PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2978906

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST IN PATENT COLLATERAL (RELEASES RF 017527/0934)
SEQUENCE:	1

CONVEYING PARTY DATA

Name	Execution Date
PNC BANK, NATIONAL ASSOCIATION (AS SUCCESSOR-BY-MERGER TO NATIONAL CITY BANK)	07/31/2014

RECEIVING PARTY DATA

Name:	FERRO CORPORATION
Street Address:	1000 LAKESIDE AVENUE
City:	CLEVELAND
State/Country:	ОНЮ
Postal Code:	44114

PROPERTY NUMBERS Total: 4

Property Type	Number
Patent Number:	7014701
Patent Number:	7740899
Patent Number:	5993747
Patent Number:	5657532

CORRESPONDENCE DATA

Fax Number: (714)755-8290

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.

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 714-540-1235

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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: 26

PATENT REEL: 033522 FRAME: 0474

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RELEASE OF SECURITY INTEREST IN PATENT COLLATERAL

This RELEASE, dated as of July 31, 2014, is made by PNC Bank, National Association (as successor-by-merger to National City Bank) ("PNC"), in favor of Ferro Corporation, Ferro Electronic Materials Inc., Ferro Color & Glass Corporation and Ferro Pfanstiehl Laboratories, Inc. (collectively, the "Borrowers") as follows. Terms used herein but not defined herein shall have the meaning ascribed to such terms in the Security Agreement (as defined below):

WITNESSETH

WHEREAS, pursuant to those certain Loan and Security Agreement, dated as of April 19, 2006 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), the Borrowers granted the Agent, for the ratable benefit of the Secured Parties, a security interest in all of the Borrowers' right, title and interest in the Patent Collateral, including the issued patents set forth on Schedules A-P;

WHEREAS, the Security Agreement dated April 19, 2006 granted to National City Bank by Ferro Electronic Materials Inc. was recorded with the United States Patent and Trademark Office ("USPTO") on April 26, 2006 at Reel/Frame 017527/0269 for those patents listed on Schedule A;

WHEREAS, the Security Agreement dated June 6, 2006 granted to National City Bank by Ferro Electronic Materials Inc. was recorded with the USPTO on June 8, 2006 at Reel/Frame 017746/0062 for those patents listed on Schedule B;

WHEREAS, the Amended and Restated Patent Security Agreement dated August 24, 2010 granted to PNC Bank National, Association (as successor-by-merger to National City Bank) by Ferro Electronic Materials Inc. was recorded with the USPTO on August 30, 2010 at Reel/Frame 024906/0806 for those patents listed on Schedule C;

WHEREAS, the Security Agreement dated April 19, 2006 granted to National City Bank by Ferro Pfanstiehl Laboratories, Inc. was recorded with the USPTO on April 26, 2006 at Reel/Frame 017527/0047 for those patents listed on Schedule D;

WHEREAS, the Security Agreement dated June 6, 2006 granted to National City Bank by Ferro Pfanstiehl Laboratories, Inc. was recorded with the USPTO on June 8, 2006 at Reel/Frame 017746/0052for those patents listed on <u>Schedule E</u>;

WHEREAS, the Security Agreement dated April 19, 2006 granted to National City Bank by Ferro Color & Glass Corporation was recorded with the USPTO on April 26, 2010 at Reel/Frame 017527/0056 for those patents listed on Schedule F;

WHEREAS, the Security Agreement dated June 6, 2006 granted to National City Bank by Ferro Color & Glass Corporation was recorded with the USPTO on June 8, 2010 at Reel/Frame 017746/0042 for those patents listed on Schedule G;

NY\6270533.3 NY\6506578.3 WHEREAS, the After-Acquired Intellectual Property Security Agreement (First Supplemental Filing) dated March 31, 2009 granted to National City Bank by Ferro Color & Glass Corporation was recorded with the USPTO on April 2, 2009 at Reel/Frame 022494/0933 for those patents listed on Schedule H;

WHEREAS, the Security Agreement dated April 19, 2006 granted to National City Bank by Ferro Corporation was recorded with the USPTO on April 27, 2006 at Reel/Frame 017527/0934 for those patents listed on <u>Schedule I</u>;

WHEREAS, the Security Agreement dated April 19, 2006 granted to National City Bank by Ferro Corporation was recorded with the USPTO on April 27, 2006 at Reel/Frame 017527/0909 for those patents listed on <u>Schedule J</u>;

WHEREAS, the Security Agreement dated June 6, 2006 granted to National City Bank by Ferro Corporation was recorded with the USPTO on June 7, 2010 at Reel/Frame 017730/0620 for those patents listed on <u>Schedule K</u>;

WHEREAS, the Security Agreement dated June 6, 2006 granted to National City Bank by Ferro Corporation was recorded with the USPTO on June 7, 2010 at Reel/Frame 017730/0594 for those patents listed on <u>Schedule L</u>;

WHEREAS, the After-acquired Intellectual Property Security Agreement (First Supplemental Filing) dated March 31, 009 granted to National City Bank by Ferro Corporation. was recorded with the USPTO on April 2, 2009 at Reel/Frame 022494/0945 for those patents listed on Schedule M;

WHEREAS, the After-Acquired Intellectual Property Security Agreement (Second Supplemental Filing) dated July 23, 2010 granted to PNC Bank, National Association (as successor-by-merger to National City Bank) by Ferro Corporation was recorded with the USPTO on August 6, 2010 at Reel/Frame 024804/0139 for those patents listed on Schedule N;

WHEREAS, the Attestation & Confirmation of Security Interest dated July 23, 2010 granted to PNC Bank, National Association (as successor-by merger to National City Bank) by Ferro Corporation was recorded with the USPTO on August 6, 2010 at Reel/Frame 024804/0117 for those patents listed on Schedule O;

WHEREAS, the Amended and Restated Patent Security Agreement dated August 24, 2010 granted to PNC Bank, National Association (as successor by merger to National City Bank) by Ferro Corporation was recorded with the USPTO on August 30, 2010 at Reel/Frame 024906/0728 for those patents listed on <u>Schedule P</u>;

WHEREAS, Borrowers requested that the Agent release its security interest in all right, title and interest of the Agent in the Patent Collateral and reconvey any and all rights it may have in the Patent Collateral to the Borrowers.

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NOW, THEREFORE, for good and valuable consideration, receipt and sufficiency of which is hereby acknowledged:

<u>SECTION 1</u>. The Agent hereby: (i) terminates, cancels, discharges, and releases its security interest in all of the Borrowers' right, title and interest in the Patent Collateral; and (ii) assigns to the Borrowers any and all interest it may have in such Patent Collateral.

SECTION 2. The Agent hereby authorizes the Borrowers, or the Borrowers' authorized representatives to: (a) record this Release with USPTO and/or any other applicable governmental office or agency, and (b) file UCC financing statement amendments with the applicable filing office in order to memorialize the release of the security interest of the Agent in the Patent Collateral. The Agent agrees to execute, acknowledge and deliver any additional documents or instruments and take any additional actions necessary or as may be necessary to effect, record and perfect the release of the Agent's security interest in the Patent Collateral which had been granted under the respective Security Agreement.

IN WITNESS WHEREOF, PNC Bank National Association has caused this Release to be duly executed and delivered by its duly authorized officer as of the date first written above.

PNC Bank, National Association (as successor-by-merger to National City Bank), as Agent

By:

Name:

Title:

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Schedule A

Security Agreement granted to National City Bank, as Administrative agent by Ferro Electronic Materials Inc. dated 4/19/2006 and recorded on 4/26/2006 at Reel/Frame 017527/0269

Title	App. No.	Patent No.	Owner
CERAMIC DIELECTRICS COMPOSITIONS	08386935	5550092	Ferro Electronic
			Materials Inc.
MULTILAYER CERAMIC CHIP CAPACITOR	09288079	6185087	Ferro Electronic
WITH HIGH RELIABILITY COMPATIBLE WITH			Materials Inc.
NICKEL ELECTRODES			

Schedule B

Security Agreement granted to National City Bank, as Collateral Agent by Ferro Electronic Materials Inc. dated 6/6/2006 and recorded on 6/8/2006 at Reel/Frame 017746/0062

Title	App. No.	Patent No.	Owner
CERAMIC DIELECTRICS COMPOSITIONS	08386935	5550092	Ferro Electronic Materials Inc.
MULTILAYER CERAMIC CHIP CAPACITOR WITH HIGH RELIABILITY COMPATIBLE WITH	09288079	6185087	Ferro Electronic Materials Inc.
NICKEL ELECTRODES			Whaterials file.

