

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4029507

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                           |                       |
| <b>NATURE OF CONVEYANCE:</b>  | PATENT SECURITY AGREEMENT                |                       |
| <b>CONVEYING PARTY DATA</b>   |  |                       |
|   | <b>Name</b>                              | <b>Execution Date</b> |
|   | CD PATENTS, LLC                          | 08/24/2016            |
| <b>RECEIVING PARTY DATA</b>   |  |                       |
| <b>Name:</b>  | HAWTHORN BANK                            |                       |
| <b>Street Address:</b>  | 132 E HIGH STREET                        |                       |
| <b>City:</b>  | JEFFERSON CITY                           |                       |
| <b>State/Country:</b>   | MISSOURI                                 |                       |
| <b>Postal Code:</b>   | 65102                                    |                       |
| <b>PROPERTY NUMBERS Total: 6</b>  |  |                       |
| <b>Property Type</b>  | <b>Number</b>                            |                       |
| <b>Patent Number:</b>   | 5355860                                  |                       |
| <b>Patent Number:</b>   | 5746184                                  |                       |
| <b>Patent Number:</b>   | 6729310                                  |                       |
| <b>Application Number:</b>  | 62138222                                 |                       |
| <b>Application Number:</b>  | 62174920                                 |                       |
| <b>Application Number:</b>  | 15041896                                 |                       |
| <b>CORRESPONDENCE DATA</b>  |  |                       |
| <b>Fax Number:</b>  | (816)691-3495                            |                       |
| <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>   | 816-842-8600                             |                       |
| <b>Email:</b>   | lora.gurley@stinson.com                  |                       |
| <b>Correspondent Name:</b>  | PATENT GROUP, STINSON LEONARD STREET LLP |                       |
| <b>Address Line 1:</b>  | 1201 WALNUT STREET, SUITE 2900           |                       |
| <b>Address Line 4:</b>  | KANSAS CITY, MISSOURI 64106-2150         |                       |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 0835817.0003                             |                       |
| <b>NAME OF SUBMITTER:</b>   | LORA GURLEY                              |                       |
| <b>SIGNATURE:</b>   | /LORAGURLEY/                             |                       |
| <b>DATE SIGNED:</b>   | 08/30/2016                               |                       |
| <b>Total Attachments: 7</b>   |  |                       |

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## PATENT SECURITY AGREEMENT

THIS PATENT SECURITY AGREEMENT (the "Agreement") is made and entered into as of August 24<sup>th</sup>, 2016, between CD PATENTS, LLC, a Missouri limited liability company (the "Pledgor"), and HAWTHORN BANK (the "Bank").

Pledgor and Bank hereby agree as follows:

### SECTION 1. DEFINITIONS; INTERPRETATION.

(a) Terms Defined in Credit Agreement. All capitalized terms used in this Agreement and not otherwise defined herein shall have the meanings assigned to them in the Credit Agreement executed in connection herewith.

(b) Certain Defined Terms. As used in this Agreement, the following terms shall have the following meanings:

"Borrower" means Pureflow Technologies, Inc., a Missouri corporation.

"Collateral" has the meaning set forth in Section 2.

"Credit Agreement" means any promissory note, loan agreement, credit agreement or other agreement or instrument, whether now existing or hereafter arising evidencing a loan or other financial accommodations provided to Borrower or Pledgor by Bank, including, without limitation, that certain Promissory Note #101006450 to Pureflow Technologies, Inc., dated as of the date hereof, between Borrower and Bank and others, as amended from time to time.

"Guaranty" means any guaranty agreement whether now existing or hereafter arising from Pledgor in favor of Bank, including, without limitation, that certain Guaranty executed by Pledgor in favor of Bank dated of even date herewith.

"Indebtedness" means any and all obligations of Borrower or Pledgor to Bank or to Bank's affiliates whether now owed or hereafter incurred or arising, including, but not limited to, all obligations of Borrower or Pledgor under a Credit Agreement or any of the other loan documents executed in connection with, or otherwise relating to a Credit Agreement, and obligations under any Guaranty, in each case, whether voluntary or otherwise, whether due or not due, direct or indirect, determined or undetermined, absolute or contingent, liquidated or unliquidated, whether Borrower or Pledgor may be liable individually or jointly with others, whether obligated as guarantor, surety, accommodation party or otherwise and whether recovery upon such amounts may be, or hereafter may become, barred by any statute of limitations, and whether the obligation to repay such amounts may be or hereafter may become otherwise unenforceable. The term "Indebtedness" also includes amounts owing by Borrower or Pledgor to Bank or the Bank's affiliates in connection with treasury management agreements or arrangements and overdrafts of deposit accounts maintained by Bank.

