

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT2978902

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	RELEASE OF SECURITY INTEREST IN PATENT COLLATERAL (RELEASES RF 017746/0042)
<b>SEQUENCE:</b>	2

## CONVEYING PARTY DATA

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

## RECEIVING PARTY DATA

<b>Name:</b>	FERRO COLOR & GLASS CORPORATION
<b>Street Address:</b>	1000 LAKESIDE AVENUE
<b>City:</b>	CLEVELAND
<b>State/Country:</b>	OHIO
<b>Postal Code:</b>	44114

## PROPERTY NUMBERS Total: 6

Property Type	Number
Patent Number:	5925160
Patent Number:	5753685
Patent Number:	6022624
Patent Number:	6624104
Patent Number:	6207285
Patent Number:	5616417

## CORRESPONDENCE DATA

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<b>ATTORNEY DOCKET NUMBER:</b>	030786-0429
<b>NAME OF SUBMITTER:</b>	ANNA T KWAN
<b>SIGNATURE:</b>	/atk/
<b>DATE SIGNED:</b>	08/12/2014

PATENT

**Total Attachments: 26**

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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 017746/0052 for those patents listed on Schedule E;

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;

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 Schedule I;

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 Schedule J;

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 Schedule K;

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 Schedule L;

WHEREAS, the After-acquired Intellectual Property Security Agreement (First Supplemental Filing) dated March 31, 2009 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 Schedule P;

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.

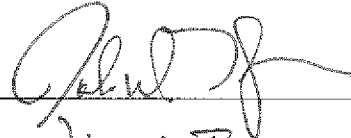
NOW, THEREFORE, for good and valuable consideration, receipt and sufficiency of which is hereby acknowledged:

SECTION 1. 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: John W. Thompson  
Title: SVP

### 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

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

### 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

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

### 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

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

### 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

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



**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

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

**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

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

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



### 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 COMPOSITION CONTAINING BISMUTH SILICATE, AND USE THEREOF	08964267	5968659	Ferro Corporation
PARTIALLY CRYSTALLIZING LEAD-FREE ENAMEL COMPOSITION FOR AUTOMOBILE GLASS	08784924	5783507	Ferro Corporation
LEAD-FREE ALKALI METAL-FREE GLASS COMPOSITIONS	09205287	6255239	Ferro Corporation
PARTIALLY CRYSTALLIZING ENAMEL CONTAINING CRYSTALLINE ZINC BORATE SEED MATERIAL	09022477	5900319	Ferro Corporation
PARTIALLY CRYSTALLIZING ENAMEL CONTAINING CRYSTALLINE ZINC BORATE SEED MATERIAL	08637445	5677251	Ferro Corporation
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL COMPOSITION CONTAINING BISMUTH SILICATE, AND USE THEREOF	08569905	5714420	Ferro Corporation
LEAD-FREE GLASS FRITS FOR CERAMIC ENAMELS	08447055	5559059	Ferro Corporation

### 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 CADMIUM FREE ELECTRONIC OVERGLAZE APPLIED THERETO	10431346	7740899	Ferro Corporation
MIXING SYSTEM FOR PROCESSES USING SUPERCRITICAL FLUIDS	08882022	5993747	Ferro Corporation
METHOD OF MAKING INSULATED ELECTRICAL HEATING ELEMENT USING LTCC TAPE	08587312	5657532	Ferro Corporation