Schedule C

Amended and Restated Patent Security Agreement granted to PNC Bank, National Association (as successor-by-merger to National City Bank) by Ferro Electronic Materials Inc. dated 8/24/2010 and recorded on 8/30/2010 at Reel/Frame 024906/0806

Title	App. No.	Patent No.	Owner
CERAMIC DIELECTRICS COMPOSITIONS	08386935	5550092	Ferro Electronic
			Materials Inc.
MULTILAYER CERAMIC CHIP CAPACITOR	09288079	6185087	Ferro Electronic
WITH HIGH RELIABILITY COMPATIBLE WITH			Materials Inc.
NICKEL ELECTRODES			

PATENT

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REEL: 033522 FRAME: 0480

Schedule D

Security Agreement granted to National City Bank, as Administrative agent by Ferro Pfanstiehl Laboratories, Inc. dated 4/19/2006 and recorded on 4/26/2006 at Reel/Frame 017527/0047

Title	App. No.	Patent No.	Owner
LYOPHILIZATION METHOD AND APPARATUS FOR	11078554	7073349	Ferro Corporation
PRODUCING PARTICLES			
METHOD AND APPARATUS FOR ENHANCED SIZE	10932559	6986846	Ferro Corporation
REDUCTION OF PARTICLES USING SUPERCRITICAL			
FLUID LIQUEFACTION OF MATERIALS			
METHOD AND APPARATUS FOR PRODUCING	10789422	7455797	Ferro Corporation
PARTICLES USING SUPERCRITICAL FLUID			
PRODUCTION OF POROUS MATERIALS BY	10552008	7901606	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
METHOD AND APPARATUS FOR ENHANCED SIZE	10541909	8535720	Ferro Corporation
REDUCTION OF PARTICLES			
METHOD AND APPARATUS FOR SUPERCRITICAL	10541292	8142814	Ferro Corporation
FLUID ASSISTED PARTICLE PRODUCTION			
METHOD FOR PREPARATION OF PARTICLES FROM	10534665	7279181	Ferro Corporation
SOLUTION-IN-SUPERCRITICAL FLUID OR			
COMPRESSED GAS EMULSIONS			
NANOPARTICLES FROM SUPERCRITICAL FLUID	10531160	7767118	Ferro Corporation
ANTISOLVENT PROCESS USING PARTICLE GROWTH			
AND AGGLOMERATION RETARDANTS			
METHOD AND APPARATUS FOR PRODUCING	10531008	7449136	Ferro Corporation
COMPOSITE PARTICLES USING SUPERCRITICAL			
FLUID AS PLASTICIZING AND EXTRACTING AGENT			
COMPOSITE PARTICLES AND METHOD FOR	10441137	6966990	Ferro Corporation
PREPARING			
LYOPHILIZATION METHOD AND APPARATUS FOR	10434435	6931888	Ferro Corporation
PRODUCING PARTICLES			
METHOD AND APPARATUS FOR CONTINUOUS	10434426	7083748	Ferro Corporation
PARTICLE PRODUCTION USING SUPERCRITICAL			
FLUID			
PARTICLES FROM SUPERCRITICAL FLUID	10423492	6998051	Ferro Corporation
EXTRACTION OF EMULSION			
METHOD OF FORMING PARTICLES	10536330	7208106	Ferro Corporation

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Schedule E

Security Agreement granted to National City Bank, as Collateral Agent by Ferro Pfanstiehl Laboratories, Inc. dated 6/6/2006 and recorded on 6/8/2006 at Reel/Frame 017746/0052

Title	App. No.	Patent No.	Owner
LYOPHILIZATION METHOD AND APPARATUS	11078554	7073349	Ferro Corporation
FOR PRODUCING PARTICLES			
METHOD AND APPARATUS FOR ENHANCED SIZE	10932559	6986846	Ferro Corporation
REDUCTION OF PARTICLES USING			
SUPERCRITICAL FLUID LIQUEFACTION OF			
MATERIALS			
METHOD AND APPARATUS FOR PRODUCING	10789422	7455797	Ferro Corporation
PARTICLES USING SUPERCRITICAL FLUID			
PRODUCTION OF POROUS MATERIALS BY	10552008	7901606	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
METHOD AND APPARATUS FOR ENHANCED SIZE	10541909	8535720	Ferro Corporation
REDUCTION OF PARTICLES			
METHOD FOR PREPARATION OF PARTICLES	10534665	7279181	Ferro Corporation
FROM SOLUTION-IN-SUPERCRITICAL FLUID OR			
COMPRESSED GAS EMULSIONS			
NANOPARTICLES FROM SUPERCRITICAL FLUID	10531160	7767118	Ferro Corporation
ANTISOLVENT PROCESS USING PARTICLE			
GROWTH AND AGGLOMERATION RETARDANTS	10721000	= 110126	
METHOD AND APPARATUS FOR PRODUCING	10531008	7449136	Ferro Corporation
COMPOSITE PARTICLES USING SUPERCRITICAL			
FLUID AS PLASTICIZING AND EXTRACTING			
AGENT	10441127	(0((000	E G
COMPOSITE PARTICLES AND METHOD FOR	10441137	6966990	Ferro Corporation
PREPARING	10434435	6931888	ECti
LYOPHILIZATION METHOD AND APPARATUS	10434433	0931888	Ferro Corporation
FOR PRODUCING PARTICLES METHOD AND APPARATUS FOR CONTINUOUS	10434426	7083748	Farma Composation
	10434426	/083/48	Ferro Corporation
PARTICLE PRODUCTION USING SUPERCRITICAL FLUID			
PARTICLES FROM SUPERCRITICAL FLUID	10423492	6998051	Ferro Corporation
EXTRACTION OF EMULSION	10423492	0990031	reno Corporation
METHOD OF FORMING PARTICLES	10536330	7208106	Ferro Corporation
MILTHOD OF FORMING PARTICLES	10000000	1200100	Ferro Corporation

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Schedule F

Security Agreement granted to National City Bank, as Administrative Assistant by Ferro Color & Glass Corporation dated 4/19/2006 and recorded on 4/26/2006 at Reel/Frame 017527/0056

Title	App. No.	Patent No.	Owner
PARTIALLY CRYSTALLIZING LEAD-FREE ENAMEL	09078659	5925160	Ferro Corporation
COMPOSITION FOR AUTOMOBILE GLASS			
LASER MARKING METHOD AND APPARATUS	08951411	6238847	Ferro Corporation
PARTIALLY CRYSTALLIZING ENAMEL	08876426	5753685	Ferro Corporation
CONTAINING CRYSTALLINE ZINC BORATE SEED			
MATERIAL			
PARTIALLY CRYSTALLIZING LEAD-FREE ENAMEL	09303683	6022624	Ferro Corporation
COMPOSITION FOR AUTOMOBILE GLASS			
HIGH DURABILITY LOW TEMPERATURE LEAD-	09916302	6624104	Ferro Corporation
FREE GLASS AND ENAMEL COMPOSITIONS WITH			
LOW BORON CONTENT			
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL	09305357	6207285	Ferro Corporation
COMPOSITION CONTAINING BISMUTH SILICATE,			
AND USE THEREOF			
LEAD-FREE GLASS FRITS FOR CERAMIC ENAMELS	08661894	5616417	Ferro Corporation

Schedule G

Security Agreement granted to National City Bank, as Collateral Agent by Ferro Color & Glass Corporation dated 6/6/2006 and recorded on 6/8/2006 at Reel/Frame 017746/0042

Title	App. No.	Patent No.	Owner
PARTIALLY CRYSTALLIZING LEAD-FREE	09078659	5925160	Ferro Corporation
ENAMEL COMPOSITION FOR AUTOMOBILE			
GLASS			
PARTIALLY CRYSTALLIZING ENAMEL	08876426	5753685	Ferro Corporation
CONTAINING CRYSTALLINE ZINC BORATE SEED			
MATERIAL			
PARTIALLY CRYSTALLIZING LEAD-FREE	09303683	6022624	Ferro Corporation
ENAMEL COMPOSITION FOR AUTOMOBILE			
GLASS			
HIGH DURABILITY LOW TEMPERATURE LEAD-	09916302	6624104	Ferro Corporation
FREE GLASS AND ENAMEL COMPOSITIONS			
WITH LOW BORON CONTENT			
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL	09305357	6207285	Ferro Corporation
COMPOSITION CONTAINING BISMUTH			
SILICATE, AND USE THEREOF			
LEAD EDEE CLASS EDITS EOD CEDAMIC	09661904	5616417	Farra Cornaration
LEAD-FREE GLASS FRITS FOR CERAMIC	08661894	5616417	Ferro Corporation
ENAMELS			

