATE COMPOSITE MATERIALS AND METHODS FOR PREPARING SUCH COMPOSITIONS | 09825152.3 | 7/9/2009 | 2019/09929 | 4/10/2019 | Registered/Granted | Turkey |
| WIRE AND CABLE JACKET COMPOSITION OF PA6/66 COPOLYMER BASE RESIN FOR IMPROVED PROCESSABILITY AND PROPERTIES | 201880030763.7 | 3/10/2018 | ZL201880030763.7 | 4/16/2021 | Registered/Granted | China |
| WIRE AND CABLE JACKET COMPOSITION OF PA6/66 COPOLYMER BASE RESIN FOR IMPROVED PROCESSABILITY AND PROPERTIES | 18715839.9 | 3/10/2018 | | | Pending | European Patent Office |
| WIRE AND CABLE JACKET COMPOSITION OF PA6/66 COPOLYMER BASE RESIN FOR IMPROVED | 10-2019-7028697 | 3/10/2018 | | | Application allowed | Republic of Korea |

| PROCESSABILITY AND PROPERTIES | | | | | | |
|---|------------|-----------|------------|-----------|--------------------|-----------------------------|
| WIRE AND CABLE JACKET COMPOSITION OF PA6/66 COPOLYMER BASE RESIN FOR IMPROVED PROCESSABILITY AND PROPERTIES | 16/491,082 | 3/10/2018 | 10,825,587 | 11/3/2020 | Registered/Granted | United States of America |

SCHEDULE B

Trademarks

| Title: | App. No.: | App. Date: | Reg. No.: | Reg. Date: | Case Status: | Country: |
|----------------|-----------------------|------------|-------------------------|------------|---------------------|-----------------------------|
| A/6 (Stylized) | 107081262 | 12/17/2018 | 02000279 | 7/16/2019 | Registered/Granted | Taiwan |
| A/6 (Stylized) | 88/208,339 | 11/28/2018 | | | Application allowed | United States of America |
| A/6 (Stylized) | 180141724 | 12/7/2018 | 201112738 | 12/7/2018 | Registered/Granted | Thailand |
| A/6 (Stylized) | 1478418 | 12/27/2018 | P376876 | 2/10/2020 | Registered/Granted | Venezuela |
| A/6 (Stylized) | 776239 | 11/30/2018 | 22907 | 2/21/2019 | Registered/Granted | Peru |
| A/6 (Stylized) | 2018015802 | 11/30/2018 | | | Pending | Malaysia |
| A/6 (Stylized) | DID201900811 8 | 2/18/2019 | IDM000825326 | 1/29/2021 | Registered/Granted | Indonesia |
| A/6 (Stylized) | DID201900811 5 | 2/18/2019 | IDM000743562 | 5/18/2020 | Registered/Granted | Indonesia |
| A/6 (Stylized) | SENADI-2018- 89777 | 11/30/2018 | SENADI_2020_ TI_192 | 2/21/2019 | Registered/Granted | Ecuador |
| A/6 (Stylized) | 2019-1263 | 2/14/2019 | 282606 | 9/11/2019 | Registered/Granted | Costa Rica |
| A/6 (Stylized) | 1.308.303 | 12/3/2018 | 1.299.994 | 6/27/2019 | Registered/Granted | Chile |
| A/6 (Stylized) | 1933144 | 11/29/2018 | | | Pending | Canada |
| A/6 (Stylized) | 916378640 | 12/5/2018 | 916378640 | 8/20/2019 | Registered/Granted | Brazil |
| A/6 (Stylized) | 3797607 | 4/30/2019 | 3067321 | 4/3/2020 | Registered/Granted | Argentina |
| A/6 (Stylized) | 2018-48513 | 12/3/2018 | 258150 | 4/30/2019 | Registered/Granted | Dominican Republic |
| A/6 (Stylized) | SENADI-2018- 89782 | 11/30/2018 | SENADI_2020_ TI_1220 | 2/21/2019 | Registered/Granted | Ecuador |
| A/6 (Stylized) | 2018015803 | 11/30/2018 | | | Pending | Malaysia |
| A/6 (Stylized) | 1478318 | 12/27/2018 | P376877 | 2/10/2020 | Registered/Granted | Venezuela |
| A/6 (Stylized) | 1478218 | 12/27/2018 | P376875 | 2/10/2020 | Registered/Granted | Venezuela |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 12/12/2018 | Registered/Granted | Madrid Protocol (TM) |
| A/6 (Stylized) | 916378756 | 12/5/2018 | 916378756 | 8/20/2019 | Registered/Granted | Brazil |
| A/6 (Stylized) | 180141725 | 12/7/2018 | 201111883 | 5/25/2020 | Registered/Granted | Thailand |
| A/6 (Stylized) | 2019/00776 | 1/10/2019 | 2019/00776 | 7/17/2020 | Registered/Granted | South Africa |

