

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3966736

|   |   |
|---|---|
| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT  |
| <b>NATURE OF CONVEYANCE:</b>  | SECURITY INTEREST                                     |
| <b>CONVEYING PARTY DATA</b>   |   |
| <b>Name</b>   | <b>Execution Date</b>                                 |
| JDCPHOSPHATE, INC.  | 07/15/2016  |
| <b>RECEIVING PARTY DATA</b>   |   |
| <b>Name:</b>  | AVENIRA HOLDINGS LLC                                  |
| <b>Street Address:</b>  | C/O AVENIRA LIMITED, GROUND FLOOR, 20 KINGS PARK ROAD |
| <b>City:</b>  | WEST PERTH  |
| <b>State/Country:</b>   | AUSTRALIA   |
| <b>Postal Code:</b>   | 6005  |
| <b>PROPERTY NUMBERS Total: 11</b>   |   |
| <b>Property Type</b>  | <b>Number</b>   |
| Application Number:   | 11145564  |
| Application Number:   | 11330034  |
| Application Number:   | 11818115  |
| Application Number:   | 12125751  |
| Application Number:   | 12186413  |
| Application Number:   | 13306890  |
| Application Number:   | 14864731  |
| Application Number:   | 60577286  |
| Application Number:   | 60648360  |
| Application Number:   | 62056254  |
| Application Number:   | 62085778  |
| <b>CORRESPONDENCE DATA</b>  |   |
| <b>Fax Number:</b>  | (617)439-4170   |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i> |   |
| <b>Phone:</b>   | (203)975-7505   |
| <b>Email:</b>   | Patricia.Buckley@LOCKELORD.COM                        |
| <b>Correspondent Name:</b>  | LOCKE LORD LLP  |
| <b>Address Line 1:</b>  | P.O. BOX 55874  |
| <b>Address Line 4:</b>  | BOSTON, MASSACHUSETTS 02215                           |

|                                |                    |
|--------------------------------|--------------------|
| <b>ATTORNEY DOCKET NUMBER:</b> | 1481917-00001      |
| <b>NAME OF SUBMITTER:</b>      | HOWARD M. GITTEN   |
| <b>SIGNATURE:</b>              | /HOWARD M. GITTEN/ |
| <b>DATE SIGNED:</b>            | 07/18/2016         |

**Total Attachments: 10**

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**THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT IS SUBJECT TO THE PROVISIONS OF THE INTERCREDITOR AGREEMENT AS SET FORTH MORE FULLY HEREIN.**

**INTELLECTUAL PROPERTY SECURITY AGREEMENT**

This Intellectual Property Security Agreement (this "Agreement") is entered into as of July 15, 2016 by and among:

**JDCPhosphate, Inc.**, a Delaware corporation (the "Grantor"), and

**Avenira Holdings LLC**, a Delaware limited liability company (the "Secured Party").

**RECITALS**

A. The Grantor and the Secured Party are parties to a Convertible Secured Note Purchase and Exchange Agreement (the "July 2016 Note Purchase Agreement"), dated July 15, 2016, pursuant to which the Secured Party purchased a promissory note (the "July 2016 New Note"; capitalized terms used herein without definition are used as defined in the July 2016 Note Purchase Agreement or the applicable New Note Financing Document (as defined in the July 2016 Note Purchase Agreement)) pursuant to the terms and conditions therein. All of the Grantor's obligations under the July 2016 New Note and the other New Note Financing Documents are secured by all of the assets of the Grantor, whether presently existing or hereafter acquired, pursuant to this Agreement and the General Security Agreement (as defined below).

B. Pursuant to the terms of that certain Security Agreement, dated as of July 15, 2016, by the Grantor in favor of the Secured Party (the "General Security Agreement"), the Grantor has granted to the Secured Party a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral (as defined therein).

**AGREEMENT**

In consideration of the foregoing recitals and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor hereby agrees with the Secured Party as follows:

To secure full and timely performance of all of the Grantor's obligations and liabilities to the Secured Party pursuant to the July 2016 New Note and the other New Note Financing Documents (including, without limitation, any obligations incurred during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding), the Grantor grants and pledges to the Secured Party, a security interest in all of the Grantor's right, title and interest in, to and under its intellectual property (including without limitation those copyrights, patents and trademarks listed on Exhibits A, B and C hereto, respectively), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions, continuations-in-part thereof and all the goodwill associated therewith.

