

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3584686

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
TEMPEL STEEL COMPANY	10/23/2015
RECEIVING PARTY DATA	
Name:	PNC BANK, NATIONAL ASSOCIATION, AS AGENT
Street Address:	200 SOUTH WACKER DRIVE, SUITE 600
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60606
PROPERTY NUMBERS Total: 19	
Property Type	Number
Patent Number:	6632062
Patent Number:	6536318
Patent Number:	6523445
Patent Number:	7520746
Patent Number:	7371296
Patent Number:	7435375
Patent Number:	7361238
Patent Number:	7648672
Patent Number:	7603760
Patent Number:	7910049
Patent Number:	7797977
Patent Number:	8082654
Patent Number:	8209850
Patent Number:	8854169
Application Number:	14556630
Application Number:	14446549
Application Number:	13957617
Application Number:	13793565
Application Number:	13447433

CORRESPONDENCE DATA**Fax Number:** (312)863-7806

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: 312-863-7198**Email:** nancy.brougher@goldbergkohn.com**Correspondent Name:** NANCY BROUGHER, PARALEGAL**Address Line 1:** GOLDBERG KOHN LTD.**Address Line 2:** 55 EAST MONROE STREET, SUITE 3300**Address Line 4:** CHICAGO, ILLINOIS 60603

ATTORNEY DOCKET NUMBER:	4033.082
NAME OF SUBMITTER:	NANCY BROUGHER
SIGNATURE:	/njb/
DATE SIGNED:	10/23/2015

Total Attachments: 5

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AMENDED AND RESTATED PATENT SECURITY AGREEMENT

THIS AMENDED AND RESTATED PATENT SECURITY AGREEMENT (this "**Agreement**") made as of the 23rd day of October, 2015, by TEMPEL STEEL COMPANY, an Illinois corporation, having a mailing address at 5500 North Wolcott Avenue, Chicago, Illinois 60640-1020, and having a federal employer identification number of 20-2122127 and an organizational number of 63930636 ("**Debtor**"), in favor of PNC BANK, NATIONAL ASSOCIATION, as Agent for Lenders under the Credit Agreement referred to below, having a mailing address at 200 South Wacker Drive, Suite 600, Chicago, Illinois 60606 ("**Secured Party**").

This Agreement supplements the Amended and Restated Revolving Credit and Security Agreement, dated as of the date hereof (the "**Credit Agreement**"), among Debtor, the other Loan Parties party thereto, the financial institutions party thereto (the "**Lenders**") and Secured Party. The Patent Collateral described in this Agreement is also part of the Collateral described in the Credit Agreement.

ACCORDINGLY, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Debtor hereby makes the following covenants, agreements, representations and warranties for the benefit and security of Secured Party:

1. Defined Terms. All terms capitalized but not defined herein shall have the same meanings herein as in the Credit Agreement.

2. Grant and Reaffirmation of Grant of Security Interests. To secure the prompt payment and performance of the Obligations, Debtor hereby pledges, and grants to Secured Party for its benefit and for the ratable benefit of Lenders, and hereby reaffirms its prior grant pursuant to the Credit Agreement of, a continuing security interest in and to Debtor's entire right, title and interest in and to the following, whether now owned or existing or hereafter created, acquired or arising (collectively, the "**Patent Collateral**"); provided, however, that Patent Collateral shall not include Excluded Assets:

(a) all patents and patent applications, including each patent and patent application set forth in Schedule I;

(b) the right to sue third parties for past, present and future infringements of any of the foregoing; and

(c) all Proceeds and products of any and all of the foregoing.

3. Credit Agreement. The security interests granted pursuant to this Agreement are granted in conjunction with the security interests granted to Secured Party, on behalf of itself and Lenders, pursuant to the Credit Agreement. Debtor hereby acknowledges and affirms that the rights and remedies of Secured Party with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Credit Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. If

any provision contained in the Credit Agreement is in direct conflict with, or inconsistent with, any provision in this Agreement, the provision contained in the Credit Agreement shall govern and control.

