

TRADEMARK ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

**CONVEYING PARTY DATA**

Name	Formerly	Execution Date	Entity Type
Wolverine Tube, Inc.		10/24/2013	CORPORATION: DELAWARE

**RECEIVING PARTY DATA**

Name:	PNC Bank
Street Address:	500 First Avenue
City:	Pittsburgh
State/Country:	PENNSYLVANIA
Postal Code:	15219
Entity Type:	National Association: PENNSYLVANIA

**PROPERTY NUMBERS Total: 17**

Property Type	Number	Word Mark
Registration Number:	3505037	CAPILATOR
Registration Number:	3764957	ENGINEERING THERMAL INNOVATION
Registration Number:	1889597	FORGE-FIN
Registration Number:	3832460	MICRO COOL
Registration Number:	4114827	MICROCOOL
Registration Number:	4258705	MICROCOOL-CLAD
Registration Number:	2607551	MICROHEAT
Registration Number:	418091	TRUFIN
Registration Number:	2852703	TURBO
Registration Number:	1431712	TURBO-B
Registration Number:	1990926	TURBO-BIII
Registration Number:	1431713	TURBO-C
Registration Number:	1800436	TURBO-C II
Registration Number:	3457558	W

OP \$440.00 3505037

Registration Number:	4015009	W WOLVERINE TUBE, INC. ENGINEERING THERM
Registration Number:	917516	WOLVERINE
Serial Number:	85768857	MICROCOOL TOOL

**CORRESPONDENCE DATA**

Fax Number: 2158325619  
*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.*

Phone: 215-569-5619  
 Email: pecsenye@blankrome.com  
 Correspondent Name: Timothy D. Pecsénye  
 Address Line 1: One Logan Square  
 Address Line 2: 8th Floor  
 Address Line 4: Philadelphia, PENNSYLVANIA 19103-6998

ATTORNEY DOCKET NUMBER:	074658-13006
NAME OF SUBMITTER:	Timothy D. Pecsénye
Signature:	/Timothy D. Pecsénye/
Date:	10/24/2013

**Total Attachments: 8**  
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## TRADEMARK AND PATENT SECURITY AGREEMENT

This Trademark and Patent Security Agreement (this "Agreement") is made as of this 24<sup>th</sup> day of October, 2013, by the Grantors listed on the signature pages hereof (collectively, jointly and severally, "Grantors" and each individually a "Grantor"), in favor of PNC BANK, NATIONAL ASSOCIATION, in its capacity as agent for the Lenders (together with its successors and assigns in such capacity, "Agent").

WHEREAS, pursuant to that certain Revolving Credit and Security Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, including all exhibits and schedules thereto, the "Credit Agreement") among WOLVERINE TUBE, INC., a Delaware corporation (together with each Person joined thereto as a borrower from time to time, collectively, the "Borrowers" and each a "Borrower"), the lenders from time to time party thereto (the "Lenders"), and Agent, the Lenders agreed to make certain financial accommodations available to Borrowers from time to time pursuant to the terms and conditions thereof; and

WHEREAS, pursuant to the Credit Agreement, Grantors are required to execute and deliver to Agent, for the benefit of the Lenders, this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor hereby agrees as follows:

1. DEFINED TERMS. All capitalized terms used but not otherwise defined herein have the meanings given to them in the Credit Agreement.

2. GRANT AND REAFFIRMATION OF SECURITY INTEREST. To secure the payment and performance of the Obligations under the Credit Agreement, each Grantor hereby grants to Agent for its benefit and the benefit of the Lenders, and hereby reaffirms its prior grant pursuant to the Credit Agreement of a continuing security interest in and Lien on all of such Grantor's right, title and interest in, to and under the following, whether presently existing or hereafter created or acquired (collectively, the "IP Collateral"), with power of sale to the extent permitted by law:

(a) all of such Grantor's trademarks, trademark applications, service marks, trade names, mask works (collectively, "Trademarks"), all of the goodwill of the business connected with the use of, and symbolized by, each Trademark, and licenses for any of the foregoing ("Trademark Licenses"), including those referred to on Schedule I hereto;

(b) all of such Grantor's patents and patent applications (collectively, "Patents"), and licenses for any of the foregoing ("Patent Licenses"), including those referred to on Schedule I hereto;

(c) all reissues, continuations or extensions of the foregoing; and

(d) all products and proceeds of the foregoing, including any claim by such Grantor against third parties for past, present or future infringement or dilution of any Trademark, any Patent, any Trademark licensed under any Trademark License, or any Patent licensed under any Patent License.

Notwithstanding the foregoing, Grantors shall not be obligated to assign to Agent any new IP Collateral developed by Grantors or others where title to such new IP Collateral vests in Wieland-Werke AG, a German corporation pursuant to any technology sharing agreement in place as of the date first written above, as amended from time to time.

3. SECURITY FOR OBLIGATIONS. This Agreement and the security interest created hereby secure the payment and performance of all the Obligations under the Credit Agreement, whether now existing or arising hereafter. Without limiting the generality of the foregoing, this Agreement secures the payment of all amounts which constitute part of the Obligations and would be owed by Grantors, or any of them, to Agent, the Lenders or any of them pursuant to the Credit Agreement.

4. CREDIT AGREEMENT. The security interests granted pursuant to this Agreement are granted in conjunction with the security interests granted to Agent, for the benefit of the Lenders, pursuant to the Credit Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of Agent with respect to the security interest in the IP 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.

5. REPRESENTATIONS, WARRANTIES AND AGREEMENTS. Each Grantor hereby represents and warrants to, and agrees with Agent and Lenders as follows: Schedule I hereto accurately lists all registered IP Collateral as of the date hereof.