"PTO" means the United States Patent and Trademark Office.

"UCC" means the Uniform Commercial Code as in effect in the State of Missouri.

(c) Terms Defined in UCC. Where applicable in the context of this Agreement and except as otherwise defined herein, terms used in this Agreement shall have the meanings assigned to them in the UCC.

(d) Construction. In this Agreement, the following rules of construction and interpretation shall be applicable: (i) no reference to "proceeds" in this Agreement authorizes any sale, transfer, or other disposition of any Collateral by Pledgor; (ii) "includes" and "including" are not limiting; (iii) "or" is not exclusive; and (iv) "all" includes "any" and "any" includes "all." To the extent not inconsistent with the foregoing, the rules of construction and interpretation applicable to the Credit Agreement dated of even date herewith shall also be applicable to this Agreement and are incorporated herein by this reference.

## SECTION 2. SECURITY INTEREST.

(a) Grant of Security Interest. As security for the payment and performance of the Indebtedness, Pledgor hereby grants to Bank a security interest in all of Pledgor's right, title and interest in, to and under the following property, in each case whether now or hereafter existing or arising or in which Pledgor now has or hereafter owns, acquires or develops an interest and wherever located (collectively, the "Collateral");

(i) all patents and patent applications, domestic or foreign, all licenses relating to any of the foregoing and all income and royalties with respect to any licenses (including such patents and patent applications as described in **Schedule A**), all rights to sue for past, present or future infringement thereof, all rights arising therefrom and pertaining thereto and all reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof;

(ii) all general intangibles and all intangible intellectual or other similar property of Pledgor of any kind or nature, associated with or arising out of any of the aforementioned properties and assets and not otherwise described above; and

(iii) all proceeds of any and all of the foregoing Collateral (including license royalties, rights to payment, accounts and proceeds of infringement suits) and, to the extent not otherwise included, all payments under insurance (whether or not Bank is the loss payee thereof) or any indemnity, warranty or guaranty payable by reason of loss or damage to or otherwise with respect to the foregoing Collateral.

(b) Continuing Security Interest. Pledgor agrees that this Agreement shall create a continuing security interest in the Collateral which shall remain in effect until terminated in accordance with Section 12. Neither this Agreement, nor any other document, instrument or agreement creates or is intended to create a present assignment of the Collateral. Subject to the rights and security interest of Bank, it is the intention of the parties hereto that Pledgor continue to own the Collateral.

SECTION 3. SUPPLEMENT TO CREDIT AGREEMENT. This Agreement has been entered into in conjunction with the security interests granted to Bank under the Credit Agreement or other security documents referred to therein. The rights and remedies of Bank with respect to the security interests granted herein are without prejudice to, and are in addition to those set forth in the Credit Agreement or any other security documents referred to therein, all terms and provisions of which are incorporated herein by reference.

SECTION 4. REPRESENTATIONS AND WARRANTIES. Pledgor represents and warrants to Bank that a true and correct list of all of the existing Collateral consisting of federally registered patents and patent applications for federal registration owned by Pledgor on the date hereof, in whole or in part, is set forth in **Schedule A**.