4. Miscellaneous. This Agreement may be executed in counterparts and each shall be effective as an original, and a telecopy of this executed Agreement shall be effective as an original. In making proof of this Agreement, it shall not be necessary to produce more than one counterpart of this Agreement. All representations, warranties and covenants of Debtor contained herein shall survive the execution and delivery of this Agreement and shall terminate only upon the full payment and satisfaction by Debtor of the Obligations and the termination of the Credit Agreement. This Agreement is an Other Document within the definition of "Other Documents" in the Credit Agreement.

5. Governing Law. This Agreement shall, except to the extent that federal law or laws of another state apply to the Patents or any part thereof, be governed by and construed in accordance with the laws of the State of Illinois applied to contracts to be performed wholly within the State of Illinois.

6. Amendment and Restatement. This Amended and Restated Patent Security Agreement amends and restates in its entirety that certain Patent Security Agreement dated as of August 11, 2011, by Debtor in favor of Secured Party (the "**Original Patent Security Agreement**"), and shall not act as a termination, release or novation of the Original Patent Security Agreement.


7. Termination. This Agreement shall terminate upon the termination of the Credit Agreement. Upon such termination, Secured Party shall, at Debtor's expense, execute and deliver to the Debtor, or its designee, an instrument in writing in recordable form releasing the lien and security interest hereby granted to Secured Party in the Patent Collateral.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, and intending to be legally bound hereby, Debtor executes this Agreement as of the day and year first above written.

DEBTOR:

TEMPEL STEEL COMPANY

By: 

Name: D. Joseph Ridyard

Title: Chief Financial Officer

Agreed and Accepted

PNC BANK, NATIONAL ASSOCIATION,
as Secured Party

By: _____

Name: _____

Its: _____

IN WITNESS WHEREOF, and intending to be legally bound hereby, Debtor executes this Agreement as of the day and year first above written.

DEBTOR:

TEMPEL STEEL COMPANY

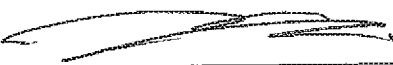
By: _____

Name: D. Joseph Ridyard

Title: Chief Financial Officer

Agreed and Accepted

PNC BANK, NATIONAL ASSOCIATION,
as Secured Party

By:  _____

Name: LEE LABINE

Its: SENIOR VICE PRESIDENT

**SCHEDULE I TO
PATENT SECURITY AGREEMENT**

Part 1: Issued U.S. Patents of Debtor:

Patent Number	Owner	Title
6,632,062	Tempel Steel Company	Parts Handling Device for Press
6,536,318	Tempel Steel Company	Loose Lamination Die with Rotating Blanking Station
6,523,445	Tempel Steel Company	Loose Lamination Die with Rotating Blanking Station
7,520,746	Tempel Steel Company	Annealing Furnace Cooling and Purging System and Method
7,371,296	Tempel Steel Company	Annealing Furnace Cooling and Purging System and Method
7,435,375	Tempel Steel Company	Annealing Furnace Purging and Oxidation System and Method
7,361,238	Tempel Steel Company	Annealing Furnace Purging and Oxidation System and Method
7,648,672	Tempel Steel Company	Process and System Employing Generation of Controlled Furnace Atmospheres Without the Use of Separate Gas Supplies or Stand-Alone Atmosphere Generators
7,603,760	Tempel Steel Company	Method for Producing a Helical Stator
7,910,049	Tempel Steel Company	System Employing Generation of Controlled Furnace Atmospheres without the use of separate gas supplies or stand-alone atmosphere generators
7,797,977	Tempel Steel Company	System for Producing a Helical Stator
8,082,654	Tempel Steel Company	Production Method for Large Rotor/Stator Laminations
8,209,850	Tempel Steel Company	Method for manufacturing pencil cores
8,854,169	Tempel Steel Company	Automotive ignition coil having a core with at least one embedded permanent magnet

Part 2: Pending U.S. Patent Applications of Debtor:

Patent Appl. Number	Owner	Title
14/556630	Tempel Steel Company	Method for producing a magnetic core with improved electrical properties
14/446549	Tempel Steel Company	Automotive ignition coil having a core with at least one embedded permanent magnet
13/957617	Tempel Steel Company	Segmented rotor and stator lamination cores
13/793565	Tempel Steel Company	Process for annealing of helical wound cores used for automotive alternator applications
13/447433	Tempel Steel Company	Ignition coil and manufacturing method