Schedule H

After-Acquired Intellectual Property Security Agreement (First Supplemental Filing) granted to National City Bank, as Collateral Agent by Ferro Color & Glass Corporation dated 3/31/2009 and recorded on 4/2/2009 at Reel/Frame 022494/0933

Title	App. No.	Patent No.	Owner
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL	08964267	5968659	Ferro Corporation
COMPOSITION CONTAINING BISMUTH SILICATE,			
AND USE THEREOF			
PARTIALLY CRYSTALLIZING LEAD-FREE	08784924	5783507	Ferro Corporation
ENAMEL COMPOSITION FOR AUTOMOBILE			
GLASS			
LEAD-FREE ALKALI METAL-FREE GLASS	09205287	6255239	Ferro Corporation
COMPOSITIONS			
PARTIALLY CRYSTALLIZING ENAMEL	09022477	5900319	Ferro Corporation
CONTAINING CRYSTALLINE ZINC BORATE SEED			
MATERIAL			
PARTIALLY CRYSTALLIZING ENAMEL	08637445	5677251	Ferro Corporation
CONTAINING CRYSTALLINE ZINC BORATE SEED			
MATERIAL			
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL	08569905	5714420	Ferro Corporation
COMPOSITION CONTAINING BISMUTH SILICATE,			
AND USE THEREOF			
LEAD-FREE GLASS FRITS FOR CERAMIC	08447055	5559059	Ferro Corporation
ENAMELS			

Schedule I

Security Agreement granted to National City Bank, as Administrative Agent by Ferro Corporation dated 4/19/2006 and recorded on 4/27/2006 at Reel/Frame 017527/0934

Title	App. No.	Patent No.	Owner
INORGANIC PIGMENTS	10649317	7014701	Ferro Corporation
ELECTRONIC DEVICE HAVING LEAD AND	10431346	7740899	Ferro Corporation
CADMIUM FREE ELECTRONIC OVERGLAZE			
APPLIED THERETO			
MIXING SYSTEM FOR PROCESSES USING	08882022	5993747	Ferro Corporation
SUPERCRITICAL FLUIDS			
METHOD OF MAKING INSULATED ELECTRICAL	08587312	5657532	Ferro Corporation
HEATING ELEMENT USING LTCC TAPE			

Schedule J

Security Agreement granted to National City Bank, as Administrative Agent by Ferro Corporation dated 4/19/2006 and recorded on 4/27/2006 at Reel/Frame 017527/0909

Title	App. No.	Patent No.	Owner
METHOD OF MAKING MULTILAYER GLASS	11131919	7832233	Ferro Corporation
STRUCTURES			1
HYDROTHERMAL SYNTHESIS OF CERIUM-	11283530	7666239	Ferro Corporation
TITANIUM OXIDE FOR USE IN CMP			_
PROCESS FOR STRUCTURING SELF-CLEANING	11115945	7527832	Ferro Corporation
GLASS SURFACES			_
STRUCTURED SELF-CLEANING SURFACES AND	11115946	7524531	Ferro Corporation
METHOD OF FORMING SAME			
ETHER-ESTER PLASTICIZERS	11164558	7498372	Ferro Corporation
COPPER TERMINATION INKS CONTAINING LEAD	11201278	7339780	Ferro Corporation
FREE AND CADMIUM FREE GLASSES FOR			
CAPACITORS			
METHOD OF REMOVING SPECTATOR IONS FROM	10917829	7318897	Ferro Corporation
AQUEOUS SUSPENSION OF SOLID PARTICLES			
SLURRY COMPOSITION AND METHOD OF USE	10444104	7300478	Ferro Corporation
SLURRY COMPOSITION AND METHOD FOR	11102555	7294044	Ferro Corporation
POLISHING ORGANIC POLYMER-BASED			
OPHTHALMIC SUBSTRATES			
FOREHEARTH CONCENTRATE AND METHOD FOR	11211133	7265069	Ferro Corporation
OPALIZATION OF GLASS			
Y5V DIELECTRIC COMPOSITION	11107358	7230817	Ferro Corporation
LIGHT FIXTURE WITH REFLECTIVE POLYMERIC	10996918	7176607	Ferro Corporation
COMPOSITION AND PIGMENT PACAKGE			
LEAD-FREE AND CADMIUM-FREE CONDUCTIVE	10864304	7176152	Ferro Corporation
COPPER THICK FILM PASTES			
COG DIELECTRIC COMPOSITION FOR USE WITH	11235656	7161795	Ferro Corporation
COPPER ELECTRODES			
CHEMICAL-MECHANICAL POLISHING SLURRY	10749726	7101800	Ferro Corporation
AND METHOD		-02-070	
TRANSPARENT TILE GLAZE	10732903	7037868	Ferro Corporation
METHOD OF MICRO AND NANO TEXTURING	10452845	6997018	Ferro Corporation
GLASS	10602522	6004505	
CHROMIUM BEARING FOREHEARTH COLOR	10602533	6984597	Ferro Corporation
CONCENTRATE	10064200	6002064	E C :
COPPER TERMINATION INKS CONTAINING LEAD	10864309	6982864	Ferro Corporation
FREE AND CADMIUM FREE GLASSES FOR			
CAPACITORS POLYMER WOOD COMPOSITES AND ADDITIVE	10426943	6042920	Farma Componentian
POLYMER-WOOD COMPOSITES AND ADDITIVE	10420943	6942829	Ferro Corporation
SYSTEMS THEREFOR DURABLE CLASS ENAMEL COMPOSITION	10409727	6026556	Farra Corneration
DURABLE GLASS ENAMEL COMPOSITION PORCELAIN ENAMEL HAVING METALLIC	10408737	6936556	Ferro Corporation
APPEARANCE	10274835	6831027	Ferro Corporation
PROCESS FOR PRODUCING ABRASIVE PARTICLES	10255136	6818030	Ferro Corporation
AND ABRASIVE PARTICLES PRODUCED BY THE	10233130	0010030	
AND ADRAGIVE LARTICLES PRODUCED BT THE			

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Title	App. No.	Patent No.	Owner
PROCESS			
GLYCERIN TRIESTER PLASTICIZER	10683479	6811722	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10314917	6740254	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING SLURRY	09692730	6702954	Ferro Corporation
AND METHOD			_
METHOD OF DECORATING A CERAMIC ARTICLE	09729650	6696100	Ferro Corporation
METHOD OF FABRICATING A COPPER	10266169	6660639	Ferro Corporation
DAMASCENE STRUCTURE			
CONTINUOUS CALCINATION OF MIXED METAL	09928972	6652829	Ferro Corporation
OXIDES			
GLYCERIN TRIESTER PLASTICIZER	10027810	6652774	Ferro Corporation
CERAMIC SUBSTRATE FOR NONSTICK COATING	09953063	6638600	Ferro Corporation
HIGH SELECTIVITY CMP SLURRY	10161315	6616514	Ferro Corporation
METHOD OF FORMING PARTICLES FOR USE IN	09992485	6596042	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING SLURRIES			
AND THE PARTICLES FORMED BY THE PROCESS			
ORTHOPEDIC MIXTURES PREPARED BY	09658252	6579532	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
TECHNIQUES			
POLYMER MATRICES PREPARED BY	09658251	6521258	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
TECHNIQUES			
SILVER INK FOR FORMING ELECTRODES	09977623	6517931	Ferro Corporation
EASY-TO-CLEAN MATTE ACID RESISTANT	09906177	6511931	Ferro Corporation
GROUND COAT	00.602720	6500050	
SLURRY FOR CHEMICAL-MECHANICAL	09692729	6508953	Ferro Corporation
POLISHING COPPER DAMASCENE STRUCTURES	00650250	(50(212	F G .:
MANUFACTURING ORTHOPEDIC PARTS USING	09658250	6506213	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
TECHNIQUES INFRARED REFLECTIVE COLOR PIGMENT	09745291	6454848	Earna Companation
INDIVIDUAL INKS AND AN INK SET FOR USE IN	09/43291	6402823	Ferro Corporation
THE COLOR INK JET PRINTING OF GLAZED	094/9330	0402823	Ferro Corporation
CERAMIC TILES AND SURFACES			
DECORATIVE GLASS ENAMELS	09429126	6346493	Ferro Corporation
SCREEN PRINTABLE THERMALLY CURING	09429120	6210520	Ferro Corporation
CONDUCTIVE GEL	09399340	0210320	Terro Corporation
SCREEN PRINTABLE CURABLE CONDUCTIVE	09408568	6204303	Ferro Corporation
MATERIAL COMPOSITION	07400300	0204303	Terro Corporation
INFRARED REFLECTIVE COLOR PIGMENT	09178957	6174360	Ferro Corporation
HIGH TEMPERATURE SEALING GLASS	09145112	6124224	Ferro Corporation
GLASS ENAMEL FOR AUTOMOTIVE	09228702	6105394	Ferro Corporation
APPLICATIONS	0,220,02	010000	1 chi corporation
MIXING SYSTEM FOR PROCESSES USING	08882707	6054103	Ferro Corporation
SUPERCRITICAL FLUIDS			warp
SCREEN PRINTABLE THERMALLY CURING	08884829	6020424	Ferro Corporation
CONDUCTIVE GEL			1
PORCELAIN ENAMEL COMPOSITION FOR	08995584	5998037	Ferro Corporation
ELECTRONIC APPLICATIONS			•

