

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM313818

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	TRADEMARK SECURITY AGREEMENT
<b>SEQUENCE:</b>	6

## CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Ferro Corporation		07/31/2014	CORPORATION: OHIO

## RECEIVING PARTY DATA

<b>Name:</b>	PNC BANK, NATIONAL ASSOCIATION
<b>Street Address:</b>	500 FIRST AVENUE
<b>City:</b>	PITTSBURGH
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	15219
<b>Entity Type:</b>	NATIONAL ASSOCIATION: UNITED STATES

## PROPERTY NUMBERS Total: 44

Property Type	Number	Word Mark
Registration Number:	2988075	ACE
Registration Number:	1393723	ALOX
Registration Number:	1221372	AMERICAL
Registration Number:	4325446	AQUARELEASE
Registration Number:	1041567	CATA-CHEK
Registration Number:	0839806	CE-RITE
Registration Number:	2438817	CERMARK
Registration Number:	2597392	CERMARK
Registration Number:	2581488	CERMARK
Registration Number:	2444691	CERMARK
Registration Number:	1004166	CONDUCTROX
Registration Number:	2711906	COOL COLORS
Registration Number:	0710108	
Registration Number:	0794281	
Registration Number:	0419066	
Registration Number:	2845284	ECLIPSE
Registration Number:	3664035	EVOLUTION
Registration Number:	0545912	FERRO
Registration Number:	0549848	FERRO

TRADEMARK

Property Type	Number	Word Mark
Registration Number:	0684616	FERRO
Registration Number:	1382917	FERROCON
Registration Number:	1280330	FERROFLEX
Registration Number:	1382918	FERROFLO
Registration Number:	1455961	FERROPAK
Registration Number:	1836504	GEODE
Registration Number:	3207819	LENSMAX
Registration Number:	1011327	MICRO-CHEK
Registration Number:	0923047	MIRAMAX
Registration Number:	1779957	PDI
Registration Number:	1105842	PERC
Registration Number:	1045181	PLAS-CHEK
Registration Number:	3559830	RUFLUX
Registration Number:	0265127	SANTICIZER
Registration Number:	1048383	SATINAL
Registration Number:	1112060	SPECTRAFLO
Registration Number:	3655259	SURESTOP
Registration Number:	3844868	SURESTOP
Registration Number:	2674257	SYNPRO
Registration Number:	1041570	THERM-CHEK
Registration Number:	0812789	TIZOX
Registration Number:	3655260	TRUPLANE
Registration Number:	1063622	UV-CHEK
Registration Number:	0781180	VIBROXIDE
Registration Number:	0708245	ZOX

**CORRESPONDENCE DATA**

Fax Number: 7147558290

*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: 714-540-1235

Email: ipdocket@lw.com

Correspondent Name: LATHAM & WATKINS LLP

Address Line 1: 650 TOWN CENTER DRIVE, SUITE 2000

Address Line 4: COSTA MESA, CALIFORNIA 92626

ATTORNEY DOCKET NUMBER: 030786-0429

NAME OF SUBMITTER: Anna T Kwan

SIGNATURE: /atk/

DATE SIGNED: 08/12/2014

Total Attachments: 7

**TRADEMARK**

REEL: 005342 FRAME: 0481

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TRADEMARK SECURITY AGREEMENT

This TRADEMARK SECURITY AGREEMENT, July 31, 2014 (this "Agreement"), is made by Ferro Corporation, an Ohio corporation, and Ferro Electronic Materials Inc., a Delaware corporation (collectively, the "Grantors"), in favor of PNC BANK, NATIONAL ASSOCIATION, as the collateral agent (together with its successor(s) thereto in such capacity, the "Collateral Agent") for each of the Secured Parties. Terms used herein but not defined herein shall have the meaning ascribed to such terms in the Security Agreement or in the Credit Agreement, as applicable.

W I T N E S S E T H:

WHEREAS, this Agreement is made pursuant to the Credit Agreement, dated as of July 31, 2014 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Ferro Corporation, an Ohio corporation (the "Company"), the Designated Borrowers from time to time party thereto, the lenders from time to time party thereto, PNC Bank, National Association, as administrative agent for the Lenders and as collateral agent for the Secured Parties and as an Issuer, and the various financial institutions and other Persons from time to time party thereto as lenders;

WHEREAS, in connection with the Credit Agreement, the Grantors have executed and delivered a Pledge and Security Agreement, dated as of July 31, 2014 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement");

WHEREAS, pursuant to the Credit Agreement and pursuant to clause (e) of Section 4.5 of the Security Agreement, the Grantors are required to execute and deliver this Agreement and to grant to the Collateral Agent a continuing security interest in all of the Trademark Collateral (as defined below) to secure all Obligations; and

WHEREAS, the Grantors have duly authorized the execution, delivery and performance of this Agreement; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantors agree, for the benefit of each Secured Party, as follows:

SECTION 1. Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided in the Security Agreement.