| A/6 (Stylized) | 2019/00777 | 1/10/2019 | 2019/00777 | 7/17/2020 | Registered/Granted | South Africa |
|----------------|--------------------|------------|-------------------|------------|--------------------|-----------------------------|
| A/6 (Stylized) | 1987729 | 12/12/2018 | 1987729 | 8/20/2019 | Registered/Granted | Australia |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 2/7/2019 | Registered/Granted | China |
| A/6 (Stylized) | 1448693 | 12/12/2018 | | 12/12/2018 | Registered/Granted | Colombia |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 2/7/2019 | Registered/Granted | Egypt |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 7/2/2019 | Registered/Granted | European Union IPO |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 4/30/2019 | Registered/Granted | United Kingdom |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 12/12/2018 | Registered/Granted | India |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 3/5/2020 | Registered/Granted | Japan |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 4/8/2020 | Registered/Granted | Republic of Korea |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 2/7/2019 | Registered/Granted | Morocco |
| A/6 (Stylized) | 2165710 | 12/12/2018 | 2027502 | 9/2/2019 | Registered/Granted | Mexico |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 8/23/2019 | Registered/Granted | Russian Federation |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 12/12/2018 | Registered/Granted | Ukraine |
| A/6 (Stylized) | 1448693 | 12/12/2018 | 1448693 | 1/24/2020 | Registered/Granted | Vietnam |
| A/6 (Stylized) | 3.797.608 | 4/30/2019 | 3184782 | 7/23/2021 | Registered/Granted | Argentina |
| A/6 (Stylized) | 2165711 | | 2027503 | 9/2/2019 | Registered/Granted | Mexico |
| A/6 (Stylized) | 1448693 | 12/12/2018 | UK0080144869 3 | 7/2/2019 | Registered/Granted | United Kingdom |
| ADVANSIX | 87/360,292 | 3/6/2017 | 5,321,829 | 10/31/2017 | Registered/Granted | United States of America |
| ADVANSIX | 3.639.892 | 9/6/2017 | 2.991.869 | 7/4/2019 | Registered/Granted | Argentina |
| ADVANSIX | 1.266.245 | 9/5/2017 | 1.280.925 | 8/29/2018 | Registered/Granted | Chile |
| ADVANSIX | D00 2017 042750 | 9/6/2017 | | | Pending | Indonesia |
| ADVANSIX | 2017067027 | 9/6/2017 | 2017067027 | 3/6/2017 | Registered/Granted | Malaysia |
| ADVANSIX | 2017067032 | 9/6/2017 | 2017067032 | 3/6/2017 | Registered/Granted | Malaysia |
| ADVANSIX | 719426 | 9/6/2017 | 00018713 | 11/24/2017 | Registered/Granted | Peru |
| ADVANSIX | 2017/26001 | 9/6/2017 | 2017/26002 | 5/13/2019 | Registered/Granted | South Africa |
| ADVANSIX | 170131448 | 9/6/2017 | 211102625 | 9/6/2017 | Registered/Granted | Thailand |
| ADVANSIX | 15109-17 | 9/6/2017 | 371385 | 8/10/2018 | Registered/Granted | Venezuela |
| ADVANSIX | 1856173 | 9/6/2017 | TMA1082322 | 9/29/2020 | Registered/Granted | Canada |

| ADVANSIX | 913350842 | 9/6/2017 | 913350842 | 12/4/2018 | Registered/Granted | Brazil |
|--------------------------|------------|-----------|-------------------|------------|--------------------|-------------------------|
| ADVANSIX | 106056396 | 9/6/2017 | 1915862 | 5/16/2018 | Registered/Granted | Taiwan |
| ADVANSIX | 3.639.893 | 9/6/2017 | 2.991.872 | 7/4/2019 | Registered/Granted | Argentina |
| ADVANSIX | 2017/26002 | 9/6/2017 | 2017/26002 | 5/13/2019 | Registered/Granted | South Africa |
| ADVANSIX | 15110-17 | 9/6/2017 | 371386 | 8/10/2018 | Registered/Granted | Venezuela |
| ADVANSIX | 15111-17 | 9/6/2017 | 371387 | 8/10/2018 | Registered/Granted | Venezuela |
| ADVANSIX | 913351164 | 9/6/2017 | 913351164 | 12/4/2018 | Registered/Granted | Brazil |
| ADVANSIX | 26254196 | 9/6/2017 | 26254196 | 8/28/2018 | Registered/Granted | China |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 9/5/2017 | Registered/Granted | Madrid Protocol (TM) |
| ADVANSIX | 1881287 | 9/5/2017 | 1881287 | 5/11/2018 | Registered/Granted | Australia |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 6/1/2018 | Registered/Granted | Colombia |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 3/21/2018 | Registered/Granted | European Union IPO |
| ADVANSIX | | 9/5/2017 | 3663787 | 7/30/2019 | Registered/Granted | India |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 5/24/2018 | Registered/Granted | Japan |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 4/11/2019 | Registered/Granted | Republic of Korea |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 10/19/2017 | Registered/Granted | Morocco |
| ADVANSIX | 1962596 | 9/5/2017 | 1903072 | 7/20/2018 | Registered/Granted | Mexico |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 5/21/2018 | Registered/Granted | Russian Federation |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 9/26/2018 | Registered/Granted | Ukraine |
| ADVANSIX | 1371431 | 9/5/2017 | 1371431 | 9/12/2018 | Registered/Granted | Vietnam |
| ADVANSIX | 1371431 | 9/5/2017 | 1903073 | 7/20/2018 | Registered/Granted | Mexico |
| ADVANSIX | 1371431 | 9/5/2017 | UK0080137143 1 | 3/21/2018 | Registered/Granted | United Kingdom |
| ADVANSIX (Back Up) | 31579552 | 6/13/2018 | 31579552 | 9/28/2020 | Registered/Granted | China |
| ADVANSIX (Divisional) | 26254195A | 9/6/2017 | 26254195A | 10/7/2018 | Registered/Granted | China |
| ADVANSIX and design | 1331558 | 7/6/2016 | 1331558 | 7/6/2016 | Registered/Granted | Madrid Protocol (TM) |
| ADVANSIX and design | 1331558 | 7/6/2016 | | | Pending | Australia |
| ADVANSIX and design | 1331558 | 7/6/2016 | G1331558 | 12/1/2020 | Registered/Granted | China |