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Title	App. No.	Patent No.	Owner
SCREEN PRINTABLE UV CURABLE CONDUCTIVE	08884995	5968606	Ferro Corporation
MATERIAL COMPOSITION			
RESETTABLE FUSE	09190032	5963121	Ferro Corporation
METHOD OF MAKING CONDUCTIVE ELECTRODES	08922705	5897912	Ferro Corporation
FOR USE IN MULTILAYER CERAMIC CAPACITORS			
OR INDUCTORS USING ORGANOMETALLIC INK			
VINYL HALIDE POLYMER COLOR CONCENTRATE	08796603	5843524	Ferro Corporation
THICK FILM HAVING ACID RESISTANCE	08801978	5792716	Ferro Corporation
METHOD OF MAKING BARIUM TITANATE	08780497	5783165	Ferro Corporation
LEAD-FREE GLASS ENAMELS FOR DECORATING	08403259	5725919	Ferro Corporation
GLASS BEVERAGE CONTAINERS AND METHODS			
FOR USING THE SAME			
CONDUCTIVE SILVER LOW TEMPERATURE	08579076	5714246	Ferro Corporation
COFIRED METALLIC GREEN TAPE			
CONTROL SYSTEM FOR PROCESSES USING	08810965	5698163	Ferro Corporation
SUPERCRITICAL FLUIDS			
METHOD OF INTEGRATING ELECTRONIC	08497239	5661882	Ferro Corporation
COMPONENTS INTO ELECTRONIC CIRCUIT			
STRUCTURES MADE USING LTCC TAPE			
NPO DIELECTRIC CERAMIC COMPOSITIONS AND	08548710	5599757	Ferro Corporation
CAPACITORS MADE THEREFROM			
SCREEN PRINTABLE DECORATIVE COATING	08390884	5549929	Ferro Corporation
COMPOSITION			

Schedule K

Security Agreement granted to National City Bank, as Collateral Agent by Ferro Corporation dated 6/6/2006 and recorded on 6/7/2006 at Reel/Frame 017730/0620

Title	App. No.	Patent No.	Owner
INORGANIC PIGMENTS	10649317	7014701	Ferro Corporation
ELECTRONIC DEVICE HAVING LEAD AND CADMIUM	10431346	7740899	Ferro Corporation
FREE ELECTRONIC OVERGLAZE APPLIED THERETO			
MIXING SYSTEM FOR PROCESSES USING	08882022	5993747	Ferro Corporation
SUPERCRITICAL FLUIDS			
METHOD OF MAKING INSULATED ELECTRICAL	08587312	5657532	Ferro Corporation
HEATING ELEMENT USING LTCC TAPE			

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Schedule L

Security Agreement granted to National City Bank, as Collateral Agent by Ferro Corporation dated 6/6/2006 and recorded on 6/7/2006 at Reel/Frame 017730/0594

Title	App. No.	Patent No.	Owner
LIGHT FIXTURE WITH REFLECTIVE POLYMERIC COMPOSITION AND PIGMENT PACAKGE	10996918	7176607	Ferro Corporation
VINYL HALIDE POLYMER COLOR CONCENTRATE	08796603	5843524	Ferro Corporation
CONDUCTIVE SILVER LOW TEMPERATURE COFIRED METALLIC GREEN TAPE	08579076	5714246	Ferro Corporation
SLURRY FOR CHEMICAL-MECHANICAL POLISHING COPPER DAMASCENE STRUCTURES	09692729	6508953	Ferro Corporation
HYDROTHERMAL SYNTHESIS OF CERIUM-TITANIUM OXIDE FOR USE IN CMP	11283530	7666239	Ferro Corporation
COG DIELECTRIC COMPOSITION FOR USE WITH COPPER ELECTRODES	11235656	7161795	Ferro Corporation
FOREHEARTH CONCENTRATE AND METHOD FOR OPALIZATION OF GLASS	11211133	7265069	Ferro Corporation
COPPER TERMINATION INKS CONTAINING LEAD FREE AND CADMIUM FREE GLASSES FOR CAPACITORS	11201278	7339780	Ferro Corporation
ETHER-ESTER PLASTICIZERS	11164558	7498372	Ferro Corporation
METHOD OF MAKING MULTILAYER GLASS STRUCTURES	11131919	7832233	Ferro Corporation
STRUCTURED SELF-CLEANING SURFACES AND METHOD OF FORMING SAME	11115946	7524531	Ferro Corporation
PROCESS FOR STRUCTURING SELF-CLEANING GLASS SURFACES	11115945	7527832	Ferro Corporation
SLURRY COMPOSITION AND METHOD FOR POLISHING ORGANIC POLYMER-BASED OPHTHALMIC SUBSTRATES	11102555	7294044	Ferro Corporation
METHOD OF REMOVING SPECTATOR IONS FROM AQUEOUS SUSPENSION OF SOLID PARTICLES	10917829	7318897	Ferro Corporation
COPPER TERMINATION INKS CONTAINING LEAD FREE AND CADMIUM FREE GLASSES FOR CAPACITORS	10864309	6982864	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING SLURRY AND METHOD	10749726	7101800	Ferro Corporation
TRANSPARENT TILE GLAZE	10732903	7037868	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10683479	6811722	Ferro Corporation
CHROMIUM BEARING FOREHEARTH COLOR CONCENTRATE	10602533	6984597	Ferro Corporation
METHOD OF MICRO AND NANO TEXTURING GLASS	10452845	6997018	Ferro Corporation
SLURRY COMPOSITION AND METHOD OF USE	10444104	7300478	Ferro Corporation
DURABLE GLASS ENAMEL COMPOSITION	10408737	6936556	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10314917	6740254	Ferro Corporation
PORCELAIN ENAMEL HAVING METALLIC	10274835	6831027	Ferro Corporation