SECTION 2. Grant of Security Interest. The Grantors hereby assigns, pledges, hypothecates, charges, mortgages, delivers, and transfers to the Collateral Agent, for its benefit and the ratable benefit of each other Secured Party, and hereby grants to the Collateral Agent, for its benefit and the ratable benefit of each other Secured Party, a continuing security interest in all of the following property, whether now or hereafter existing or acquired by the Grantors (the "Trademark Collateral");

(a) (i) all of its trademarks, trade names, corporate names, company names, business names, fictitious business names, trade styles, service marks, certification marks, collective marks, logos and other source or business identifiers, and all goodwill of the business associated therewith, now existing or hereafter adopted or acquired including those referred to in Item A of Schedule I hereto, whether currently in use or not, all registrations and recordings thereof and all applications in connection therewith, whether pending or in preparation for filing, including registrations, recordings and applications in the United States Patent and Trademark Office or in any office or agency of the United States of America or any State thereof or any other country or political subdivision thereof or otherwise, and all common-law rights relating to the foregoing, and (ii) the right to obtain all reissues, extensions or renewals of the foregoing (collectively referred to as the "Trademark");

(b) all Trademark licenses for the grant by or to the Grantors of any right to use any Trademark, including each Trademark license referred to in Item B of Schedule I hereto;

(c) all of the goodwill of the business connected with the use of, and symbolized by the items described in, clause (a), and to the extent applicable clause (b);

(d) the right to sue third parties for past, present and future infringements of any Trademark Collateral described in clause (a) and, to the extent applicable, clause (b); and

(e) all Proceeds of, and rights associated with, the foregoing, including any claim by the Grantors against third parties for past, present or future infringement or dilution of any Trademark, Trademark registration or Trademark license, or for any injury to the goodwill associated with the use of any such Trademark or for breach or enforcement of any Trademark license and all rights corresponding thereto throughout the world.

Notwithstanding the foregoing, the Trademark Collateral shall not include any intent-to-use United States Trademark applications for which an amendment to allege use or statement of use has not been filed under 15 U.S.C. § 1501(c) or 15 U.S.C. § 1501(d), respectively, with the United States Patent and Trademark Office, solely to the extent, if any, that, and solely during the period, if any, in which, the grant of a security interest therein would impair the validity or enforceability of any registration that issues from such intent-to-use application under applicable federal law, and provided that upon such filing, such intent-to-use applications shall be included in the Trademark Collateral.

**SECTION 3. Security Agreement.** This Agreement has been executed and delivered by the Grantors for the purpose of registering the security interest of the Collateral Agent in the Trademark Collateral with the United States Patent and Trademark Office and corresponding offices in other countries of the world. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to the Collateral Agent for its benefit and the ratable benefit of each other Secured Party under the Security Agreement. The

Security Agreement (and all rights and remedies of the Collateral Agent and each Secured Party thereunder) shall remain in full force and effect in accordance with its terms.

SECTION 4. Release of Liens. Upon (i) the Disposition of Trademark Collateral in accordance with the Credit Agreement or (ii) the occurrence of the Termination Date, the security interests granted herein shall automatically terminate with respect to (A) such Trademark Collateral (in the case of clause (i)) or (B) all Trademark Collateral (in the case of clause (ii)). Upon any such Disposition or termination, the Collateral Agent will, at the Grantors' sole expense, deliver to the Grantors, without any representations, warranties or recourse of any kind whatsoever, all Trademark Collateral held by the Collateral Agent hereunder, and execute and deliver to the Grantors such Documents as the Grantors shall reasonably request to evidence such termination.

SECTION 5. Acknowledgment. The Grantors do hereby further acknowledge and affirm that the rights and remedies of the Collateral Agent with respect to the security interest in the Trademark Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein. To the extent any conflict exists, the Security Agreement shall control.

SECTION 6. Loan Document. This Agreement is a Loan Document executed pursuant to the Credit Agreement and shall (unless otherwise expressly indicated herein) be construed, administered and applied in accordance with the terms and provisions thereof, including Article X thereof.

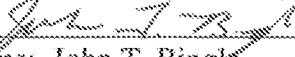
SECTION 7. Governing Law, Entire Agreement. THIS AGREEMENT SHALL BE DEEMED TO BE A CONTRACT MADE UNDER AND GOVERNED BY THE INTERNAL LAWS OF THE STATE OF NEW YORK (INCLUDING FOR SUCH PURPOSE SECTIONS 5-1401 AND 5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK) AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER (INCLUDING, WITHOUT LIMITATION, ANY CLAIMS SOUNDING IN CONTRACT OR TORT LAW ARISING OUT OF THE SUBJECT MATTER HEREOF AND ANY DETERMINATIONS WITH RESPECT TO POST-JUDGMENT INTEREST) SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK. This Agreement and the other Loan Documents constitute the entire understanding among the parties hereto with respect to the subject matter hereof and thereof and supersede any prior agreements, written or oral, with respect thereto.