| ADMANIGINA | }····· | | } | } | | , |
|------------------------|-------------------|-----------|-------------------|------------|--------------------|-----------------------------|
| ADVANSIX and design | 3529795 | 7/6/2016 | 3529795 | 5/2/2018 | Registered/Granted | India |
| ADVANSIX and design | 1331558 | 7/6/2016 | 1331558 | 8/10/2018 | Registered/Granted | Japan |
| ADVANSIX and design | 1331558 | 7/6/2016 | 1331558 | 4/1/2019 | Registered/Granted | Republic of Korea |
| ADVANSIX and design | 3522649 | 7/15/2016 | 2889497 | 5/26/2017 | Registered/Granted | Argentina |
| ADVANSIX and design | 105039592 | 7/7/2016 | 01830535 | 3/16/2017 | Registered/Granted | Taiwan |
| ADVANSIX and design | 2016062548 | 7/12/2016 | 2016062548 | 7/6/2017 | Registered/Granted | Malaysia |
| ADVANSIX and design | 668356 | 7/7/2016 | 243265 | 11/2/2016 | Registered/Granted | Peru |
| ADVANSIX and design | 160103173 | 8/22/2016 | 181113820 | 5/28/2018 | Registered/Granted | Thailand |
| ADVANSIX and design | 4-2016-13253 | 5/11/2016 | 296949 | 3/19/2018 | Registered/Granted | Vietnam |
| ADVANSIX and design | 87/030,966 | 5/10/2016 | 5,551,276 | 8/28/2018 | Registered/Granted | United States of America |
| ADVANSIX and Design | 1745807 | 5/11/2016 | 1838908 | 12/20/2017 | Registered/Granted | Mexico |
| ADVANSIX and Design | D00201602451 6 | 5/23/2016 | IDM000687110 | 4/3/2020 | Registered/Granted | Indonesia |
| ADVANSIX and design | 303771054 | 5/11/2016 | 303771054 | 5/11/2016 | Registered/Granted | Hong Kong |
| ADVANSIX and design | 015417363 | 5/10/2016 | 015417363 | 9/13/2016 | Registered/Granted | European Union IPO |
| ADVANSIX and design | 1781614 | 5/10/2016 | TMA1020035 | 4/25/2019 | Registered/Granted | Canada |
| ADVANSIX and design | 911026738 | 5/12/2016 | 911026738 | 8/7/2018 | Registered/Granted | Brazil |
| ADVANSIX and design | 015417363 | 5/10/2016 | UK0091541736 3 | 9/13/2016 | Registered/Granted | United Kingdom |
| ADVANSIX CARING | 87/333,097 | 2/13/2017 | 6,185,440 | 10/27/2020 | Registered/Granted | United States of America |
| ADVANSIX CARING | 1856174 | 9/6/2017 | 1082327 | 9/29/2020 | Registered/Granted | Canada |

| ADVANSIX CARING | 913351288 | 9/6/2017 | 913351288 | 12/4/2018 | Registered/Granted | Brazil |
|--------------------|-----------|-----------|-------------------|------------|--------------------|-------------------------|
| ADVANSIX CARING | 913351881 | 9/6/2017 | 913351881 | 12/4/2018 | Registered/Granted | Brazil |
| ADVANSIX CARING | 26587110 | 9/25/2017 | 26587110 | 9/21/2018 | Registered/Granted | China |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 9/5/2017 | Registered/Granted | Madrid Protocol (TM) |
| ADVANSIX CARING | 1879455 | 9/5/2017 | 1879455 | 5/11/2018 | Registered/Granted | Australia |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 6/1/2018 | Registered/Granted | Colombia |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 10/12/2017 | Registered/Granted | Egypt |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 3/14/2018 | Registered/Granted | European Union IPO |
| ADVANSIX CARING | | 9/5/2017 | 3660343 | 9/7/2019 | Registered/Granted | India |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 10/11/2018 | Registered/Granted | Japan |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 4/26/2019 | Registered/Granted | Republic of Korea |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 369437 | 10/12/2017 | Registered/Granted | Morocco |
| ADVANSIX CARING | 1959208 | 9/5/2017 | 1901036 | 7/13/2018 | Registered/Granted | Mexico |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 5/29/2018 | Registered/Granted | Russian Federation |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 1369437 | 9/24/2018 | Registered/Granted | Ukraine |
| ADVANSIX CARING | 1369437 | 9/5/2017 | 369437 | 10/12/2017 | Registered/Granted | Vietnam |
| ADVANSIX CARING | 1959209 | 9/5/2017 | 1901037 | 7/13/2018 | Registered/Granted | Mexico |
| ADVANSIX CARING | 1369437 | 9/5/2017 | UK0080136943 7 | 3/14/2018 | Registered/Granted | United Kingdom |
| ADVANSIX CARING | 26587102 | 9/25/2017 | 26587102 | 9/21/2018 | Registered/Granted | China |