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Title	App. No.	Patent	Owner
APPEARANCE		No.	
METHOD OF FABRICATING A COPPER DAMASCENE STRUCTURE	10266169	6660639	Ferro Corporation
PROCESS FOR PRODUCING ABRASIVE PARTICLES AND ABRASIVE PARTICLES PRODUCED BY THE PROCESS	10255136	6818030	Ferro Corporation
HIGH SELECTIVITY CMP SLURRY	10161315	6616514	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10027810	6652774	Ferro Corporation
CERAMIC SUBSTRATE FOR NONSTICK COATING	09953063	6638600	Ferro Corporation
CONTINUOUS CALCINATION OF MIXED METAL OXIDES	09928972	6652829	Ferro Corporation
INFRARED REFLECTIVE COLOR PIGMENT	09745291	6454848	Ferro Corporation
METHOD OF DECORATING A CERAMIC ARTICLE	09729650	6696100	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING SLURRY AND METHOD	09692730	6702954	Ferro Corporation
MANUFACTURING ORTHOPEDIC PARTS USING SUPERCRITICAL FLUID PROCESSING TECHNIQUES	09658250	6506213	Ferro Corporation
INDIVIDUAL INKS AND AN INK SET FOR USE IN THE COLOR INK JET PRINTING OF GLAZED CERAMIC TILES AND SURFACES	09479350	6402823	Ferro Corporation
DECORATIVE GLASS ENAMELS	09429126	6346493	Ferro Corporation
SCREEN PRINTABLE CURABLE CONDUCTIVE MATERIAL COMPOSITION	09408568	6204303	Ferro Corporation
SCREEN PRINTABLE THERMALLY CURING CONDUCTIVE GEL	09399546	6210520	Ferro Corporation
GLASS ENAMEL FOR AUTOMOTIVE APPLICATIONS	09228702	6105394	Ferro Corporation
RESETTABLE FUSE	09190032	5963121	Ferro Corporation
INFRARED REFLECTIVE COLOR PIGMENT	09178957	6174360	Ferro Corporation
HIGH TEMPERATURE SEALING GLASS	09145112	6124224	Ferro Corporation
PORCELAIN ENAMEL COMPOSITION FOR ELECTRONIC APPLICATIONS	08995584	5998037	Ferro Corporation
METHOD OF MAKING CONDUCTIVE ELECTRODES FOR USE IN MULTILAYER CERAMIC CAPACITORS OR INDUCTORS USING ORGANOMETALLIC INK	08922705	5897912	Ferro Corporation
SCREEN PRINTABLE UV CURABLE CONDUCTIVE MATERIAL COMPOSITION	08884995	5968606	Ferro Corporation
SCREEN PRINTABLE THERMALLY CURING CONDUCTIVE GEL	08884829	6020424	Ferro Corporation
MIXING SYSTEM FOR PROCESSES USING SUPERCRITICAL FLUIDS	08882707	6054103	Ferro Corporation
CONTROL SYSTEM FOR PROCESSES USING SUPERCRITICAL FLUIDS	08810965	5698163	Ferro Corporation
THICK FILM HAVING ACID RESISTANCE	08801978	5792716	Ferro Corporation
METHOD OF MAKING BARIUM TITANATE	08780497	5783165	Ferro Corporation
NPO DIELECTRIC CERAMIC COMPOSITIONS AND CAPACITORS MADE THEREFROM	08548710	5599757	Ferro Corporation
METHOD OF INTEGRATING ELECTRONIC COMPONENTS INTO ELECTRONIC CIRCUIT	08497239	5661882	Ferro Corporation

Title	App. No.	Patent No.	Owner
STRUCTURES MADE USING LTCC TAPE			
LEAD-FREE GLASS ENAMELS FOR DECORATING	08403259	5725919	Ferro Corporation
GLASS BEVERAGE CONTAINERS AND METHODS FOR			
USING THE SAME			
SCREEN PRINTABLE DECORATIVE COATING	08390884	5549929	Ferro Corporation
COMPOSITION			
POLYMER-WOOD COMPOSITES AND ADDITIVE	10426943	6942829	Ferro Corporation
SYSTEMS THEREFOR			
EASY-TO-CLEAN MATTE ACID RESISTANT GROUND	09906177	6511931	Ferro Corporation
COAT			
METHOD OF FORMING PARTICLES FOR USE IN	09992485	6596042	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING SLURRIES AND			
THE PARTICLES FORMED BY THE PROCESS			
ORTHOPEDIC MIXTURES PREPARED BY	09658252	6579532	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING TECHNIQUES			
Y5V DIELECTRIC COMPOSITION	11107358	7230817	Ferro Corporation
POLYMER MATRICES PREPARED BY SUPERCRITICAL	09658251	6521258	Ferro Corporation
FLUID PROCESSING TECHNIQUES			
LEAD-FREE AND CADMIUM-FREE CONDUCTIVE	10864304	7176152	Ferro Corporation
COPPER THICK FILM PASTES			
SILVER INK FOR FORMING ELECTRODES	09977623	6517931	Ferro Corporation

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Schedule M

After-acquired Intellectual Property Security Agreement (First Supplemental Filing) granted to National City Bank, as Collateral Agent by Ferro Corporation dated 3/31/2009 and recorded on 4/2/2009 at Reel/Frame 022494/0945

Title	App. No.	Patent	Owner
DOMINED GO FEING GO FROGRETON	00075065	No.	- C .:
POWDER COATING COMPOSITION	09075965	6194525	Ferro Corporation
COMPRISING UNSATURATED POLYESTERS			
AND USES THERE OF WHITE ENAMEL FOR ALUMINIZED OR	09932472	6566289	Esua Camanatian
GALVANIZED STEEL	09932472	0300289	Ferro Corporation
ZINC CONTAINING GLASSES AND ENAMELS	12368331	8007930	Ferro Corporation
CORUNDUM CRYSTAL STRUCTURE PIGMENTS	12308331	8007930	Ferro Corporation
WITH REDUCED SOLUBLE CHROMIUM	12210433		reno Corporation
CONTENT			
METHOD FOR PRODUCING SOLID-LIPID	12124518	8642091	Ferro Corporation
COMPOSITE DRUG PARTICLES	12124316	0042091	Terro Corporation
SUPERCRITICAL FLUID EXTRACTION	12017414		Ferro Corporation
PRODUCED BY IN-LINE HOMOGENIZATION	12017414		Terro corporation
METHODS FOR THE PURIFICATION OF	12017399	7745566	Ferro Corporation
POLYMERS	12017377	7743300	Terro corporation
SPECIAL EFFECT PIGMENTS	11995001	8172935	Ferro Corporation
ULTRA LOW-EMISSIVITY (ULTRA LOW E)	11781982	7833439	Ferro Corporation
SILVER COATING	11701702	7033437	Terro corporation
FOREHEARTH CONCENTRATE AND METHOD	11758273	7737062	Ferro Corporation
FOR OPALIZATION OF GLASS	11730273	7737002	Terro corporation
METHOD FOR THE PRODUCTION OF POROUS	11748095	8207236	Ferro Corporation
PARTICLES	117.10070	0207200	Torre Corporation
SLURRY COMPOSITION AND METHOD FOR	11689543	7467988	Ferro Corporation
POLISHING ORGANIC POLYMER-BASED			<u>F</u>
OPHTHALMIC SUBSTRATES			
AUTO-STOPPING SLURRIES FOR CHEMICAL-	11678248	7696095	Ferro Corporation
MECHANICAL POLISHING OF TOPOGRAPHIC			
DIELECTRIC SILICON DIOXIDE			
X8R DIELECTRIC COMPOSITION FOR USE	11623905	7541306	Ferro Corporation
WITH NICKEL ELECTRODES			
LEAD-FREE AND CADMIUM-FREE	11609998	7504349	Ferro Corporation
CONDUCTIVE COPPER THICK FILM PASTES			
METHOD OF MAKING MULTILAYER	11468798	7547369	Ferro Corporation
STRUCTURES USING TAPES ON NON-			
DENSIFYING SUBSTRATES			
SYNTHESIS OF NICKEL NANOPOWDERS	11462729	7819939	Ferro Corporation
BUTYL LACTATE EMULSIONS FOR THE	11420035	7595348	Ferro Corporation
PRECIPITATION OF WATER-INSOLUBLE DRUG			
NANOPARTICLES			
SUBSTANTIALLY SPHERICAL COMPOSITE	11380980	7687401	Ferro Corporation
CERIA/TITANIA PARTICLES			

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Title	App. No.	Patent No.	Owner
SLURRY FOR CHEMICAL MECHANICAL	10617510	7091164	Ferro Corporation
POLISHING SILICON DIOXIDE			
COG DIELECTRIC COMPOSITION FOR USE	10599925	7858548	Ferro Corporation
WITH NICKEL ELECTRODES			
EXTENDED FIRING RANGE ENAMELS TO	10599370	8092911	Ferro Corporation
PRODUCE FROST EFFECTS			
METHODS OF FORMING AND DETECTING	10597781	8006909	Ferro Corporation
NON-VISIBLE MARKS AND ARTICLES			
MARKED IN ACCORDANCE WITH THE			
METHODS			
PORCELAIN ENAMEL HAVING A METALLIC	10585526	7763557	Ferro Corporation
APPEARANCE			
X7R DIELECTRIC COMPOSITION	10440051	6828266	Ferro Corporation
SLURRY FOR CHEMICAL MECHANICAL	09526286	6491843	Ferro Corporation
POLISHING SILICON DIOXIDE			_
SLURRY FOR CHEMICAL MECHANICAL	09456612	6468910	Ferro Corporation
POLISHING SILICON DIOXIDE			

Schedule N

After-Acquired Intellectual Property Security Agreement (Second Supplemental Filing) granted to PNC Bank, National Association (as successor-by-merger to National City Bank), as Collateral Agent by Ferro Corporation dated 7/23/2010 and recorded on 8/6/2010 at Reel/Frame 024804/0139