### 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 STRUCTURES	11131919	7832233	Ferro Corporation
HYDROTHERMAL SYNTHESIS OF CERIUM-TITANIUM OXIDE FOR USE IN CMP	11283530	7666239	Ferro Corporation
PROCESS FOR STRUCTURING SELF-CLEANING GLASS SURFACES	11115945	7527832	Ferro Corporation
STRUCTURED SELF-CLEANING SURFACES AND METHOD OF FORMING SAME	11115946	7524531	Ferro Corporation
ETHER-ESTER PLASTICIZERS	11164558	7498372	Ferro Corporation
COPPER TERMINATION INKS CONTAINING LEAD FREE AND CADMIUM FREE GLASSES FOR CAPACITORS	11201278	7339780	Ferro Corporation
METHOD OF REMOVING SPECTATOR IONS FROM AQUEOUS SUSPENSION OF SOLID PARTICLES	10917829	7318897	Ferro Corporation
SLURRY COMPOSITION AND METHOD OF USE	10444104	7300478	Ferro Corporation
SLURRY COMPOSITION AND METHOD FOR POLISHING ORGANIC POLYMER-BASED OPHTHALMIC SUBSTRATES	11102555	7294044	Ferro Corporation
FOREHEARTH CONCENTRATE AND METHOD FOR OPALIZATION OF GLASS	11211133	7265069	Ferro Corporation
Y5V DIELECTRIC COMPOSITION	11107358	7230817	Ferro Corporation
LIGHT FIXTURE WITH REFLECTIVE POLYMERIC COMPOSITION AND PIGMENT PACAKGE	10996918	7176607	Ferro Corporation
LEAD-FREE AND CADMIUM-FREE CONDUCTIVE COPPER THICK FILM PASTES	10864304	7176152	Ferro Corporation
COG DIELECTRIC COMPOSITION FOR USE WITH COPPER ELECTRODES	11235656	7161795	Ferro Corporation
CHEMICAL-MECHANICAL POLISHING SLURRY AND METHOD	10749726	7101800	Ferro Corporation
TRANSPARENT TILE GLAZE	10732903	7037868	Ferro Corporation
METHOD OF MICRO AND NANO TEXTURING GLASS	10452845	6997018	Ferro Corporation
CHROMIUM BEARING FOREHEARTH COLOR CONCENTRATE	10602533	6984597	Ferro Corporation
COPPER TERMINATION INKS CONTAINING LEAD FREE AND CADMIUM FREE GLASSES FOR CAPACITORS	10864309	6982864	Ferro Corporation
POLYMER-WOOD COMPOSITES AND ADDITIVE SYSTEMS THEREFOR	10426943	6942829	Ferro Corporation
DURABLE GLASS ENAMEL COMPOSITION	10408737	6936556	Ferro Corporation
PORCELAIN ENAMEL HAVING METALLIC APPEARANCE	10274835	6831027	Ferro Corporation
PROCESS FOR PRODUCING ABRASIVE PARTICLES AND ABRASIVE PARTICLES PRODUCED BY THE	10255136	6818030	Ferro Corporation

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 AND METHOD	09692730	6702954	Ferro Corporation
METHOD OF DECORATING A CERAMIC ARTICLE	09729650	6696100	Ferro Corporation
METHOD OF FABRICATING A COPPER DAMASCENE STRUCTURE	10266169	6660639	Ferro Corporation
CONTINUOUS CALCINATION OF MIXED METAL OXIDES	09928972	6652829	Ferro Corporation
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 CHEMICAL-MECHANICAL POLISHING SLURRIES AND THE PARTICLES FORMED BY THE PROCESS	09992485	6596042	Ferro Corporation
ORTHOPEDIC MIXTURES PREPARED BY SUPERCRITICAL FLUID PROCESSING TECHNIQUES	09658252	6579532	Ferro Corporation
POLYMER MATRICES PREPARED BY SUPERCRITICAL FLUID PROCESSING TECHNIQUES	09658251	6521258	Ferro Corporation
SILVER INK FOR FORMING ELECTRODES	09977623	6517931	Ferro Corporation
EASY-TO-CLEAN MATTE ACID RESISTANT GROUND COAT	09906177	6511931	Ferro Corporation
SLURRY FOR CHEMICAL-MECHANICAL POLISHING COPPER DAMASCENE STRUCTURES	09692729	6508953	Ferro Corporation
MANUFACTURING ORTHOPEDIC PARTS USING SUPERCRITICAL FLUID PROCESSING TECHNIQUES	09658250	6506213	Ferro Corporation
INFRARED REFLECTIVE COLOR PIGMENT	09745291	6454848	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 THERMALLY CURING CONDUCTIVE GEL	09399546	6210520	Ferro Corporation
SCREEN PRINTABLE CURABLE CONDUCTIVE MATERIAL COMPOSITION	09408568	6204303	Ferro Corporation
INFRARED REFLECTIVE COLOR PIGMENT	09178957	6174360	Ferro Corporation
HIGH TEMPERATURE SEALING GLASS	09145112	6124224	Ferro Corporation
GLASS ENAMEL FOR AUTOMOTIVE APPLICATIONS	09228702	6105394	Ferro Corporation
MIXING SYSTEM FOR PROCESSES USING SUPERCRITICAL FLUIDS	08882707	6054103	Ferro Corporation
SCREEN PRINTABLE THERMALLY CURING CONDUCTIVE GEL	08884829	6020424	Ferro Corporation
PORCELAIN ENAMEL COMPOSITION FOR ELECTRONIC APPLICATIONS	08995584	5998037	Ferro Corporation