| ADVANSIX TECHNOLOGIES | 4-2016-13254 | 5/11/2016 | 296950 | 3/19/2018 | Registered/Granted | Vietnam |
|--------------------------|---------------------|------------|-------------------|------------|--------------------|-----------------------------|
| ADVANSIX TECHNOLOGIES | 1745806 | 5/11/2016 | 1751273 | 5/8/2017 | Registered/Granted | Mexico |
| ADVANSIX TECHNOLOGIES | D00201602839 4 | 6/13/2016 | IDM000651402 | 8/14/2019 | Registered/Granted | Indonesia |
| ADVANSIX TECHNOLOGIES | 303771063 | 5/11/2016 | 303771063 | 5/11/2016 | Registered/Granted | Hong Kong |
| ADVANSIX TECHNOLOGIES | 015417355 | 5/10/2016 | 015417355 | 9/13/2016 | Registered/Granted | European Union IPO |
| ADVANSIX TECHNOLOGIES | 911026665 | 5/12/2016 | 911026665 | 8/7/2018 | Registered/Granted | Brazil |
| ADVANSIX TECHNOLOGIES | 015417355 | 5/10/2016 | UK0091541735 5 | 9/13/2016 | Registered/Granted | United Kingdom |
| AEGIS | 78/542,967 | 1/6/2005 | 3,050,249 | 1/24/2006 | Registered/Granted | United States of America |
| AEGIS | 40-2010- 0028177 | 5/28/2010 | 40-0877218 | 8/22/2011 | Registered/Granted | Republic of Korea |
| AEGIS | 1496001 | 6/12/2014 | 1496019 | 11/14/2014 | Registered/Granted | Mexico |
| AEGIS | 009162389 | 6/9/2010 | 009162389 | 11/25/2010 | Registered/Granted | European Union IPO |
| AEGIS | 8358349 | 6/3/2010 | 8358349 | 6/14/2011 | Registered/Granted | China |
| AEGIS | 910440 | 6/22/2010 | 341.802 | 10/28/2010 | Registered/Granted | Chile |
| AEGIS | 1680777 | 6/11/2014 | TMA977033 | 7/27/2017 | Registered/Granted | Canada |
| AEGIS | 830638172 | 6/10/2010 | 830638172 | 4/30/2013 | Registered/Granted | Brazil |
| AEGIS | 3.008.243 | 6/8/2010 | 2439815 | 5/10/2011 | Registered/Granted | Argentina |
| AEGIS | 009162389 | 6/9/2010 | UK0090916238 9 | 11/25/2010 | Registered/Granted | United Kingdom |
| AEGIS "Back- Up" | 34803845 | 11/21/2018 | 34803845 | 11/28/2019 | Registered/Granted | China |
| AEGIS "Back- Up" | 39445960 | 7/5/2019 | 39445960 | 2/21/2021 | Registered/Granted | China |
| AEGIS BARRIERPRO2 | 85/833,526 | 1/28/2013 | 4,685,252 | 2/10/2015 | Registered/Granted | United States of America |
| AEGIS BARRIERPRO2 | 4020140039289 | 6/12/2014 | 40-1100506 | 4/16/2015 | Registered/Granted | Republic of Korea |
| AEGIS BARRIERPRO2 | 12955671 | 6/10/2014 | 12955671 | 10/31/2014 | Registered/Granted | European Union IPO |