SECTION 8. Counterparts. This Agreement may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement.

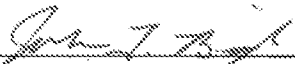
\* \* \* \* \*

IN WITNESS WHEREOF, each of the parties hereto has caused this Security Agreement to be duly executed and delivered as of the date first written above.

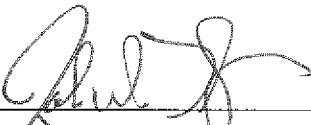
FERRO CORPORATION

By:   
Name: John T. Bingle  
Title: Treasurer

FERRO ELECTRONIC MATERIALS INC.

By:   
Name: John T. Bingle  
Title: Treasurer

PNC BANK, NATIONAL ASSOCIATION, as  
Collateral Agent







By:   
Name: John W. Thompson  
Title: SVP




SCHEDULE I  
to Trademark Security Agreement

Item A. Issued Trademarks, Pending Trademark Applications and Trademark Applications in Preparation

**Trademark Registrations**

Trademark	Reg. No.	Reg. Date	Owner
TICON	0433994	November 4, 1947	Ferro Electronic Materials, Inc.
ACE	2988075	August 23, 2005	Ferro Corporation
ALOX	1393723	May 20, 1986	Ferro Corporation
AMERICAL 	1221372	December 28, 1982	Ferro Corporation
AQUARELEASE	4325446	April 23, 2013	Ferro Corporation
CATA-CHEK	1041567	June 22, 1976	Ferro Corporation
CE-RITE	0839806	December 5, 1967	Ferro Corporation
CERMARK	2438817	March 27, 2001	Ferro Corporation
CERMARK	2597392	July 23, 2002	Ferro Corporation
CERMARK 	2581488	June 18, 2002	Ferro Corporation
CERMARK 	2444691	April 17, 2001	Ferro Corporation
CONDUCTROX	1004166	February 11, 1975	Ferro Corporation
COOL COLORS	2711906	April 29, 2003	Ferro Corporation
Design Only 	0710108	January 24, 1961	Ferro Corporation
Design Only 	0794281	August 17, 1965	Ferro Corporation
Design Only 	0419066	February 5, 1946	Ferro Corporation
ECLIPSE	2845284	May 25, 2004	Ferro Corporation
EVOLUTION	3664035	August 4, 2009	Ferro Corporation
FERRO	0545912	July 31, 1951	Ferro Corporation
FERRO	0549848	October 23, 1951	Ferro Corporation
FERRO	0684616	September 8, 1959	Ferro Corporation
FERROCON	1382917	February 18, 1986	Ferro Corporation
FERROFLEX	1280330	June 5, 1984	Ferro Corporation

<b>Trademark</b>	<b>Reg. No.</b>	<b>Reg. Date</b>	<b>Owner</b>
FERROFLO	1382918	February 18, 1986	Ferro Corporation
FERROPAK	1455961	September 8, 1987	Ferro Corporation
GEODE	1836504	May 17, 1994	Ferro Corporation
LENSMAX	3207819	February 13, 2007	Ferro Corporation
MICRO-CHEK	1011327	May 27, 1975	Ferro Corporation
MIRAMAX	0923047	November 2, 1971	Ferro Corporation
PDI	1779957	July 6, 1993	Ferro Corporation
PERC	1105842	November 14, 1978	Ferro Corporation
PLAS-CHEK	1045181	August 3, 1976	Ferro Corporation
RUFLUX	3559830	January 13, 2009	Ferro Corporation
SANTICIZER	0265127	December 17, 1929	Ferro Corporation
SATINAL	1048383	September 21, 1976	Ferro Corporation
SPECTRAFLO	1112060	January 30, 1979	Ferro Corporation
SURESTOP	3655259	July 14, 2009	Ferro Corporation
SURESTOP	3844868	September 7, 2010	Ferro Corporation
SYNPRO 	2674257	January 14, 2003	Ferro Corporation
THERM-CHEK	1041570	June 22, 1976	Ferro Corporation
TIZOX	0812789	August 16, 1966	Ferro Corporation
TRUPLANE	3655260	July 14, 2009	Ferro Corporation
UV-CHEK	1063622	April 19, 1977	Ferro Corporation
VIBROXIDE	0781180	December 8, 1964	Ferro Corporation
ZOX	0708245	December 13, 1960	Ferro Corporation

Item B. Trademark Licenses