<b>Title</b>	<b>App. No.</b>	<b>Patent No.</b>	<b>Owner</b>
SCREEN PRINTABLE UV CURABLE CONDUCTIVE MATERIAL COMPOSITION	08884995	5968606	Ferro Corporation
RESETTABLE FUSE	09190032	5963121	Ferro Corporation
METHOD OF MAKING CONDUCTIVE ELECTRODES FOR USE IN MULTILAYER CERAMIC CAPACITORS OR INDUCTORS USING ORGANOMETALLIC INK	08922705	5897912	Ferro Corporation
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 GLASS BEVERAGE CONTAINERS AND METHODS FOR USING THE SAME	08403259	5725919	Ferro Corporation
CONDUCTIVE SILVER LOW TEMPERATURE COFIRED METALLIC GREEN TAPE	08579076	5714246	Ferro Corporation
CONTROL SYSTEM FOR PROCESSES USING SUPERCRITICAL FLUIDS	08810965	5698163	Ferro Corporation
METHOD OF INTEGRATING ELECTRONIC COMPONENTS INTO ELECTRONIC CIRCUIT STRUCTURES MADE USING LTCC TAPE	08497239	5661882	Ferro Corporation
NPO DIELECTRIC CERAMIC COMPOSITIONS AND CAPACITORS MADE THEREFROM	08548710	5599757	Ferro Corporation
SCREEN PRINTABLE DECORATIVE COATING COMPOSITION	08390884	5549929	Ferro Corporation

### 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

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

**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

<b>Title</b>	<b>App. No.</b>	<b>Patent No.</b>	<b>Owner</b>
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



Title	App. No.	Patent No.	Owner
APPEARANCE			
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

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

**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

<b>Title</b>	<b>App. No.</b>	<b>Patent No.</b>	<b>Owner</b>
POWDER COATING COMPOSITION COMPRISING UNSATURATED POLYESTERS AND USES THERE OF	09075965	6194525	Ferro Corporation
WHITE ENAMEL FOR ALUMINIZED OR GALVANIZED STEEL	09932472	6566289	Ferro Corporation
ZINC CONTAINING GLASSES AND ENAMELS	12368331	8007930	Ferro Corporation
CORUNDUM CRYSTAL STRUCTURE PIGMENTS WITH REDUCED SOLUBLE CHROMIUM CONTENT	12210453		Ferro Corporation
METHOD FOR PRODUCING SOLID-LIPID COMPOSITE DRUG PARTICLES	12124518	8642091	Ferro Corporation
SUPERCRITICAL FLUID EXTRACTION PRODUCED BY IN-LINE HOMOGENIZATION	12017414		Ferro Corporation
METHODS FOR THE PURIFICATION OF POLYMERS	12017399	7745566	Ferro Corporation
SPECIAL EFFECT PIGMENTS	11995001	8172935	Ferro Corporation
ULTRA LOW-EMISSIVITY (ULTRA LOW E) SILVER COATING	11781982	7833439	Ferro Corporation
FOREHEARTH CONCENTRATE AND METHOD FOR OPALIZATION OF GLASS	11758273	7737062	Ferro Corporation
METHOD FOR THE PRODUCTION OF POROUS PARTICLES	11748095	8207236	Ferro Corporation
SLURRY COMPOSITION AND METHOD FOR POLISHING ORGANIC POLYMER-BASED OPHTHALMIC SUBSTRATES	11689543	7467988	Ferro Corporation
AUTO-STOPPING SLURRIES FOR CHEMICAL-MECHANICAL POLISHING OF TOPOGRAPHIC DIELECTRIC SILICON DIOXIDE	11678248	7696095	Ferro Corporation
X8R DIELECTRIC COMPOSITION FOR USE WITH NICKEL ELECTRODES	11623905	7541306	Ferro Corporation
LEAD-FREE AND CADMIUM-FREE CONDUCTIVE COPPER THICK FILM PASTES	11609998	7504349	Ferro Corporation
METHOD OF MAKING MULTILAYER STRUCTURES USING TAPES ON NON-DENSIFYING SUBSTRATES	11468798	7547369	Ferro Corporation
SYNTHESIS OF NICKEL NANOPOWDERS	11462729	7819939	Ferro Corporation
BUTYL LACTATE EMULSIONS FOR THE PRECIPITATION OF WATER-INSOLUBLE DRUG NANOPARTICLES	11420035	7595348	Ferro Corporation
SUBSTANTIALLY SPHERICAL COMPOSITE CERIA/TITANIA PARTICLES	11380980	7687401	Ferro Corporation