| AEGIG | · · · · · · · · · · · · · · · · · · · | | ····· | , | | , |
|----------------------|---------------------------------------|-----------|-------------------|------------|--------------------|-----------------------------|
| AEGIS BARRIERPRO2 | 14605063 | 6/13/2014 | 14605063 | 7/28/2015 | Registered/Granted | China |
| AEGIS BARRIERPRO2 | 1112035 | 6/20/2014 | 1.158.081 | 3/3/2015 | Registered/Granted | Chile |
| AEGIS BARRIERPRO2 | 3333623 | 6/16/2014 | 2730367 | 5/22/2015 | Registered/Granted | Argentina |
| AEGIS BARRIERPRO2 | 12955671 | 6/10/2014 | UK0091295567 1 | 10/31/2014 | Registered/Granted | United Kingdom |
| CAPRAN | 72/122,244 | 6/19/1961 | 0,730,229 | 4/24/1962 | Registered/Granted | United States of America |
| CAPRAN | 932016 | 10/7/1968 | 932016 | 10/7/1968 | Registered/Granted | United Kingdom |
| CAPRAN | 58255/2010 | 8/6/2010 | 605939 | 9/28/2010 | Registered/Granted | Switzerland |
| CAPRAN | 140267 | 1/6/1982 | 140267 | 1/6/1982 | Registered/Granted | New Zealand |
| CAPRAN | 3620170001253 69 | 8/13/2008 | 815113 | 5/30/2000 | Registered/Granted | Italy |
| CAPRAN | 900014 | 1/15/1998 | 1445169 | 1/15/1998 | Registered/Granted | France |
| CAPRAN | 0335052 | 11/8/1968 | TMA177990 | 8/27/1971 | Registered/Granted | Canada |
| CAPRAN | 3.270.157 | 2/3/1970 | 2.642.340 | 4/30/1993 | Registered/Granted | Argentina |
| CAPRAN | | 11/5/2007 | 944810 | 11/5/2007 | Registered/Granted | Madrid Protocol (TM) |
| CAPRAN | 944810 | 11/5/2007 | 944810 | 10/24/2008 | Registered/Granted | European Union IPO |
| CAPRAN | 944810 | 11/5/2007 | UK0080094481 0 | 10/27/2008 | Registered/Granted | United Kingdom |
| CAPRAN PROSHIELD | 53708/2011 | 3/28/2011 | 618445 | 8/18/2011 | Registered/Granted | Switzerland |
| CAPRAN PROSHIELD | 451018 | 3/29/2011 | 178467 | 8/12/2011 | Registered/Granted | Peru |
| CAPRAN PROSHIELD | 2011-001630 | 5/24/2011 | 2013099011 | 9/19/2013 | Registered/Granted | Nicaragua |
| CAPRAN PROSHIELD | M-002778-2011 | 4/1/2011 | 178405 | 10/4/2011 | Registered/Granted | Guatemala |
| CAPRAN PROSHIELD | 2011-1856-RE | 3/29/2011 | 6997-11 | 10/12/2011 | Registered/Granted | Ecuador |
| CAPRAN PROSHIELD | 9844838 | 3/28/2011 | 9844838 | 9/2/2011 | Registered/Granted | European Union IPO |
| CAPRAN PROSHIELD | 830997377 | 4/4/2011 | 830997377 | 7/22/2014 | Registered/Granted | Brazil |
| | | | | | | |

| | · | , | · | , | | , |
|---------------------|-------------|-----------|-------------------|------------|--------------------|-----------------------------|
| CAPRAN PROSHIELD | 9844838 | 3/28/2011 | UK0090984483 8 | 9/2/2011 | Registered/Granted | United Kingdom |
| CAPRAN PROSHIELD | 9844838 | 3/28/2011 | UK0090984483 8 | 9/2/2011 | Registered/Granted | United Kingdom |
| ELASTOMAX | 011669678 | 3/19/2013 | 011669678 | 12/28/2014 | Registered/Granted | European Union IPO |
| ELASTOMAX | 011669678 | 3/19/2013 | UK0091166967 8 | 12/28/2014 | Registered/Granted | United Kingdom |
| EZ-BLOX | 2015-071756 | 7/27/2015 | 5826820 | 2/12/2016 | Registered/Granted | Japan |
| EZ-BLOX | 014402424 | 7/24/2015 | 014402424 | 12/1/2015 | Registered/Granted | European Union IPO |
| EZ-BLOX | 909744556 | 7/28/2015 | 909744556 | 8/7/2018 | Registered/Granted | Brazil |
| EZ-BLOX | 014402424 | 7/24/2015 | UK0091440242 4 | 12/1/2015 | Registered/Granted | United Kingdom |
| EZ-BLOX | 86/703,512 | 6/24/2015 | 5,423,808 | 3/13/2018 | Registered/Granted | United States of America |
| EZ-BLOX | 3903786 | 6/12/2020 | | | Pending | Argentina |
| EZ-BLOX | 172646 | 6/14/2020 | | | Pending | Jordan |
| EZ-BLOX | 1541767 | 6/11/2020 | 1541767 | 6/11/2020 | Registered/Granted | Madrid Protocol (TM) |
| EZ-BLOX | 2105682 | 6/11/2020 | 1541767 | 1/19/2021 | Registered/Granted | Australia |
| EZ-BLOX | 2041486 | 6/11/2020 | | | Pending | Canada |
| EZ-BLOX | 1541767 | 6/11/2020 | 1541767 | 11/12/2020 | Registered/Granted | China |
| EZ-BLOX | 1541767 | 6/11/2020 | 1541767 | | Registered/Granted | United Kingdom |
| EZ-BLOX | 1541767 | 6/11/2020 | 1541767 | 6/11/2021 | Registered/Granted | Indonesia |
| EZ-BLOX | 1541767 | 6/11/2020 | 329873 | 5/18/2021 | Registered/Granted | Israel |
| EZ-BLOX | 1541767 | 6/11/2020 | | | Pending | Republic of Korea |
| EZ-BLOX | 1541767 | 6/11/2020 | | | Pending | Mexico |
| EZ-BLOX | 1541767 | 6/11/2020 | | | Pending | Malaysia |
| EZ-BLOX | 1154265 | 6/11/2020 | 1154265 | 3/19/2021 | Registered/Granted | New Zealand |
| EZ-BLOX | 1541767 | 6/11/2020 | | | Pending | Oman |
| EZ-BLOX | 1541767 | 6/11/2020 | 1541767 | 11/13/2020 | Registered/Granted | Philippines |
| EZ-BLOX | 1541767 | 6/11/2020 | | | Pending | Thailand |
| EZ-BLOX | 1541767 | 6/11/2020 | 1541767 | 12/29/2020 | Registered/Granted | Turkey |
| EZ-BLOX | 1541767 | 6/11/2020 | 1541767 | 7/9/2021 | Registered/Granted | Vietnam |