SECTION 5. FURTHER ACTS. On a continuing basis, Pledgor shall make, execute, acknowledge and deliver, and file and record in the proper filing and recording places, all such instruments and documents, and take all such action as may be necessary or advisable or may be reasonably requested by Bank to carry out the intent and purposes of this Agreement, or for assuring, confirming or protecting the grant or perfection of the security interest granted or purported to be granted hereby, to ensure Pledgor's compliance with this Agreement or to enable Bank to exercise and enforce its rights and remedies hereunder with respect to the Collateral, including any documents for filing with the PTO or any applicable state office. Bank may record this Agreement, an abstract thereof, or any other document describing Bank's interest in the Collateral with the PTO, at the expense of Pledgor. In addition, Pledgor authorizes Bank to file financing statements describing the Collateral in any UCC filing office deemed appropriate by Bank. Other than the grant of the security interest described herein, Pledgor will not sell, assign, transfer any right or interest in and to any of the Collateral without the express written consent of Bank. Upon the request of Bank, Pledgor will (a) notify and direct any licensee or other party who is obligated to make payments ("Payment Collateral") on the Collateral, to make payment thereof to such accounts as Bank may direct in writing and/or (b) promptly upon receipt, transmit and deliver to Bank, in the form received, all cash, checks, drafts and other instruments for the payment of money (properly endorsed where required so that such items may be collected by Bank) which may be received by Pledgor at any time on account of any Collateral Payment and, until delivered to Bank, such items will be held in trust for Bank and will not be commingled by Pledgor with any of its other funds or property. Thereafter, Bank is hereby authorized and empowered to endorse the name of Pledgor on any check, draft or other instrument for the payment of money received by Bank on account of any Collateral Payment if Bank believes such endorsement is necessary or desirable for purposes of collection. Pledgor will indemnify and save harmless Bank from and against all reasonable liabilities and expenses on account of any adverse claim asserted against Bank relating to any moneys received by Bank on account of any Collateral Payment and such obligation of Pledgor shall continue in effect after and notwithstanding the discharge of the Indebtedness and the release of the security interest granted in this Agreement.

SECTION 6. AUTHORIZATION TO SUPPLEMENT. If Pledgor shall obtain rights to any new patentable inventions or become entitled to the benefit of any patent application or patent for any reissue, division, or continuation of any patent, the provisions of this Agreement shall automatically apply thereto. Pledgor shall give prompt notice in writing to Bank with respect to any such new patent rights. Without limiting Pledgor's obligations under this Section 6, Pledgor authorizes Bank unilaterally to modify this Agreement by amending **Schedule A** to include any such new patent rights. Notwithstanding the foregoing, no failure to so modify this Agreement or amend **Schedule A** shall in any way affect, invalidate or detract from Bank's continuing security interest in all Collateral, whether or not listed on **Schedule A**.

SECTION 7. REMEDIES. Upon the occurrence of a default or event of default under the Credit Agreement or the other loan documents related thereto, Bank may, without notice to or demand on Pledgor or Borrower and in addition to all rights and remedies available to Bank with respect to the Indebtedness, at law, in equity or otherwise, do any one or more of the following: (i) foreclose or otherwise enforce Bank's security interest in any manner permitted by law or provided for in this Agreement or the Credit Agreement or other loan documents executed in connection therewith; (ii) sell, lease, license or otherwise dispose of any Collateral at one or more public or private sales at Bank's place of business or any other place or places, whether or not such Collateral is present at the place of sale, for cash or credit or future delivery, on such terms and in such manner as Bank may determine; (iii) recover

from Pledgor all costs and expenses, including, without limitation, reasonable attorneys' fees, incurred or paid by Bank in exercising any right, power or remedy provided by this Agreement; (iv) require Pledgor to assemble the Collateral and make it available to Bank at a place to be designated by Bank; (v) enter onto property where any Collateral is located and take possession thereof with or without judicial process; (vi) prior to the disposition of the Collateral, store, process, repair or recondition it or otherwise prepare it for disposition in any manner, but in no event shall Bank be obligated to do so, and to the extent Bank deems appropriate and in connection with such preparation and disposition, without charge, use any trademark, tradename, copyright, patent or technical process used by Pledgor; and (iv) in connection with the disposition of any Collateral, disclaim any warranty relating to title, possession or quiet enjoyment.

SECTION 8. BINDING EFFECT. This Agreement shall be binding upon, inure to the benefit of and be enforceable by Pledgor, Bank and their respective successors and assigns. Pledgor may not assign, transfer, hypothecate or otherwise convey its rights, benefits, obligations or duties hereunder except as specifically permitted by the Credit Agreement.

SECTION 9. GOVERNING LAW. This Agreement shall be governed by, and construed in accordance with, the law of the State of Missouri, except as required by mandatory provisions of law or to the extent the perfection or priority of the security interests hereunder, or the remedies hereunder, in respect of any Collateral are governed by the law of a jurisdiction other than Missouri.