Title	App. No.	Patent No.	Owner
LYOPHILIZATION METHOD AND APPARATUS FOR	11078554	7073349	Ferro Corporation
PRODUCING PARTICLES			1
METHOD AND APPARATUS FOR ENHANCED SIZE	10932559	6986846	Ferro Corporation
REDUCTION OF PARTICLES USING			1
SUPERCRITICAL FLUID LIQUEFACTION OF			
MATERIALS			
METHOD AND APPARATUS FOR PRODUCING	10789422	7455797	Ferro Corporation
PARTICLES USING SUPERCRITICAL FLUID			
PRODUCTION OF POROUS MATERIALS BY	10552008	7901606	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
METHOD AND APPARATUS FOR ENHANCED SIZE	10541909	8535720	Ferro Corporation
REDUCTION OF PARTICLES			
METHOD AND APPARATUS FOR SUPERCRITICAL	10541292	8142814	Ferro Corporation
FLUID ASSISTED PARTICLE PRODUCTION			
METHOD FOR PREPARATION OF PARTICLES FROM	10534665	7279181	Ferro Corporation
SOLUTION-IN-SUPERCRITICAL FLUID OR			
COMPRESSED GAS EMULSIONS			
NANOPARTICLES FROM SUPERCRITICAL FLUID	10531160	7767118	Ferro Corporation
ANTISOLVENT PROCESS USING PARTICLE			
GROWTH AND AGGLOMERATION RETARDANTS			
METHOD AND APPARATUS FOR PRODUCING	10531008	7449136	Ferro Corporation
COMPOSITE PARTICLES USING SUPERCRITICAL			
FLUID AS PLASTICIZING AND EXTRACTING			
AGENT			
COMPOSITE PARTICLES AND METHOD FOR	10441137	6966990	Ferro Corporation
PREPARING			
LYOPHILIZATION METHOD AND APPARATUS FOR	10434435	6931888	Ferro Corporation
PRODUCING PARTICLES			
METHOD AND APPARATUS FOR CONTINUOUS	10434426	7083748	Ferro Corporation
PARTICLE PRODUCTION USING SUPERCRITICAL			
FLUID			
PARTICLES FROM SUPERCRITICAL FLUID	10423492	6998051	Ferro Corporation
EXTRACTION OF EMULSION			
METHOD OF FORMING PARTICLES		7208106	Ferro Corporation
METHOD OF MAKING MULTILAYER STRUCTURES	12464980	8043721	Ferro Corporation
USING TAPES ON NON-DENSIFYING SUBSTRATES			
X8R DIELECTRIC COMPOSITION FOR USE WITH	12434752	7727922	Ferro Corporation
NICKEL ELECTRODES			
ULTRA LOW TEMPERATURE FIXED X7R AND BX	11681796	7521390	Ferro Corporation
DIELECTRIC CERAMIC COMPOSITION AND			
METHOD OF MAKING			

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Schedule O

Attestation & Confirmation of Security Interest granted to PNC Bank, National Association (as successor-by merger to National City Bank), as Collateral Agent by Ferro Corporation dated 7/23/2010 and recorded on 8/6/2010 at Reel/Frame 024804/0117

Title	App. No.	Patent No.	Owner
LYOPHILIZATION METHOD AND APPARATUS FOR	11078554	7073349	Ferro Corporation
PRODUCING PARTICLES			_
METHOD AND APPARATUS FOR ENHANCED SIZE	10932559	6986846	Ferro Corporation
REDUCTION OF PARTICLES USING SUPERCRITICAL			
FLUID LIQUEFACTION OF MATERIALS			
METHOD AND APPARATUS FOR PRODUCING	10789422	7455797	Ferro Corporation
PARTICLES USING SUPERCRITICAL FLUID			
PRODUCTION OF POROUS MATERIALS BY	10552008	7901606	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
METHOD AND APPARATUS FOR ENHANCED SIZE	10541909	8535720	Ferro Corporation
REDUCTION OF PARTICLES			
METHOD FOR PREPARATION OF PARTICLES FROM	10534665	7279181	Ferro Corporation
SOLUTION-IN-SUPERCRITICAL FLUID OR			
COMPRESSED GAS EMULSIONS			
NANOPARTICLES FROM SUPERCRITICAL FLUID	10531160	7767118	Ferro Corporation
ANTISOLVENT PROCESS USING PARTICLE			
GROWTH AND AGGLOMERATION RETARDANTS			
METHOD AND APPARATUS FOR PRODUCING	10531008	7449136	Ferro Corporation
COMPOSITE PARTICLES USING SUPERCRITICAL			
FLUID AS PLASTICIZING AND EXTRACTING AGENT			
COMPOSITE PARTICLES AND METHOD FOR	10441137	6966990	Ferro Corporation
PREPARING			
LYOPHILIZATION METHOD AND APPARATUS FOR	10434435	6931888	Ferro Corporation
PRODUCING PARTICLES			
METHOD AND APPARATUS FOR CONTINUOUS	10434426	7083748	Ferro Corporation
PARTICLE PRODUCTION USING SUPERCRITICAL			
FLUID			
PARTICLES FROM SUPERCRITICAL FLUID	10423492	6998051	Ferro Corporation
EXTRACTION OF EMULSION			
METHOD OF FORMING PARTICLES	10536330	7208106	Ferro Corporation

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Schedule P

Amended and Restated Patent Security Agreement granted to PNC Bank, National Association (as successor by merger to National City Bank) by Ferro Corporation dated 8/24/2010 and recorded on 8/30/2010 at Reel/Frame 024906/0728

Title	App. No.	Patent No.	Owner
LIGHT FIXTURE WITH REFLECTIVE	10996918	7176607	Ferro Corporation
POLYMERIC COMPOSITION AND PIGMENT			
PACAKGE			
PARTIALLY CRYSTALLIZING LEAD-FREE	09078659	5925160	Ferro Corporation
ENAMEL COMPOSITION FOR AUTOMOBILE			
GLASS			
POWDER COATING COMPOSITION	09075965	6194525	Ferro Corporation
COMPRISING UNSATURATED POLYESTERS			
AND USES THERE OF			
PARTIALLY CRYSTALLIZING CERAMIC	08964267	5968659	Ferro Corporation
ENAMEL COMPOSITION CONTAINING			
BISMUTH SILICATE, AND USE THEREOF			
LASER MARKING METHOD AND APPARATUS	08951411	6238847	Ferro Corporation
PARTIALLY CRYSTALLIZING ENAMEL	08876426	5753685	Ferro Corporation
CONTAINING CRYSTALLINE ZINC BORATE			
SEED MATERIAL			
VINYL HALIDE POLYMER COLOR	08796603	5843524	Ferro Corporation
CONCENTRATE			
CONDUCTIVE SILVER LOW TEMPERATURE	08579076	5714246	Ferro Corporation
COFIRED METALLIC GREEN TAPE			
WHITE ENAMEL FOR ALUMINIZED OR	09932472	6566289	Ferro Corporation
GALVANIZED STEEL			
SLURRY FOR CHEMICAL-MECHANICAL	09692729	6508953	Ferro Corporation
POLISHING COPPER DAMASCENE STRUCTURES			. 1
PARTIALLY CRYSTALLIZING LEAD-FREE	09303683	6022624	Ferro Corporation
ENAMEL COMPOSITION FOR AUTOMOBILE			1
GLASS			
PARTIALLY CRYSTALLIZING LEAD-FREE	08784924	5783507	Ferro Corporation
ENAMEL COMPOSITION FOR AUTOMOBILE			
GLASS			
HYDROTHERMAL SYNTHESIS OF CERIUM-	11283530	7666239	Ferro Corporation
TITANIUM OXIDE FOR USE IN CMP			. 1
COG DIELECTRIC COMPOSITION FOR USE	11235656	7161795	Ferro Corporation
WITH COPPER ELECTRODES			
FOREHEARTH CONCENTRATE AND METHOD	11211133	7265069	Ferro Corporation
FOR OPALIZATION OF GLASS			I
COPPER TERMINATION INKS CONTAINING	11201278	7339780	Ferro Corporation
LEAD FREE AND CADMIUM FREE GLASSES			
FOR CAPACITORS			
ETHER-ESTER PLASTICIZERS	11164558	7498372	Ferro Corporation
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Title	App. No.	Patent No.	Owner
METHOD OF MAKING MULTILAYER GLASS	11131919	7832233	Ferro Corporation
STRUCTURES	11101313	, 002200	Tono corporation
STRUCTURED SELF-CLEANING SURFACES AND	11115946	7524531	Ferro Corporation
METHOD OF FORMING SAME	111105.0	7021001	Tono corporation
PROCESS FOR STRUCTURING SELF-CLEANING	11115945	7527832	Ferro Corporation
GLASS SURFACES		,02,032	Terro corporation
SLURRY COMPOSITION AND METHOD FOR	11102555	7294044	Ferro Corporation
POLISHING ORGANIC POLYMER-BASED	1110200	, 2,	Tone Corporation
OPHTHALMIC SUBSTRATES			
LYOPHILIZATION METHOD AND APPARATUS	11078554	7073349	Ferro Corporation
FOR PRODUCING PARTICLES			
METHOD AND APPARATUS FOR ENHANCED	10932559	6986846	Ferro Corporation
SIZE REDUCTION OF PARTICLES USING			
SUPERCRITICAL FLUID LIQUEFACTION OF			
MATERIALS			
METHOD OF REMOVING SPECTATOR IONS	10917829	7318897	Ferro Corporation
FROM AQUEOUS SUSPENSION OF SOLID			
PARTICLES			
COPPER TERMINATION INKS CONTAINING	10864309	6982864	Ferro Corporation
LEAD FREE AND CADMIUM FREE GLASSES			
FOR CAPACITORS			
METHOD AND APPARATUS FOR PRODUCING	10789422	7455797	Ferro Corporation
PARTICLES USING SUPERCRITICAL FLUID			
CHEMICAL-MECHANICAL POLISHING SLURRY	10749726	7101800	Ferro Corporation
AND METHOD			1
TRANSPARENT TILE GLAZE	10732903	7037868	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10683479	6811722	Ferro Corporation
INORGANIC PIGMENTS	10649317	7014701	Ferro Corporation
CHROMIUM BEARING FOREHEARTH COLOR	10602533	6984597	Ferro Corporation
CONCENTRATE			
PRODUCTION OF POROUS MATERIALS BY	10552008	7901606	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
METHOD AND APPARATUS FOR ENHANCED	10541909	8535720	Ferro Corporation
SIZE REDUCTION OF PARTICLES			
METHOD AND APPARATUS FOR	10541292	8142814	Ferro Corporation
SUPERCRITICAL FLUID ASSISTED PARTICLE			1
PRODUCTION			
METHOD FOR PREPARATION OF PARTICLES	10534665	7279181	Ferro Corporation
FROM SOLUTION-IN-SUPERCRITICAL FLUID OR			1
COMPRESSED GAS EMULSIONS			
NANOPARTICLES FROM SUPERCRITICAL	10531160	7767118	Ferro Corporation
FLUID ANTISOLVENT PROCESS USING			•
PARTICLE GROWTH AND AGGLOMERATION			
RETARDANTS			
METHOD AND APPARATUS FOR PRODUCING	10531008	7449136	Ferro Corporation
COMPOSITE PARTICLES USING			`
SUPERCRITICAL FLUID AS PLASTICIZING AND			
EXTRACTING AGENT			
	•	•	•