| EZ-BLOX | 339656 | 11/18/2020 | 339656 | 2/16/2021 | Registered/Granted | United Arab Emirates |
|-----------|------------|------------|---------------------|------------|---------------------|-----------------------------|
| EZ-BLOX | 109038721 | 6/11/2020 | 02113890 | 1/16/2021 | Registered/Granted | Taiwan |
| EZ-BLOX | 1359379 | 6/11/2020 | 1333606 | 11/20/2020 | Registered/Granted | Chile |
| EZ-BLOX | 859169 | 8/28/2020 | 298811 | 10/23/2020 | Registered/Granted | Peru |
| EZ-BLOX | 271486 | 1/19/2021 | 1442017640 | 4/28/2021 | Registered/Granted | Saudi Arabia |
| | 2/1400 | †····· | 1442017040 | | | United States of |
| NADONE | 72/016,928 | 1/28/1998 | 657602 | 1/28/1998 | Registered/Granted | America |
| NADONE | 109083915 | 11/26/2020 | 02152919 | 7/16/2021 | Registered/Granted | Taiwan |
| NADONE | 1567665 | 11/25/2020 | 1567665 | 11/25/2020 | Registered/Granted | Madrid Protocol (TM) |
| NADONE | 2147005 | 11/25/2020 | 2147005 | 7/5/2021 | Registered/Granted | Australia |
| NADONE | 501567665 | 11/25/2020 | | | Pending | Brazil |
| NADONE | 1567665 | 11/25/2020 | | | Pending | Canada |
| NADONE | | 11/25/2020 | 1567665 | 9/30/2021 | Registered/Granted | Switzerland |
| NADONE | | | | | Pending | Germany |
| NADONE | 1567665 | 11/25/2020 | 1567665 | 5/21/2021 | Registered/Granted | European Union IPO |
| NADONE | | 11/25/2020 | WO0000001567 665 | 5/16/2021 | Registered/Granted | United Kingdom |
| NADONE | 1567665 | 11/25/2020 | | | Pending | Japan |
| NADONE | | 11/25/2020 | | | Pending | Republic of Korea |
| NADONE | 1567665 | 11/25/2020 | | | Pending | Mexico |
| NADONE | 1567665 | 11/25/2020 | | | Pending | Russian Federation |
| NADONE | 1567665 | 11/25/2020 | 1567665 | 4/8/2021 | Registered/Granted | China |
| NADONE | 1567665 | 11/25/2020 | 40202100447Y | 6/17/2021 | Registered/Granted | Singapore |
| NADONE | 1567665 | 11/25/2020 | 335021 | 8/2/2021 | Registered/Granted | Israel |
| NADONE DR | 88/918,399 | 5/15/2020 | | | Application allowed | United States of America |
| NADONE DR | 109083917 | 11/26/2020 | 02152920 | 7/16/2021 | Registered/Granted | Taiwan |
| NADONE DR | 2068565 | 12/4/2020 | | | Pending | Canada |
| NADONE DR | 2140970 | 12/4/2020 | | | Pending | Australia |
| NADONE DR | 921584636 | 12/11/2020 | 921584636 | 10/13/2021 | Registered/Granted | Brazil |
| NADONE DR | 1386126 | 12/4/2020 | 1344448 | 5/10/2021 | Registered/Granted | Chile |