This security interest is granted in conjunction with the security interest granted to the Secured Party under the General Security Agreement. The rights and remedies of the Secured Party with respect to the security interest granted hereby are in addition to those set forth in the General Security Agreement, and those which are now or hereafter available to the Secured Party as a matter of law or equity. Each right, power and remedy of the Secured Party provided for herein or in the General Security Agreement, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by the Secured Party of any one or more of the rights, powers or remedies provided for in this Agreement, the General Security Agreement, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including the Secured Party, of any or all other rights, powers or remedies.

Grantor represents and warrants that Exhibits A, B and C attached hereto set forth any and all intellectual property rights in connection with which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

The Secured Party's security interest in the Collateral shall continue until the satisfaction of all obligations set forth in the July 2016 New Note and the other New Note Financing Documents, whereupon such security interest shall automatically terminate and the Collateral shall be released. The Secured Party shall, at Grantor's sole cost and expense, execute such further documents and take such further actions as may be reasonably necessary to make effective the release contemplated by this paragraph, including duly authorizing and delivering termination statements for filing in all relevant jurisdictions under the Uniform Commercial Code.

Until the satisfaction of all obligations set forth in the July 2016 New Note and the other New Note Financing Documents, the Grantor shall not sell, transfer, lease or otherwise dispose of any of its intellectual property, including those set forth on Exhibits A, B and C, to any Person (including, for the avoidance of doubt, to any of its subsidiaries or affiliates) or attempt, offer or contract to do so.

Any term of this Agreement may be amended or waived only with the written consent of the Secured Party. Any amendment or waiver so effected shall be binding upon the parties and their respective successors and assigns.

In the event one or more of the provisions of this Agreement should, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. Each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law and any invalid, illegal or unenforceable term or provision shall be deemed replaced by a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid, illegal or unenforceable term or provision.

This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. The parties hereto hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Court of Chancery of the State of Delaware (the "Delaware Chancery Court"), and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Chancery Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, irrevocably The Corporation Trust Company, 1209 Orange

Street, Wilmington, Delaware 19801 as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Chancery Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Chancery Court has been brought in an improper or inconvenient forum. THE PARTIES TO THIS AGREEMENT HEREBY WAIVE THEIR RIGHT TO A TRIAL BY JURY WITH RESPECT TO DISPUTES ARISING UNDER THIS AGREEMENT AND CONSENT TO A BENCH TRIAL WITH THE APPROPRIATE JUDGE ACTING AS THE FINDER OF FACT.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.

Notwithstanding anything herein to the contrary, (i) the security interests granted to the Secured Party pursuant to this Agreement and (ii) the exercise of any right or remedy by Secured Party hereunder or the application of proceeds (including insurance proceeds and condemnation proceeds) of any Collateral are subject to the provisions of the Intercreditor Agreement (as defined in the July 2016 Note Purchase Agreement). In the event of any conflict between the terms of the Intercreditor Agreement and the terms of this Agreement, the terms of the Intercreditor Agreement shall govern.

\* \* \*

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed and delivered as of the date first above written.

GRANTOR:

JDCPHOSPHATE, INC.

By: Theodore P. Fowler  
Theodore P. Fowler, President

Address: 3200 County Road 630 W  
Fort Meade, FL 33841

Facsimile: 1-863-285-8504

SECURED PARTY:

AVENIRA HOLDINGS LLC

By: Avenira Limited, its sole member

By: \_\_\_\_\_  
Name (print): \_\_\_\_\_  
Title: \_\_\_\_\_

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed and delivered as of the date first above written.

**GRANTOR:**

JDCPHOSPHATE, INC.