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Title	App. No.	Patent No.	Owner
METHOD OF MICRO AND NANO TEXTURING	10452845	6997018	Ferro Corporation
GLASS			
SLURRY COMPOSITION AND METHOD OF USE	10444104	7300478	Ferro Corporation
COMPOSITE PARTICLES AND METHOD FOR	10441137	6966990	Ferro Corporation
PREPARING			•
LYOPHILIZATION METHOD AND APPARATUS	10434435	6931888	Ferro Corporation
FOR PRODUCING PARTICLES			•
METHOD AND APPARATUS FOR CONTINUOUS	10434426	7083748	Ferro Corporation
PARTICLE PRODUCTION USING			•
SUPERCRITICAL FLUID			
ELECTRONIC DEVICE HAVING LEAD AND	10431346	7740899	Ferro Corporation
CADMIUM FREE ELECTRONIC OVERGLAZE			•
APPLIED THERETO			
PARTICLES FROM SUPERCRITICAL FLUID	10423492	6998051	Ferro Corporation
EXTRACTION OF EMULSION			1
DURABLE GLASS ENAMEL COMPOSITION	10408737	6936556	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10314917	6740254	Ferro Corporation
PORCELAIN ENAMEL HAVING METALLIC	10274835	6831027	Ferro Corporation
APPEARANCE	1027.1002	0001027	Tone Corporation
METHOD OF FABRICATING A COPPER	10266169	6660639	Ferro Corporation
DAMASCENE STRUCTURE	10200103	0000000	Tonio corporation
PROCESS FOR PRODUCING ABRASIVE	10255136	6818030	Ferro Corporation
PARTICLES AND ABRASIVE PARTICLES	10200130	0010050	Torro corporation
PRODUCED BY THE PROCESS			
HIGH SELECTIVITY CMP SLURRY	10161315	6616514	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10027810	6652774	Ferro Corporation
CERAMIC SUBSTRATE FOR NONSTICK	09953063	6638600	Ferro Corporation
COATING			a transfer to the transfer to
CONTINUOUS CALCINATION OF MIXED METAL	09928972	6652829	Ferro Corporation
OXIDES			
HIGH DURABILITY LOW TEMPERATURE LEAD-	09916302	6624104	Ferro Corporation
FREE GLASS AND ENAMEL COMPOSITIONS			1
WITH LOW BORON CONTENT			
INFRARED REFLECTIVE COLOR PIGMENT	09745291	6454848	Ferro Corporation
METHOD OF DECORATING A CERAMIC	09729650	6696100	Ferro Corporation
ARTICLE			
CHEMICAL-MECHANICAL POLISHING SLURRY	09692730	6702954	Ferro Corporation
AND METHOD			
MANUFACTURING ORTHOPEDIC PARTS USING	09658250	6506213	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING	0302020	0000210	Tonio corporation
TECHNIQUES			
INDIVIDUAL INKS AND AN INK SET FOR USE IN	09479350	6402823	Ferro Corporation
THE COLOR INK JET PRINTING OF GLAZED			
CERAMIC TILES AND SURFACES			
DECORATIVE GLASS ENAMELS	09429126	6346493	Ferro Corporation
SCREEN PRINTABLE CURABLE CONDUCTIVE	09408568	6204303	Ferro Corporation
MATERIAL COMPOSITION	37130300	0201303	1 on o corporation
SCREEN PRINTABLE THERMALLY CURING	09399546	6210520	Ferro Corporation
CONDUCTIVE GEL	0,0,0,0	3213323	Tollo Corporation
COMPOCITATION		1	

Title	App. No.	Patent No.	Owner
PARTIALLY CRYSTALLIZING CERAMIC	09305357	6207285	Ferro Corporation
ENAMEL COMPOSITION CONTAINING			
BISMUTH SILICATE, AND USE THEREOF			
GLASS ENAMEL FOR AUTOMOTIVE	09228702	6105394	Ferro Corporation
APPLICATIONS			1
RESETTABLE FUSE	09190032	5963121	Ferro Corporation
INFRARED REFLECTIVE COLOR PIGMENT	09178957	6174360	Ferro Corporation
HIGH TEMPERATURE SEALING GLASS	09145112	6124224	Ferro Corporation
PORCELAIN ENAMEL COMPOSITION FOR	08995584	5998037	Ferro Corporation
ELECTRONIC APPLICATIONS			1
METHOD OF MAKING CONDUCTIVE	08922705	5897912	Ferro Corporation
ELECTRODES FOR USE IN MULTILAYER			_
CERAMIC CAPACITORS OR INDUCTORS USING			
ORGANOMETALLIC INK			
SCREEN PRINTABLE UV CURABLE	08884995	5968606	Ferro Corporation
CONDUCTIVE MATERIAL COMPOSITION			
SCREEN PRINTABLE THERMALLY CURING	08884829	6020424	Ferro Corporation
CONDUCTIVE GEL			
MIXING SYSTEM FOR PROCESSES USING	08882707	6054103	Ferro Corporation
SUPERCRITICAL FLUIDS			1
MIXING SYSTEM FOR PROCESSES USING	08882022	5993747	Ferro Corporation
SUPERCRITICAL FLUIDS			
CONTROL SYSTEM FOR PROCESSES USING	08810965	5698163	Ferro Corporation
SUPERCRITICAL FLUIDS			
THICK FILM HAVING ACID RESISTANCE	08801978	5792716	Ferro Corporation
METHOD OF MAKING BARIUM TITANATE	08780497	5783165	Ferro Corporation
LEAD-FREE GLASS FRITS FOR CERAMIC	08661894	5616417	Ferro Corporation
ENAMELS			
METHOD OF MAKING INSULATED ELECTRICAL	08587312	5657532	Ferro Corporation
HEATING ELEMENT USING LTCC TAPE			
NPO DIELECTRIC CERAMIC COMPOSITIONS	08548710	5599757	Ferro Corporation
AND CAPACITORS MADE THEREFROM			
METHOD OF INTEGRATING ELECTRONIC	08497239	5661882	Ferro Corporation
COMPONENTS INTO ELECTRONIC CIRCUIT			
STRUCTURES MADE USING LTCC TAPE			
LEAD-FREE GLASS ENAMELS FOR	08403259	5725919	Ferro Corporation
DECORATING GLASS BEVERAGE CONTAINERS			
AND METHODS FOR USING THE SAME			
SCREEN PRINTABLE DECORATIVE COATING	08390884	5549929	Ferro Corporation
COMPOSITION			
POLYMER-WOOD COMPOSITES AND ADDITIVE	10426943	6942829	Ferro Corporation
SYSTEMS THEREFOR			
METHOD OF FORMING PARTICLES	10536330	7208106	Ferro Corporation
EASY-TO-CLEAN MATTE ACID RESISTANT	09906177	6511931	Ferro Corporation
GROUND COAT			
METHOD OF FORMING PARTICLES FOR USE IN	09992485	6596042	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING			
SLURRIES AND THE PARTICLES FORMED BY THE PROCESS			