| , | | | | | | |
|------------|---------------------|------------|--------------|------------|--------------------|-----------------------------|
| NADONE DR | 018349020 | 12/4/2020 | 018349020 | 4/30/2021 | Registered/Granted | European Union IPO |
| NADONE DR | 334156 | 12/7/2020 | 334156 | 7/4/2021 | Registered/Granted | Israel |
| NADONE DR | 40-2020- 0221918 | 12/7/2020 | | | Pending | Republic of Korea |
| NADONE DR | 2465958 | 12/8/2020 | 2465958 | 2/25/2021 | Registered/Granted | Mexico |
| NADONE DR | 2020769617 | 12/7/2020 | | | Pending | Russian Federation |
| NADONE DR | 40202026136U | 12/11/2020 | 40202026136U | 12/11/2020 | Registered/Granted | Singapore |
| NADONE DR | 17451/2020 | 12/7/2020 | 762226 | 4/13/2021 | Registered/Granted | Switzerland |
| NADONE DR | 200145607 | 12/14/2020 | | | Pending | Thailand |
| NADONE DR | UK0000356482 1 | 12/7/2020 | 00003564821 | 4/16/2021 | Registered/Granted | United Kingdom |
| NADONE DR | 4-2020-51236 | 12/7/2020 | | | Pending | Vietnam |
| NADONE DR | 51988334 | 12/8/2020 | | | Pending | China |
| NADONE DR | 4775267 | 12/10/2020 | 4775267 | 5/26/2021 | Registered/Granted | India |
| NADONE DR | 2020-150901 | 12/7/2020 | | | Pending | Japan |
| NADONE DR | 429875 | 12/15/2020 | | | Pending | Egypt |
| NADONE DR | TM2020029420 | 12/8/2020 | | | Pending | Malaysia |
| NADONE DR | 875527 | 12/10/2020 | 304166 | 2/11/2021 | Registered/Granted | Peru |
| NADONE DR | 42020519879 | 12/10/2020 | 42020519879 | 3/12/2021 | Registered/Granted | Philippines |
| NADONE DR | 270105 | 1/10/2021 | 1442016591 | 4/13/2021 | Registered/Granted | Saudi Arabia |
| NADONE DR | 340669 | 12/8/2020 | 340669 | 3/28/2021 | Registered/Granted | United Arab Emirates |
| NADONE DR | 2020/34653 | 12/9/2020 | | | Pending | South Africa |
| NADONE DR | 2020/154368 | 12/8/2020 | 2020/154368 | 8/4/2021 | Registered/Granted | Turkey |
| NADONE HDR | 88/918,408 | 5/15/2020 | 6,472,154 | 8/31/2021 | Registered/Granted | United States of America |
| NADONE HDR | 109083918 | 11/26/2020 | 02152921 | 7/16/2021 | Registered/Granted | Taiwan |
| NADONE HDR | 2068569 | 12/4/2020 | | | Pending | Canada |
| NADONE HDR | 2140971 | 12/4/2020 | | | Pending | Australia |
| NADONE HDR | 921584644 | 12/11/2020 | 921584644 | 10/13/2021 | Registered/Granted | Brazil |
| NADONE HDR | 1386128 | 12/4/2020 | 1344449 | 5/10/2021 | Registered/Granted | Chile |
| NADONE HDR | 51985184 | 12/8/2020 | | | Pending | China |
| NADONE HDR | 018349028 | 12/4/2020 | 018349028 | 4/30/2021 | Registered/Granted | European Union IPO |

| NADONE HDR | 4775268 | 12/10/2020 | 4775268 | 5/26/2021 | Registered/Granted | India |
|-------------|---------------------|------------|--------------|------------|--------------------|-----------------------------|
| NADONE HDR | 334157 | 12/7/2020 | 334157 | 7/4/2021 | Registered/Granted | Israel |
| NADONE HDR | 2020-150902 | 12/7/2020 | | | Pending | Japan |
| NADONE HDR | 40-2020- 0221922 | 12/7/2020 | | | Pending | Republic of Korea |
| NADONE HDR | 2465959 | 12/8/2020 | 2465959 | 2/25/2021 | Registered/Granted | Mexico |
| NADONE HDR | 2020769618 | 12/7/2020 | | | Pending | Russian Federation |
| NADONE HDR | 40202026139X | 12/11/2020 | 40202026139X | 12/11/2020 | Registered/Granted | Singapore |
| NADONE HDR | 17452/2020 | 12/7/2020 | 761980 | 4/8/2021 | Registered/Granted | Switzerland |
| NADONE HDR | 200145608 | 12/14/2020 | | | Pending | Thailand |
| NADONE HDR | UK0000356482 7 | 12/7/2020 | 00003564827 | 4/16/2021 | Registered/Granted | United Kingdom |
| NADONE HDR | 4-2020-51237 | 12/7/2020 | | | Pending | Vietnam |
| NADONE UHDR | 88/918,414 | 5/15/2020 | 6,472,155 | 8/31/2021 | Registered/Granted | United States of America |
| NAXOL | 72/037,537 | 9/20/1957 | 0,665,249 | 8/5/1958 | Registered/Granted | United States of America |
| OXYSHIELD | 1635-05 | 2/1/2005 | P265977 | 11/11/2005 | Registered/Granted | Venezuela |
| OXYSHIELD | 74/505,679 | 3/25/1994 | 1,980,405 | 6/18/1996 | Registered/Granted | United States of America |
| OXYSHIELD | 2134708 | 6/2/1997 | 2134708 | 7/3/1998 | Registered/Granted | United Kingdom |
| OXYSHIELD | 2008/10821 | 2/27/2008 | 2008/10821 | 3/10/2009 | Registered/Granted | Turkey |
| OXYSHIELD | 336637 | 6/18/1997 | TM71127 | 6/18/1997 | Registered/Granted | Thailand |
| OXYSHIELD | 4247/1997 | 5/29/1997 | 448577 | 5/29/1997 | Registered/Granted | Switzerland |
| OXYSHIELD | 2095948 | 6/2/1997 | 2095948 | 6/2/1997 | Registered/Granted | Spain |
| OXYSHIELD | 97-24594 | 5/29/1997 | 40-0425832 | 10/21/1998 | Registered/Granted | Republic of Korea |
| OXYSHIELD | 97/8038 | 5/29/1997 | 1997/08038 | 8/9/2000 | Registered/Granted | South Africa |
| OXYSHIELD | S/13960/97 | 11/13/1997 | T97/13960G | 11/13/1997 | Registered/Granted | Singapore |
| OXYSHIELD | 2008705211 | 2/26/2008 | 375987 | 4/1/2009 | Registered/Granted | Russian Federation |
| OXYSHIELD | 228015 | 12/10/2004 | 105148 | 4/29/2005 | Registered/Granted | Peru |
| OXYSHIELD | 276662 | 5/14/1997 | 276662 | 5/14/1997 | Registered/Granted | New Zealand |
| OXYSHIELD | 299074 | 6/23/1997 | 554101 | 6/23/1997 | Registered/Granted | Mexico |
| OXYSHIELD | 98/02322 | 2/27/1998 | 98002322 | 6/19/2001 | Registered/Granted | Malaysia |

