

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3674372

|                                                                                                                                                                                                 |                            |                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------|
| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT             |                       |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | MERGER                     |                       |
| <b>EFFECTIVE DATE:</b>                                                                                                                                                                          | 09/03/2015                 |                       |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                            |                       |
|                                                                                                                                                                                                 | <b>Name</b>                | <b>Execution Date</b> |
|                                                                                                                                                                                                 | O'SHANTEL SOFTWARE L.L.C.  | 08/26/2015            |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                            |                       |
| <b>Name:</b>                                                                                                                                                                                    | CHEMTRON RESEARCH LLC      |                       |
| <b>Street Address:</b>                                                                                                                                                                          | 160 GREENTREE DRIVE        |                       |
| <b>Internal Address:</b>                                                                                                                                                                        | SUITE 101                  |                       |
| <b>City:</b>                                                                                                                                                                                    | DOVER                      |                       |
| <b>State/Country:</b>                                                                                                                                                                           | DELAWARE                   |                       |
| <b>Postal Code:</b>                                                                                                                                                                             | 19904                      |                       |
| <b>PROPERTY NUMBERS Total: 5</b>                                                                                                                                                                |                            |                       |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>              |                       |
| <b>Patent Number:</b>                                                                                                                                                                           | 6622263                    |                       |
| <b>Patent Number:</b>                                                                                                                                                                           | 8381032                    |                       |
| <b>Patent Number:</b>                                                                                                                                                                           | 8966315                    |                       |
| <b>Patent Number:</b>                                                                                                                                                                           | 7840768                    |                       |
| <b>Patent Number:</b>                                                                                                                                                                           | RE45632                    |                       |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                            |                       |
| <b>Fax Number:</b>                                                                                                                                                                              | (425)679-0580              |                       |
| <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>Email:</b>                                                                                                                                                                                   | ivrecording@intven.com     |                       |
| <b>Correspondent Name:</b>                                                                                                                                                                      | BRUNDIDGE & STANGER, P.C.  |                       |
| <b>Address Line 1:</b>                                                                                                                                                                          | 2318 MILL ROAD             |                       |
| <b>Address Line 2:</b>                                                                                                                                                                          | SUITE 1020                 |                       |
| <b>Address Line 4:</b>                                                                                                                                                                          | ALEXANDRIA, VIRGINIA 22314 |                       |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | KRISTI JACOBSEN            |                       |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /Kristi Jacobsen/          |                       |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 12/29/2015                 |                       |
| <b>Total Attachments: 9</b>                                                                                                                                                                     |                            |                       |

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# Delaware

PAGE 1

*The First State*

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"ACEDIA SOLUTIONS LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"AEROMEE DEVELOPMENT L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"ARMSTRONG, QUINTON CO. LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"ATTAR DATA LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

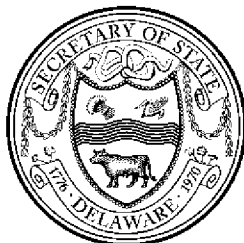
"BASCULE DEVELOPMENT AG LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"BEHEMOTH DEVELOPMENT CO. L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"BIORAM TECH L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"BURANI CONSULTING LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"CDA PROCESSING LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,



5029083 8100M

151252912

You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 2703210

DATE: 09-03-15

PATENT  
REEL: 037374 FRAME: 0070

# Delaware

PAGE 2

*The First State*

"CHAIPARA PTE., L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"CHASM BRIDGE TECHNOLOGIES LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"COLE CRUX L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"CONTRIA SAN LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"DAMON, LAREMIE PT. L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"DORAN TOUCH APP. LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"DOWNING PLACE LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"DU DIMENSIONAL LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"DUSCANEL GOFF GMBH. LLC", A DELAWARE LIMITED LIABILITY COMPANY,

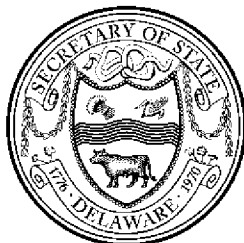
"GEOMASS LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"GLITHOUBY MGMT. LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"GORMANDIZE LLC", A DELAWARE LIMITED LIABILITY COMPANY,