Title	App. No.	Patent No.	Owner
ORTHOPEDIC MIXTURES PREPARED BY	09658252	6579532	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			•
TECHNIQUES			
Y5V DIELECTRIC COMPOSITION	11107358	7230817	Ferro Corporation
POLYMER MATRICES PREPARED BY	09658251	6521258	Ferro Corporation
SUPERCRITICAL FLUID PROCESSING			
TECHNIQUES			
LEAD-FREE AND CADMIUM-FREE	10864304	7176152	Ferro Corporation
CONDUCTIVE COPPER THICK FILM PASTES			
SILVER INK FOR FORMING ELECTRODES	09977623	6517931	Ferro Corporation
SLURRY FOR CHEMICAL MECHANICAL	10192815	6544892	Ferro Corporation
POLISHING SILICON DIOXIDE			•
ENAMEL AND GROUND COAT COMPOSITIONS	12768213	8778455	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING	12673834	8409990	Ferro Corporation
COMPOSITIONS AND METHODS OF MAKING			1
AND USING THE SAME			
METHOD OF DECORATING LAMINATED GLASS	12567876	7955470	Ferro Corporation
HOT-MELT SEALING GLASS COMPOSITIONS	12532424	8307674	Ferro Corporation
AND METHODS OF MAKING AND USING THE			1
SAME			
SLURRY FOR CHEMICAL MECHANICAL	10192471	6627107	Ferro Corporation
POLISHING SILICON DIOXIDE			1
METHOD OF MAKING MULTILAYER	12464980	8043721	Ferro Corporation
STRUCTURES USING TAPES ON NON-			1
DENSIFYING SUBSTRATES			
X8R DIELECTRIC COMPOSITION FOR USE WITH	12434752	7727922	Ferro Corporation
NICKEL ELECTRODES			1
ULTRA LOW TEMPERATURE FIXED X7R AND	11681796	7521390	Ferro Corporation
BX DIELECTRIC CERAMIC COMPOSITION AND			1
METHOD OF MAKING			
ZINC CONTAINING GLASSES AND ENAMELS	12368331	8007930	Ferro Corporation
CORUNDUM CRYSTAL STRUCTURE PIGMENTS	12210453		Ferro Corporation
WITH REDUCED SOLUBLE CHROMIUM			1
CONTENT			
METHOD FOR PRODUCING SOLID-LIPID	12124518	8642091	Ferro Corporation
COMPOSITE DRUG PARTICLES			+ F
SUPERCRITICAL FLUID EXTRACTION	12017414		Ferro Corporation
PRODUCED BY IN-LINE HOMOGENIZATION			
METHODS FOR THE PURIFICATION OF	12017399	7745566	Ferro Corporation
POLYMERS			
SPECIAL EFFECT PIGMENTS	11995001	8172935	Ferro Corporation
ULTRA LOW-EMISSIVITY (ULTRA LOW E)	11781982	7833439	Ferro Corporation
SILVER COATING	11,01,02		2 circ corporation
FOREHEARTH CONCENTRATE AND METHOD	11758273	7737062	Ferro Corporation
FOR OPALIZATION OF GLASS	11,002,3	1.27002	Title Corporation
METHOD FOR THE PRODUCTION OF POROUS	11748095	8207236	Ferro Corporation
PARTICLES	11, 100,5	320,230	2 Site Corporation
SLURRY COMPOSITION AND METHOD FOR	11689543	7467988	Ferro Corporation
POLISHING ORGANIC POLYMER-BASED	11305513	,	- Circ Corporation
POLISHING ORGANIC POLYMER-BASED			

Title	App. No.	Patent No.	Owner
OPHTHALMIC SUBSTRATES			
AUTO-STOPPING SLURRIES FOR CHEMICAL-	11678248	7696095	Ferro Corporation
MECHANICAL POLISHING OF TOPOGRAPHIC			
DIELECTRIC SILICON DIOXIDE			
X8R DIELECTRIC COMPOSITION FOR USE WITH	11623905	7541306	Ferro Corporation
NICKEL ELECTRODES			
LEAD-FREE AND CADMIUM-FREE	11609998	7504349	Ferro Corporation
CONDUCTIVE COPPER THICK FILM PASTES	11460700	75.472.60	E C .:
METHOD OF MAKING MULTILAYER	11468798	7547369	Ferro Corporation
STRUCTURES USING TAPES ON NON- DENSIFYING SUBSTRATES			
SYNTHESIS OF NICKEL NANOPOWDERS	11462729	7819939	Ferro Corporation
BUTYL LACTATE EMULSIONS FOR THE	11402729	7595348	Ferro Corporation
PRECIPITATION OF WATER-INSOLUBLE DRUG	11420033	7393346	Terro corporation
NANOPARTICLES			
SUBSTANTIALLY SPHERICAL COMPOSITE	11380980	7687401	Ferro Corporation
CERIA/TITANIA PARTICLES	11000000	, 30, 101	Terro corporation
SLURRY FOR CHEMICAL MECHANICAL	10617510	7091164	Ferro Corporation
POLISHING SILICON DIOXIDE			1
COG DIELECTRIC COMPOSITION FOR USE	10599925	7858548	Ferro Corporation
WITH NICKEL ELECTRODES			_
EXTENDED FIRING RANGE ENAMELS TO	10599370	8092911	Ferro Corporation
PRODUCE FROST EFFECTS			
METHODS OF FORMING AND DETECTING NON-	10597781	8006909	Ferro Corporation
VISIBLE MARKS AND ARTICLES MARKED IN			
ACCORDANCE WITH THE METHODS			
PORCELAIN ENAMEL HAVING A METALLIC	10585526	7763557	Ferro Corporation
APPEARANCE	10110051	(02026	
X7R DIELECTRIC COMPOSITION	10440051	6828266	Ferro Corporation
SLURRY FOR CHEMICAL MECHANICAL	09526286	6491843	Ferro Corporation
POLISHING SILICON DIOXIDE	09456612	6468910	Farma Componetion
SLURRY FOR CHEMICAL MECHANICAL POLISHING SILICON DIOXIDE	09436612	0408910	Ferro Corporation
LEAD-FREE ALKALI METAL-FREE GLASS	09205287	6255220	Ferro Corporation
COMPOSITIONS	09203287	0233239	Terro Corporation
PARTIALLY CRYSTALLIZING ENAMEL	09022477	5900319	Ferro Corporation
CONTAINING CRYSTALLINE ZINC BORATE	09022177	3700317	Terro corporation
SEED MATERIAL			
PARTIALLY CRYSTALLIZING ENAMEL	08637445	5677251	Ferro Corporation
CONTAINING CRYSTALLINE ZINC BORATE			
SEED MATERIAL			
PARTIALLY CRYSTALLIZING CERAMIC	08569905	5714420	Ferro Corporation
ENAMEL COMPOSITION CONTAINING			_
BISMUTH SILICATE, AND USE THEREOF			
LEAD-FREE GLASS FRITS FOR CERAMIC	08447055	5559059	Ferro Corporation
ENAMELS			

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RECORDED: 08/12/2014