6. AUTHORIZATION TO SUPPLEMENT. If any Grantor shall obtain rights to any new IP Collateral, this Agreement shall automatically apply thereto. Grantors shall give prompt notice in writing to Agent with respect to any such new IP Collateral. Without limiting Grantors' obligations under this Section 6, Grantors hereby authorize Agent unilaterally to modify this Agreement by amending Schedule I to include any such new IP Collateral of Grantors identified in such written notice provided by Grantors. Notwithstanding the foregoing, no failure to so modify this Agreement or amend Schedule I shall in any way affect, invalidate or detract from Agent's continuing security interest in all IP Collateral, whether or not listed on Schedule I.

7. GOVERNING LAW. This Agreement and the transactions contemplated hereby, and all disputes between the parties under or relating to this Agreement or the facts or circumstances leading to its execution, whether in contract, tort or otherwise shall, in accordance with Section 5-1401 of the General Obligations Law of the State of New York, 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.

8. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such separate counterparts shall together constitute but one and the same instrument. Any signatures delivered by a party by facsimile transmission or by e-mail transmission shall be deemed an original signature hereto.

9. CONSTRUCTION. Unless the context of this Agreement or any Other Document clearly requires otherwise, the term "or" has, except where otherwise indicated, the inclusive meaning represented by the phrase "and/or." Section, subsection, clause, schedule, and

exhibit references herein are to this Agreement unless otherwise specified. Any reference herein to any Person shall be construed to include such Person's successors and assigns.

*[Remainder of page intentionally left blank; signature page follows.]*

IN WITNESS WHEREOF, each Grantor has duly executed this Agreement as of the date first written above.

GRANTORS:

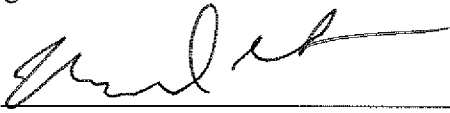
WOLVERINE TUBE, INC.

By: 

Name: Julie Smith  
Title: Secretary

ACCEPTED AND  
ACKNOWLEDGED BY:

PNC BANK, NATIONAL ASSOCIATION,  
as Agent

By:   
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Name: Michael Etienne

Title: Senior Vice President

SCHEDULE I  
TO  
TRADEMARK AND PATENT SECURITY AGREEMENT

Trademarks and Trademark Applications

<b>Trademark</b>	<b>Country</b>	<b>Reg./Application Number</b>	<b>Year Registered/Filed</b>	<b>Owner</b>
CAPILATOR & Design	USA	3,505,037	2008	Wolverine Tube, Inc.
ENGINEERING THERMAL INNOVATION	USA	3,764,957	2010	Wolverine Tube, Inc.
FORGE-FIN	USA	1,889,597	1995	Wolverine Tube, Inc.
MICRO COOL & Design	USA	3,832,460	2010	Wolverine Tube, Inc.
MICROCOOL	USA	4,114,827	2012	Wolverine Tube, Inc.
MICROCOOL TOOL	USA	85/768,857	2012	Wolverine Tube, Inc.
MICROCOOL-CLAD & Design	USA	4,258,705	2012	Wolverine Tube, Inc.
MICROHEAT	USA	2,607,551	2002	Wolverine Tube, Inc.
TRUFIN	USA	418,091	1945	Wolverine Tube, Inc.
TURBO	USA	2,852,703	2004	Wolverine Tube, Inc.
TURBO-B	USA	1,431,712	1987	Wolverine Tube, Inc.



Trademark	Country	Reg./Application Number	Year Registered/Filed	Owner
TURBO-BIII	USA	1,990,926	1996	Wolverine Tube, Inc.
TURBO-C	USA	1,431,713	1987	Wolverine Tube, Inc.
TURBO-C II	USA	1,800,436	1993	Wolverine Tube, Inc.
W & Design	USA	3,457,558	2008	Wolverine Tube, Inc.
W WOLVERINE TUBE, INC. ENGINEERING THERMAL INNOVATION & Design	USA	4,015,009	2011	Wolverine Tube, Inc.
WOLVERINE	USA	917,516	1971	Wolverine Tube, Inc.
CAPILATOR	Canada	TMA108,204	1957	Wolverine Tube
KORODENSE	Canada	TMA183,929	1972	Wolverine Tube
TRUFIN	Canada	TMA107,832	1957	Wolverine Tube
TUBEMANSHIP	Canada	TMA120,480	1960	Wolverine Tube
TURBO-A	Canada	TMA366,459	1990	Wolverine Tube
TURBO-DX	Canada	TMA366,460	1990	Wolverine Tube
VERSATUBE	Canada	TMA107,833	1957	Wolverine Tube
W & Design	Canada	TMA225,372	1978	Wolverine Tube

## Patents and Patent Applications

Country Name	Title	Serial #	Filed Date	Patent #	Issue Date
UNITED STATES	Cold Plate with Pins	12/573,107	10/3/2009		
UNITED STATES	Electronics Substrate with Enhanced Direct Bonded Metal	13/191,281	7/26/2011		
UNITED STATES	Enhanced Clad Metal Base Plate	13/601,206	8/31/2012		
UNITED STATES	Heat Transfer Surface for Electronic Cooling	11/447,327	6/6/2006	7,861,408	1/4/2011
UNITED STATES	Integrated Cold Plate for Electronics	13/770,426	2/19/2013		
CANADA	Heat Transfer Surface For Electronic Cooling	2605966	06/06/2006		

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