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Jeffrey W. Bullock, Secretary of State  
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# Delaware

PAGE 3

*The First State*

"GRAPHIC PLATFORM DEVELOPMENT LLC", A DELAWARE LIMITED  
LIABILITY COMPANY,

"HUAN FUND PTE. L.L.C.", A DELAWARE LIMITED LIABILITY  
COMPANY,

"HYALINE SCREEN LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"KDL SCAN DESIGNS LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

"KELTON CAPITAL, L.L.C.", A DELAWARE LIMITED LIABILITY  
COMPANY,

"KEY TRANS INVESTMENTS, LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

"KOAN FOUNDATION L.L.C.", A DELAWARE LIMITED LIABILITY  
COMPANY,

"LIGHT REFRACTURE LTD., LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

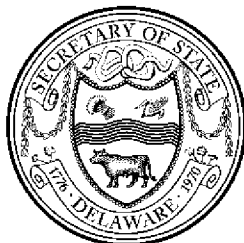
"MARQUEE CODE, LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"MINIM RESEARCH NY LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

"MINT ACCESS FUND, LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

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# Delaware

PAGE 4

*The First State*

"MIST SILICON LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"MUSE GREEN INVESTMENTS LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"NEXUS NABOT RESEARCH L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"OCCLUDED FRONT ENTERPRISES L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"O.C.K. INVESTMENT B.V. LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"O'SHANTEL SOFTWARE L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"OUTLAND PRECIPICE CO. L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"PAMERA MANAGEMENT CO., LLC", A DELAWARE LIMITED LIABILITY COMPANY,

"PILSNE RESEARCH CO, L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"PIQUANT RESEARCH LLC", A DELAWARE LIMITED LIABILITY COMPANY,

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Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 2703210

DATE: 09-03-15

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# Delaware

PAGE 5

*The First State*

"PM DUSK RESEARCH LIMITED LIABILITY COMPANY", A DELAWARE  
LIMITED LIABILITY COMPANY,

"POINT SOMEE LIMITED LIABILITY COMPANY", A DELAWARE LIMITED  
LIABILITY COMPANY,

"Q PARTICLE RESEARCH LTD. L.L.C.", A DELAWARE LIMITED  
LIABILITY COMPANY,

"ROWLAND NETWORK GROUP LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

"RUCTION CAPITAL LIMITED LIABILITY COMPANY", A DELAWARE  
LIMITED LIABILITY COMPANY,

"SEMI GATE L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

"SHARECOMM LIMITED LIABILITY COMPANY", A DELAWARE LIMITED  
LIABILITY COMPANY,

"SUBAUDITION WIRELESS LLC", A DELAWARE LIMITED LIABILITY  
COMPANY,

"TWISTED REACH FACILTIES L.L.C.", A DELAWARE LIMITED  
LIABILITY COMPANY,

"VERUCA LIMITED LIABILITY COMPANY", A DELAWARE LIMITED  
LIABILITY COMPANY,

"WARPED PRISM LIMITED LIABILITY COMPANY", A DELAWARE LIMITED

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You may verify this certificate online  
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Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 2703210

DATE: 09-03-15

PATENT  
REEL: 037374 FRAME: 0074

# Delaware

PAGE 6

*The First State*

LIABILITY COMPANY,

"Y INDEED CONSULTING L.L.C.", A DELAWARE LIMITED LIABILITY COMPANY,

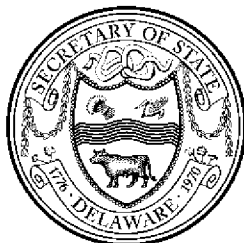
"ZERO KNOLL LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"2 RESTRESS LIMITED LIABILITY COMPANY", A DELAWARE LIMITED LIABILITY COMPANY,

"3233 VIA DUNHAM LLC", A DELAWARE LIMITED LIABILITY COMPANY,  
WITH AND INTO "CHEMTRON RESEARCH LLC" UNDER THE NAME OF  
"CHEMTRON RESEARCH LLC", A LIMITED LIABILITY COMPANY ORGANIZED  
AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS  
RECEIVED AND FILED IN THIS OFFICE THE THIRD DAY OF SEPTEMBER,  
A.D. 2015, AT 9:17 O'CLOCK A.M.