By: \_\_\_\_\_  
Theodore P. Fowler, President

Address: 3200 County Road 630 W  
Fort Meade, FL 33841

Facsimile: 1-863-285-8504

**SECURED PARTY:**

AVENIRA HOLDINGS LLC

By: Avenir Limited, its sole member

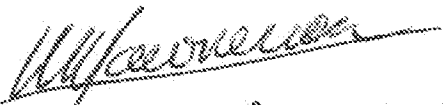
By:   
Name (print): Cliff Lawson  
Title: CEO

EXHIBIT A

Copyrights

None



**EXHIBIT B**

**Patents**

| U.S. PATENT CASES                             |   |   |           |                    |  |
|---|---|---|-----------|--------------------|--|
| Patent / Patent Application No.               | Title   | Filed / Issued / Expires  | Status    | Assignee           |  |
| 60/577,286<br>19908.001US00                   | Process for phosphoric acid manufacture   | Filed: June 4, 2004   | Expired   | NA                 |  |
| 60/648,360<br>19908.002US00                   | KPA process   | Filed: Jan. 28, 2005  | Expired   | NA                 |  |
| 11/145,564<br>19908.001US01                   | Rotary kiln process for phosphoric acid manufacture   | Filed: June 3, 2005   | Abandoned | NA                 |  |
| 11/330,034<br>19908.001US02                   | Rotary kiln process for phosphoric acid manufacture   | Filed: Jan. 11, 2006  | Abandoned | NA                 |  |
| 11/818,115<br>19908.001US03<br>Pat. 7,378,070 | Phosphorous pentoxide producing methods   | Filed: June 13, 2007<br>Issued: May 27, 2008<br>Expires: June 3, 2025   | Issued    | JDCPhosphate, Inc. |  |
| 12/125,751<br>19908.001US04                   | Phosphorous pentoxide producing Methods   | Filed: May 22, 2008   | Abandoned | JDCPhosphate, Inc. |  |
| 12/186,413<br>19908.001US05<br>Pat. 7,910,080 | Phosphorous pentoxide producing Methods   | Filed: Aug. 5, 2008<br>Issued: Mar. 22, 2011<br>Expires: March 25, 2026 | Issued    | JDCPhosphate, Inc. |  |
| 13/306,890<br>19908.008US01<br>Pat. 8,734,749 | Phosphorous Pentoxide Producing Methods and Phosphate Ore Feed Agglomerates                         | Filed: Nov. 29, 2011<br>Issued: 05/27/2014<br>Expires: 11/29/2031       | Issued    | JDCPhosphate, Inc. |  |
| 62/056,254<br>19908.009US00                   | Improved Process for Phosphorous Pentoxide Production   | Filed: Sept. 26, 2014   | Expired   | NA                 |  |
| 62/085,778<br>19908.009US01                   | Improved Process for Phosphorous Pentoxide Production   | Filed: Dec. 01, 2014  | Expired   | NA                 |  |
| 14/864,731<br>19908.009US02                   | Phosphorous Pentoxide Producing Methods and Systems with Increased Agglomerate Compression Strength | Filed: Sept 24, 2015  | Pending   | (In Process)       |  |

| FOREIGN PATENT CASES  |   |  |           |                                 |
|---|---|--|-----------|---------------------------------|
| PCT/US05/19598<br>19908.001WO01                                     | Rotary Kiln Process for Phosphoric Acid Manufacture | Filed: July 18, 2005   | Abandoned | NA                              |
| PCT/US07/13834<br>WO/2008/153521<br>19908.004W O01                  | Phosphorous pentoxide producing Methods             | Filed: June 13, 2007   | Expired   | JDCPhosphate, Inc.              |
| (Australia) 2007354897<br>19908.004AU01<br>Grant: 2007354897        | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007<br>Granted: Oct. 24, 2013<br>Expires: June 12, 2027 | Granted   | JDCPhosphate, Inc.              |
| (Brazil) P10721729-3<br>19908.004BR01                               | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007   | Pending   | JDCPhosphate, Inc. (In Process) |
| (Canada) 2689983<br>19908.004CA01<br>Grant: 2689983                 | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007<br>Granted: May 20, 2014<br>Expires: June 13, 2027  | Granted   | JDCPhosphate, Inc.              |
| (China) 200780053313.1<br>19908.004CN01<br>Grant: ZL 200780053313.1 | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007<br>Granted: July 24, 2013<br>Expires: June 12, 2027 | Granted   | JDCPhosphate, Inc.              |
| (Egypt) PCT18052009<br>19908.004EG01<br>Grant: 26428                | Pentoxide Producing Methods                         | Filed: June 13, 2007<br>Granted: Oct 24, 2013<br>Expires: June 13, 2027  | Granted   | JDCPhosphate, Inc.              |
| (Europe) 07796036.7<br>19908.004EP01                                | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007   | Published | JDCPhosphate, Inc.              |
| (Israel) 202222<br>19908.004IL01<br>Grant: 202222                   | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007<br>Granted: May 1, 2014<br>Expires: June 13, 2027   | Granted   | JDCPhosphate, Inc.              |
| (Jordan) 496/2008<br>19908.004JO01                                  | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007   | Pending   | JDCPhosphate, Inc.              |
| (Mexico) MX/a/2009/013101<br>19908.004MX01                          | Pentoxide Producing Methods                         | Filed: June 13, 2007   | Pending   | JDCPhosphate, Inc.              |
| (Morocco) 32506<br>19908.004MA01<br>Grant: 31673                    | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007<br>Granted: Sept. 1, 2010<br>Expires: June 12, 2027 | Granted   | JDCPhosphate, Inc.              |
| (Mozambique) Not Yet Assigned<br>19908.004MZ01                      | Phosphorous Pentoxide Producing Methods             | Filed: June 13, 2007   | Abandoned | JDCPhosphate, Inc.              |

