

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
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EPAS ID: PAT3542688

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECOND LIEN PATENT SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
COMMUNICATIONS & POWER INDUSTRIES LLC	09/17/2015
CPI MALIBU DIVISION	09/17/2015
CPI RADANT TECHNOLOGIES DIVISION, INC.	09/17/2015

RECEIVING PARTY DATA

Name:	CORTLAND CAPITAL MARKET SERVICES LLC, AS COLLATERAL AGENT
Street Address:	225 W. WASHINGTON STREET
Internal Address:	21ST FLOOR
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60606

PROPERTY NUMBERS Total: 35

Property Type	Number
Patent Number:	6856081
Patent Number:	7005789
Patent Number:	6456009
Patent Number:	6211657
Patent Number:	6552490
Patent Number:	6236161
Patent Number:	6437510
Patent Number:	6740858
Patent Number:	6867401
Patent Number:	7029296
Patent Number:	7368874
Patent Number:	7145297
Patent Number:	7384293
Patent Number:	7359206
Patent Number:	7242135
Patent Number:	8872057
Patent Number:	8278812

PATENT

Property Type	Number
Patent Number:	6870318
Patent Number:	6198457
Patent Number:	6882311
Patent Number:	6856301
Patent Number:	7868839
Patent Number:	8159410
Patent Number:	7872614
Patent Number:	7804464
Patent Number:	7420523
Patent Number:	7463212
Patent Number:	8917220
Patent Number:	9099782
Patent Number:	6777877
Patent Number:	7733195
Patent Number:	7755564
Patent Number:	7888873
Patent Number:	8076853
Application Number:	13424460

CORRESPONDENCE DATA

Fax Number: (650)251-5002
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.

Phone: 6502515047
Email: jmull@stblaw.com
Correspondent Name: MICHELLE MORAD
Address Line 1: 2475 HANOVER STREET
Address Line 4: PALO ALTO, CALIFORNIA 94304

ATTORNEY DOCKET NUMBER:	051209/0075
NAME OF SUBMITTER:	J. JASON MULL
SIGNATURE:	/J. Jason Mull/
DATE SIGNED:	09/25/2015

Total Attachments: 8
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Second Lien Patent Security Agreement

Second Lien Patent Security Agreement, dated as of September 17, 2015, by Communications & Power Industries LLC, CPI Malibu Division, and CPI Radant Technologies Division, Inc. (individually, a “Pledgor”, and, collectively, the “Pledgors”), in favor of CORTLAND CAPITAL MARKET SERVICES LLC, in its capacity as collateral agent pursuant to the Credit Agreement (in such capacity, the “Collateral Agent”).

WITNESSETH:

WHEREAS, the Pledgors are party to a Second Lien Security Agreement of even date herewith (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”) in favor of the Collateral Agent pursuant to which the Pledgors are required to execute and deliver this Second Lien Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Credit Agreement, the Pledgors hereby agree with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. As collateral security for the payment and performance in full of all the Secured Obligations, each Pledgor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Pledged Collateral of such Pledgor:

- (a) Patents of such Pledgor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing (other than Excluded Property).

SECTION 3. Security Agreement. The security interest granted pursuant to this Second Lien Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and Pledgors hereby acknowledge and affirm that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement. In the event that any provision of this Second Lien Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4. Termination. Upon the payment in full of the Secured Obligations and termination of the Security Agreement, the Collateral Agent shall execute, acknowledge, and deliver to the Pledgors an instrument in writing in recordable form releasing the collateral pledge, grant, assignment, lien and security interest in the Patents under this Second Lien Patent Security Agreement.

SECTION 5. Counterparts. This Second Lien Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party here-to may execute this Second Lien Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 6. Governing Law. This Second Lien Patent Security Agreement and the transactions contemplated hereby, and all disputes between the parties under or relating to this Second Lien Pa-

tent Security Agreement or the facts or circumstances leading to its execution, whether in contract, tort or otherwise, shall be construed in accordance with and governed by the laws (including statutes of limitation) of the State of New York, without regard to conflicts of law principles that would require the application of the laws of another jurisdiction.

[signature page follows]

IN WITNESS WHEREOF, each Pledgor has caused this Second Lien Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

Communications & Power Industries LLC

By: 

Name: Joel A. Littman

Title: Chief Financial Officer, Treasurer and Secretary

CPI Malibu Division

By: 

Name: Joel A. Littman

Title: Secretary & Chief Financial Officer

CPI Radant Technologies Division, Inc.

By: 

Name: Joel A. Littman

Title: Secretary

Accepted and Agreed:

CORTLAND CAPITAL MARKET SERVICES LLC,
as Collateral Agent

By:



Name: Emily Ergang Pappas
Title: Associate Counsel

SCHEDULE I
to
SECOND LIEN PATENT SECURITY AGREEMENT
PATENT REGISTRATIONS AND PATENT APPLICATIONS

PATENTS AND PATENT APPLICATIONS

Title	Country	Application No.	Filing Date	Patent No.	Issue Date	Registered Holder	Status
Method and apparatus for magnetic focusing of off-axis electron beam	U.S.	10192772	2002-07-09	6856081	2005-02-15	Communications & Power Industries LLC	Issued
Method and apparatus for magnetic focusing of off-axis electron beam	U.S.	10996180	2004-11-22	7005789	2006-02-28	Communications & Power Industries LLC	Issued
Adaptive heater voltage algorithm and control system for setting and maintenance of the heater voltage of a vacuum electron device	U.S.	09629315	2000-07-31	6456009	2002-09-24	Communications & Power Industries LLC	Issued
Two stage power converter with interleaved buck regulators	U.S.	09574712	2000-05-18	6211657	2001-04-03	Communications & Power Industries LLC	Issued
Multiple stage depressed collector (MSDC) klystron based amplifier for ground based satellite and terrestrial communications	U.S.	09668008	2000-09-21	6552490	2003-04-22	Communications & Power Industries LLC	Issued
Crossed-field device	U.S.	09259643	1999-02-26	6236161	2001-05-22	Communications & Power Industries LLC	Issued
Crossed-field amplifier with multipactor suppression	U.S.	09455886	1999-12-06	6437510	2002-08-20	Communications & Power Industries LLC	Issued