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You may verify this certificate online  
at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

  
Jeffrey W. Bullock, Secretary of State  
AUTHENTICATION: 2703210

DATE: 09-03-15

PATENT  
REEL: 037374 FRAME: 0075



**CERTIFICATE OF MERGER  
OF  
NON-SURVIVING ENTITIES LISTED BELOW  
INTO  
CHEMTRON RESEARCH LLC**

The undersigned entity, organized and existing under and by virtue of the Delaware Limited Liability Company Act, does hereby certify as follows:

1. The name and jurisdiction of formation of the constituent entities are as follows:

| <u>Name</u>                                 | <u>Jurisdiction<br/>of<br/>Formation</u> | <u>Type of Entity</u>     |
|---------------------------------------------|------------------------------------------|---------------------------|
| <i>The Surviving Entity:</i>                |                                          |                           |
| Chemtron Research LLC                       | Delaware                                 | Limited Liability Company |
| <i>The Non-Surviving Entities:</i>          |                                          |                           |
| 2 Restress Limited Liability Company        | Delaware                                 | Limited Liability Company |
| 3233 Via Dunham LLC                         | Delaware                                 | Limited Liability Company |
| Acedia Solutions Limited Liability Company  | Delaware                                 | Limited Liability Company |
| Aeromee Development L.L.C.                  | Delaware                                 | Limited Liability Company |
| Armstrong, Quinton Co. LLC                  | Delaware                                 | Limited Liability Company |
| Attar Data Limited Liability Company        | Delaware                                 | Limited Liability Company |
| Bascule Development AG LLC                  | Delaware                                 | Limited Liability Company |
| Behemoth Development Co. L.L.C.             | Delaware                                 | Limited Liability Company |
| BioRam Tech L.L.C.                          | Delaware                                 | Limited Liability Company |
| Burani Consulting Limited Liability Company | Delaware                                 | Limited Liability Company |
| CDA Processing Limited Liability Company    | Delaware                                 | Limited Liability Company |
| Chaipara Pte., L.L.C.                       | Delaware                                 | Limited Liability Company |
| Chasm Bridge Technologies LLC               | Delaware                                 | Limited Liability Company |
| Cole Crux L.L.C.                            | Delaware                                 | Limited Liability Company |
| Contria San Limited Liability Company       | Delaware                                 | Limited Liability Company |
| Damon, Laremie Pt. L.L.C.                   | Delaware                                 | Limited Liability Company |
| Doran Touch App. Limited Liability Company  | Delaware                                 | Limited Liability Company |
| Downing Place Limited Liability Company     | Delaware                                 | Limited Liability Company |
| Du Dimensional LLC                          | Delaware                                 | Limited Liability Company |
| Duscanel Goff GmbH. LLC                     | Delaware                                 | Limited Liability Company |
| Geomass Limited Liability Company           | Delaware                                 | Limited Liability Company |
| Glihouby Mgmt. LLC                          | Delaware                                 | Limited Liability Company |
| Gormandize LLC                              | Delaware                                 | Limited Liability Company |
| Graphic Platform Development LLC            | Delaware                                 | Limited Liability Company |
| Huan Fund Pte. L.L.C.                       | Delaware                                 | Limited Liability Company |
| Hyaline Screen LLC                          | Delaware                                 | Limited Liability Company |

Phyllis Turner-Brim  
E-signed 2015-08-26 01:00PM PDT  
pturnerbrim@intven.com  
Intellectual Ventures  
VP Chief IP Counsel