|  |   |   |           |                    |
|--|---|---|-----------|--------------------|
| (Namibia) AP/P/2010/005479<br>19908.004NA01<br>AP 3422 | Phosphorous Pentoxide Producing<br>Methods  | Filed: June 13, 2007<br>Granted: Sept 24, 2015<br>Expires: June 13, 2021  | Granted   | JDCPhosphate, Inc. |
| (Tunisia) TN2009/0502<br>19908.004TN01<br>Grant: 21250 | Phosphorous Pentoxide Producing<br>Methods  | Filed: June 13, 2007<br>Granted: Sept. 20, 2011<br>Expires: June 12, 2027 | Granted   | JDCPhosphate, Inc. |
| PCT/US2012/066597<br>19908.008WO01                     | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov. 27, 2012   | Expired   | JDCPhosphate, Inc. |
| (Argentina) P120104462<br>19908.008AR01                | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov. 28, 2012   | Published | JDCPhosphate, Inc. |
| (DR Congo) NP/055/Ext/2012<br>19908.008CD01            | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov 26, 2012  | Pending   | JDCPhosphate, Inc. |
| (Iran) 13915014000306971<br>19908.008IR01              | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov 21, 2012  | Abandoned | JDCPhosphate, Inc. |
| (Iraq) 307/2012<br>19908.008IQ01                       | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov 27, 2012  | Abandoned | JDCPhosphate, Inc. |
| (Lebanon) 9914<br>19908.008LB01<br>Grant: 9854         | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov. 21, 2012<br>Granted: Nov. 27, 2012<br>Expired: Nov. 21, 2032   | Granted   | JDCPhosphate, Inc. |
| (Pakistan) 799/2012<br>19908.008PK01                   | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov 28, 2012  | Pending   | JDCPhosphate, Inc. |
| (Saudi Arabia) 112 34 0038<br>19908.008SA01            | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov 27, 2012  | Pending   | JDCPhosphate, Inc. |
| (Venezuela) 2012-001527<br>19908.008VE01               | Phosphorous Pentoxide Producing<br>Methods and Phosphate Ore Feed<br>Agglomerates                         | Filed Nov. 28, 2012   | Pending   | JDCPhosphate, Inc. |
| PCT/US15/52402<br>19908.009WO02                        | Phosphorous Pentoxide Producing<br>Methods and Systems with Increased<br>Agglomerate Compression Strength | Filed: Sept 25, 2015  | Pending   | JDCPhosphate, Inc. |

EXHIBIT C

Trademarks

| U.S. TRADEMARK CASES                           |       |   |            |                     |  |
|--|-------|---|------------|---------------------|--|
| Registration/Serial No.                        | Mark  | Filed / Issued / Expires                        | Status     | Applicant           |  |
| 85/712,638<br>19908.013US50<br>Reg No: 4560829 | J-ROX | Filed: Aug 24, 2012<br>Registered: July 1, 2014 | Registered | JDCTPhosphate, Inc. |  |

PATENT

REEL: 039181 FRAME: 0758

RECORDED: 07/18/2016