Title	Country	Application No.	Filing Date	Patent No.	Issue Date	Registered Holder	Status
Microwave heating applicator for heating a moving fluid	U.S.	10160666	2002-05-30	6740858	2004-05-25	Communications & Power Industries LLC	Issued
Waveguide foreign object damage prevention window	U.S.	10222255	2002-08-16	6867401	2005-03-15	Communications & Power Industries LLC	Issued
Cover assembly for vacuum electron device	U.S.	09778387	2001-02-06	7029296	2006-04-18	Communications & Power Industries LLC	Issued
Dynamic depressed collector	U.S.	11347357	2006-02-03	7368874	2008-05-06	Communications and Power Industries LLC	Issued
L-band inductive output tube	U.S.	10982192	2004-11-04	7145297	2006-12-05	Communications & Power Industries LLC	Issued
Breach lock mechanism for seating vacuum electron device	U.S.	11370708	2007-10-31	7384293	2008-06-10	Communications & Power Industries LLC	Issued
Radio frequency isolation system and cover assembly for vacuum electron device	U.S.	11370429	2006-03-07	7359206	2008-04-15	Communications & Power Industries LLC	Issued
High voltage connection for vacuum electron device	U.S.	11370279	2006-03-07	7242135	2007-07-10	Communications & Power Industries LLC	Issued
Liquid cooling system for linear beam device electrodes	U.S.	11376970	2006-03-15	8872057	2014-10-28	Communications & Power Industries LLC	Issued
Grid for vacuum electron device and method for manufacture of same	U.S.	12008069	2008-01-07	8278812	2012-10-02	Communications & Power Industries LLC	Issued
Multiple stage depressed collector (MSDC) klystron based amplifier for ground based satellite and terrestrial communications	U.S.	10387929	2003-03-12	6870318	2005-03-22	Communications and Power Industries LLC	Issued

Title	Country	Application No.	Filing Date	Patent No.	Issue Date	Registered Holder	Status
Low-windload satellite antenna	U.S.	09169454	1998-10-09	6198457	2001-03-06	Communications & Power Industries LLC	Issued
Digital beam-forming radar system	U.S.	10121964	2002-04-12	6882311	2005-04-19	Communications & Power Industries LLC	Issued
Plasma phased array electronic scan antenna	U.S.	10427705	2003-04-30	6856301	2005-02-15	Communications & Power Industries LLC	Issued
Planar scanner antenna for high frequency scanning and radar environments	U.S.	11933103	2007-10-31	7868839	2011-01-11	Communications & Power Industries LLC	Issued
Reflective antenna assembly	U.S.	11933053	2007-10-31	8159410	2012-04-17	Communications & Power Industries LLC	Issued
System and method for providing a deployable phasing structure	U.S.	11933040	2007-10-31	7872614	2011-01-18	CPI Malibu Division	Issued
Adjustable paneling system for a phasing structure	U.S.	11933063	2007-10-31	7804464	2010-09-28	Communications & Power Industries LLC	Issued
B-sandwich radome fabrication	U.S.	11434485	2006-05-15	7420523	2008-09-02	CPI Radant Technologies Division, Inc.	Issued
Lightweight C-sandwich radome fabrication	U.S.	11434052	2006-05-15	7463212	2008-12-09	CPI Radant Technologies Division, Inc.	Issued
Multi-band, broadband, high angle sandwich radome structure	U.S.	13135263	2011-06-30	8917220	2014-12-23	CPI Radant Technologies Division, Inc.	Issued
Lightweight, multiband, high angle sandwich radome structure for millimeter wave frequencies	U.S.	13506968	2012-05-29	9099782	2015-08-04	CPI Radant Technologies Division, Inc.	Issued
Gun-only magnet used for a multi-stage depressed collector klystron	U.S.	09/649,479	2000-08-28	6,777,877	2004-08-17	Communications & Power Industries LLC	Issued
Waveguide attenuator having coaxial probes	U.S.	12/047,399	2008-03-13	7,733,195	2010-06-08	Communications & Power Industries LLC	Issued

Title	Country	Application No.	Filing Date	Patent No.	Issue Date	Registered Holder	Status
Deployable phasing system for emulating reflective surfaces	U.S.	11/932,785	2007-10-31	7,755,564	2010-07-13	Communications & Power Industries LLC	Issued
Dynamic depressed collector	U.S.	12/075,870	2008-03-14	7,888,873	2011-02-15	Communications & Power Industries LLC	Issued
Terahertz sheet beam klystron	U.S.	12/074,558	2008-03-03	8,076,853	2011-12-13	Communications & Power Industries LLC	Issued
CROSSED-FIELD AMPLIFIERS WITH REDUCED SPURIOUS EMISSIONS	U.S.	13/424,460	2012-03-20	N/A	N/A	Communications & Power Industries LLC	Pending