| OVACILIETO | 125022/1077 | C/10/1007 | 4315036 | 11/27/1000 | D = -i-t 1/Ct- 1 | T |
|------------|--------------|------------|-------------------|------------|--------------------|-----------------------------|
| OXYSHIELD | 125823/1977 | 6/10/1997 | 4215836 | 11/27/1998 | Registered/Granted | Japan |
| OXYSHIELD | TO97C001512 | 6/4/1997 | 1275265 | 2/1/2000 | Registered/Granted | Italy |
| OXYSHIELD | D9711362 | 2/11/1998 | IDM000179650 | 9/20/1999 | Registered/Granted | Indonesia |
| OXYSHIELD | 39725500 | 6/5/1997 | 39725499 | 8/20/1997 | Registered/Granted | Germany |
| OXYSHIELD | 97/680451 | 6/2/1997 | 97/680451 | 6/2/1997 | Registered/Granted | France |
| OXYSHIELD | 972204 | 5/30/1997 | 209949 | 5/15/1998 | Registered/Granted | Finland |
| OXYSHIELD | 151911 | 12/15/2004 | 1869-05 | 5/10/2005 | Registered/Granted | Ecuador |
| OXYSHIELD | 4124148 | 12/10/2004 | 301654 | 7/14/2005 | Registered/Granted | Colombia |
| OXYSHIELD | 4408513 | 12/10/2005 | 4408513 | 4/21/2008 | Registered/Granted | China |
| OXYSHIELD | 379338 | 6/6/1997 | 822.799 | 2/9/1998 | Registered/Granted | Chile |
| OXYSHIELD | 1240420 | 12/13/2004 | TMA654000 | 11/30/2005 | Registered/Granted | Canada |
| OXYSHIELD | 820094757 | 6/18/1997 | 820094757 | 9/21/1999 | Registered/Granted | Brazil |
| OXYSHIELD | 732273 | 4/16/1997 | 732273 | 4/16/1997 | Registered/Granted | Australia |
| OXYSHIELD | 3832482 | 6/19/1997 | 3131432 | 9/2/2009 | Registered/Granted | Argentina |
| OXYSHIELD | 970442 | 6/30/2008 | 970442 | 6/30/2008 | Registered/Granted | Madrid Protocol (TM) |
| OXYSHIELD | 970442 | 6/30/2008 | 970442 | 7/20/2009 | Registered/Granted | European Union IPO |
| OXYSHIELD | 970442 | 6/30/2008 | 970442 | 12/30/2009 | Registered/Granted | Ukraine |
| OXYSHIELD | 970442 | 6/30/2008 | UK0080097044 2 | 7/21/2009 | Registered/Granted | United Kingdom |
| ROSI | 86/157,534 | 1/4/2014 | 4,598,990 | 9/2/2014 | Registered/Granted | United States of America |
| ROSI | 1675859 | 5/6/2014 | TMA915,458 | 9/29/2015 | Registered/Granted | Canada |
| SULF-N | 76/356,885 | 1/10/2002 | 2,674,588 | 1/14/2003 | Registered/Granted | United States of America |
| SULF-N | 308702 | 3/14/2007 | 127996 | 6/7/2007 | Registered/Granted | Peru |
| SULF-N | 650657 | 1/3/2002 | 650657 | 7/2/2002 | Registered/Granted | New Zealand |
| SULF-N | 926523 | 4/14/2008 | 1040477 | 4/14/2008 | Registered/Granted | Mexico |
| SULF-N | E-65664-2007 | 3/20/2007 | 242 Book 93 | 10/15/2007 | Registered/Granted | El Salvador |
| SULF-N | 2007-20765 | 3/21/2007 | 161241 | 6/14/2007 | Registered/Granted | Dominican Republic |
| SULF-N | 1127626 | 1/9/2002 | TMA591431 | 10/3/2003 | Registered/Granted | Canada |
| SULF-N | 829010793 | 3/15/2007 | 829010793 | 10/13/2009 | Registered/Granted | Brazil |
| SULF-N | 899238 | 12/27/2001 | 899238 | 8/19/2002 | Registered/Granted | Australia |
| SULF-N | 3.678.033 | 3/15/2007 | 2980611 | 3/7/2008 | Registered/Granted | Argentina |

| CITIE IN A.I. | 3 X C 2020 010050 3 | 10/10/0000 | 250 250 | E 17 10001 | D: 1/C 1 | C | |
|---------------|---------------------|--------------|---------|--------------------|--------------------|---|--|
| SULF-N | : M-2020-010950 : | 12/12/2020 = | ארנ אר. | 5 3 7772021 | Registered/Granted | | |
| | | | | | | | |
| | | | | | | | |

SCHEDULE C

Copyrights

None.

RECORDED: 10/27/2021