SECTION 10. ENTIRE AGREEMENT; AMENDMENT. This Agreement and the Credit Agreement, together with the Schedules hereto and thereto, contains the entire agreement of the parties with respect to the subject matter hereof and supersedes all prior drafts and communications relating to such subject matter. Neither this Agreement nor any provision hereof may be modified, amended or waived except by the written agreement of the parties, as provided in the Credit Agreement. Notwithstanding the foregoing, Bank unilaterally may re-execute this Agreement or modify, amend or supplement the Schedule hereto as provided in Section 6 hereof. To the extent that any provision of this Agreement conflicts with any provision of the Credit Agreement, the provision giving Bank greater rights or remedies shall govern, it being understood that the purpose of this Agreement is to add to, and not detract from, the rights granted to Bank under the Credit Agreement.

SECTION 11. COUNTERPARTS. This Agreement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute but one and the same agreement. Delivery of an executed counterpart of this Agreement by electronic transmission shall be equally as effective as delivery of a manually executed counterpart. Any party hereto delivering a counterpart of this Agreement by electronic transmission shall also deliver a manually executed counterpart, but the failure to so deliver a manually executed counterpart shall not affect the validity, enforceability, or binding effect hereof.

SECTION 12. TERMINATION. Upon payment and performance in full of all Indebtedness, the security interests created by this Agreement shall terminate and Bank (at Pledgor's expense) shall promptly execute and deliver to Pledgor such documents and instruments reasonably requested by Pledgor as shall be necessary to evidence termination of all such security interests given by Pledgor to Bank hereunder, including cancellation of this Agreement by written notice from Bank to the PTO.

SECTION 13. NO INCONSISTENT REQUIREMENTS. Pledgor acknowledges that this Agreement and the other documents, agreements and instruments entered into or executed in connection herewith may contain covenants and other terms and provisions variously stated regarding the same or similar matters, and Pledgor agrees that all such covenants, terms and provisions are cumulative and all shall be performed and satisfied in accordance with their respective terms.

SECTION 14. SEVERABILITY. If one or more provisions contained in this Agreement shall be invalid, illegal or unenforceable in any respect in any jurisdiction or with respect to any party, such invalidity, illegality or unenforceability in such jurisdiction or with respect to such party shall, to the fullest extent permitted by applicable law, not invalidate or render illegal or unenforceable any such provision in any other jurisdiction or with respect to any other party, or any other provisions of this Agreement.


SECTION 15. NOTICES. All notices and other communications hereunder shall be in writing and shall be mailed, sent or delivered in accordance with the Credit Agreement dated of even date herewith.

**[Remainder of page intentionally left blank.]**

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement, as of the date first above written.

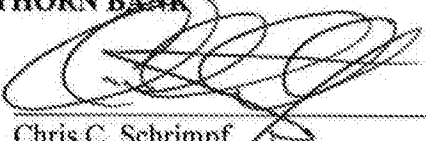
**PLEDGOR:**

**CD PATENTS, LLC**

By:   
Name: Dora Serrano  
Title: Sole Member

**BANK:**

**HAWTHORN BANK**

By:   
Name: Chris C. Schrimpf  
Title: Senior Vice President



**SCHEDULE A**  
to the Patent Security Agreement

| <u>Country</u> | <u>Application/Patent No.</u>   | <u>Status</u>   |
|----------------|---|---|
| AUSTRALIA      | 2008212010  | Issued  |
| BRAZIL         | PI-0207628-4  | Pending   |
| CANADA         | 2,436,095   | Issued  |
| CANADA         | 2,108,391   | Issued  |
| CHILE          | 1577-2004   | Pending   |
| CHINA          | 02805235.8  | Published – Notification to Grant<br>Patent Right issued on April 17,<br>2009 |
| COLUMBIA       | 03071561  | Published   |
| ECUADOR        | PL 10-2021  | Issued  |
| EUROPE         | 02714937.6  | Published   |
| HONG KONG      | 1061420   | Issued  |
| JAPAN          | Application No.<br>2002-566107<br><br>Application Identification No.<br>503301060 | Published   |
| JAPAN          | 2010261463A   | Issued  |
|                | 5133381B2   | Issued  |
| MEXICO         | 270409  | Issued  |
| UNITED STATES  | 5,355,860   | Issued  |
| UNITED STATES  | 5,746,184   | Issued  |
| UNITED STATES  | 6,729,310   | Issued  |
| UNITED STATES  | 2002170545A1  | Issued  |

New Patent Application Serial #62/138,222 Filed March 25, 2015

Provision Patent Application Serial #62/174,920 Filed June 12, 2015

U.S. Patent Application #15/041896 Filed February 11, 2016