Byron E Springer Jr  
E-signed 2015-08-26 01:18PM PDT  
bspringer@intven.com

***The Non-Surviving Entities- continuing***

|                                            | <b>Jurisdiction<br/>of<br/>Formation</b> | <b>Type of Entity</b>     |
|--------------------------------------------|------------------------------------------|---------------------------|
| KDL Scan Designs LLC                       | Delaware                                 | Limited Liability Company |
| Kelton Capital, L.L.C.                     | Delaware                                 | Limited Liability Company |
| Key Trans Investments, LLC                 | Delaware                                 | Limited Liability Company |
| Koan Foundation L.L.C.                     | Delaware                                 | Limited Liability Company |
| Light Refracture Ltd., LLC                 | Delaware                                 | Limited Liability Company |
| Marquee Code, LLC                          | Delaware                                 | Limited Liability Company |
| Minim Research NY LLC                      | Delaware                                 | Limited Liability Company |
| Mint Access Fund, LLC                      | Delaware                                 | Limited Liability Company |
| Mist Silicon Limited Liability Company     | Delaware                                 | Limited Liability Company |
| Muse Green Investments LLC                 | Delaware                                 | Limited Liability Company |
| Nexus NaBot Research L.L.C.                | Delaware                                 | Limited Liability Company |
| O.C.K. Investment B.V. LLC                 | Delaware                                 | Limited Liability Company |
| Occluded Front Enterprises L.L.C.          | Delaware                                 | Limited Liability Company |
| O'Shantel Software L.L.C.                  | Delaware                                 | Limited Liability Company |
| Outland Precipice Co. L.L.C.               | Delaware                                 | Limited Liability Company |
| Pamera Management Co., LLC                 | Delaware                                 | Limited Liability Company |
| Pilsne Research Co, L.L.C.                 | Delaware                                 | Limited Liability Company |
| Piquant Research LLC                       | Delaware                                 | Limited Liability Company |
| PM Dusk Research Limited Liability Company | Delaware                                 | Limited Liability Company |
| Point Somee Limited Liability Company      | Delaware                                 | Limited Liability Company |
| Q Particle Research Ltd. L.L.C.            | Delaware                                 | Limited Liability Company |
| Rowland Network Group LLC                  | Delaware                                 | Limited Liability Company |
| Ruction Capital Limited Liability Company  | Delaware                                 | Limited Liability Company |
| Semi Gate L.L.C.                           | Delaware                                 | Limited Liability Company |
| Sharecomm Limited Liability Company        | Delaware                                 | Limited Liability Company |
| Subaudition Wireless LLC                   | Delaware                                 | Limited Liability Company |
| Twisted Reach Facilities L.L.C.            | Delaware                                 | Limited Liability Company |
| Veruca Limited Liability Company           | Delaware                                 | Limited Liability Company |
| Warped Prism Limited Liability Company     | Delaware                                 | Limited Liability Company |
| Y Indeed Consulting L.L.C.                 | Delaware                                 | Limited Liability Company |
| Zero Knoll Limited Liability Company       | Delaware                                 | Limited Liability Company |

2. An agreement of merger has been approved and executed by each of the constituent entities in accordance with Section 18-209 of the Delaware Limited Liability Company Act.

3. The name of the surviving entity is Chemtron Research LLC

4. The Certificate of Formation of Chemtron Research LLC shall be the Certificate of Formation of the surviving limited liability company.

5. The executed agreement of merger is on file at the principal place of business of the surviving entity located at 3150 139th Avenue SE, Building 4, Bellevue, Washington 98005.

Phyllis Turner-Brim  
E-signed 2015-08-26 01:00PM PDT  
pturnerbrim@intven.com  
Intellectual Ventures  
VP Chief IP Counsel

Byron E Springer Jr  
E-signed 2015-08-26 01:18PM PDT  
bspringer@intven.com

6. A copy of the agreement of merger will be furnished by the surviving entity, on request and without cost, to any member of any constituent limited liability company.

IN WITNESS WHEREOF, the surviving limited liability company has caused this certificate to be signed by an authorized person, dated August 28, 2015.

**CHEMTRON RESEARCH LLC**

By: Byron E Springer Jr  
Byron E Springer Jr (Aug 28, 2015)  
Name: Byron E Springer Jr  
Its: Assistant Secretary

Phyllis Turner-Brim  
E-signed 2015-08-26 01:00PM PDT  
pturnerbrim@intven.com  
Intellectual Ventures  
VP Chief IP Counsel

Byron E Springer Jr  
E-signed 2015-08-26 01:18PM PDT  
bspringer@intven.com