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

**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

<b>Title</b>	<b>App. No.</b>	<b>Patent No.</b>	<b>Owner</b>
LYOPHILIZATION METHOD AND APPARATUS FOR PRODUCING PARTICLES	11078554	7073349	Ferro Corporation
METHOD AND APPARATUS FOR ENHANCED SIZE REDUCTION OF PARTICLES USING SUPERCRITICAL FLUID LIQUEFACTION OF MATERIALS	10932559	6986846	Ferro Corporation
METHOD AND APPARATUS FOR PRODUCING PARTICLES USING SUPERCRITICAL FLUID	10789422	7455797	Ferro Corporation
PRODUCTION OF POROUS MATERIALS BY SUPERCRITICAL FLUID PROCESSING	10552008	7901606	Ferro Corporation
METHOD AND APPARATUS FOR ENHANCED SIZE REDUCTION OF PARTICLES	10541909	8535720	Ferro Corporation
METHOD AND APPARATUS FOR SUPERCRITICAL FLUID ASSISTED PARTICLE PRODUCTION	10541292	8142814	Ferro Corporation
METHOD FOR PREPARATION OF PARTICLES FROM SOLUTION-IN-SUPERCRITICAL FLUID OR COMPRESSED GAS EMULSIONS	10534665	7279181	Ferro Corporation
NANOPARTICLES FROM SUPERCRITICAL FLUID ANTISOLVENT PROCESS USING PARTICLE GROWTH AND AGGLOMERATION RETARDANTS	10531160	7767118	Ferro Corporation
METHOD AND APPARATUS FOR PRODUCING COMPOSITE PARTICLES USING SUPERCRITICAL FLUID AS PLASTICIZING AND EXTRACTING AGENT	10531008	7449136	Ferro Corporation
COMPOSITE PARTICLES AND METHOD FOR PREPARING	10441137	6966990	Ferro Corporation
LYOPHILIZATION METHOD AND APPARATUS FOR PRODUCING PARTICLES	10434435	6931888	Ferro Corporation
METHOD AND APPARATUS FOR CONTINUOUS PARTICLE PRODUCTION USING SUPERCRITICAL FLUID	10434426	7083748	Ferro Corporation
PARTICLES FROM SUPERCRITICAL FLUID EXTRACTION OF EMULSION	10423492	6998051	Ferro Corporation
METHOD OF FORMING PARTICLES	10536330	7208106	Ferro Corporation
METHOD OF MAKING MULTILAYER STRUCTURES USING TAPES ON NON-DENSIFYING SUBSTRATES	12464980	8043721	Ferro Corporation
X8R DIELECTRIC COMPOSITION FOR USE WITH NICKEL ELECTRODES	12434752	7727922	Ferro Corporation
ULTRA LOW TEMPERATURE FIXED X7R AND BX DIELECTRIC CERAMIC COMPOSITION AND METHOD OF MAKING	11681796	7521390	Ferro Corporation

**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

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

**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

<b>Title</b>	<b>App. No.</b>	<b>Patent No.</b>	<b>Owner</b>
LIGHT FIXTURE WITH REFLECTIVE POLYMERIC COMPOSITION AND PIGMENT PACAKGE	10996918	7176607	Ferro Corporation
PARTIALLY CRYSTALLIZING LEAD-FREE ENAMEL COMPOSITION FOR AUTOMOBILE GLASS	09078659	5925160	Ferro Corporation
POWDER COATING COMPOSITION COMPRISING UNSATURATED POLYESTERS AND USES THERE OF	09075965	6194525	Ferro Corporation
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL COMPOSITION CONTAINING BISMUTH SILICATE, AND USE THEREOF	08964267	5968659	Ferro Corporation
LASER MARKING METHOD AND APPARATUS	08951411	6238847	Ferro Corporation
PARTIALLY CRYSTALLIZING ENAMEL CONTAINING CRYSTALLINE ZINC BORATE SEED MATERIAL	08876426	5753685	Ferro Corporation
VINYL HALIDE POLYMER COLOR CONCENTRATE	08796603	5843524	Ferro Corporation
CONDUCTIVE SILVER LOW TEMPERATURE COFIRED METALLIC GREEN TAPE	08579076	5714246	Ferro Corporation
WHITE ENAMEL FOR ALUMINIZED OR GALVANIZED STEEL	09932472	6566289	Ferro Corporation
SLURRY FOR CHEMICAL-MECHANICAL POLISHING COPPER DAMASCENE STRUCTURES	09692729	6508953	Ferro Corporation
PARTIALLY CRYSTALLIZING LEAD-FREE ENAMEL COMPOSITION FOR AUTOMOBILE GLASS	09303683	6022624	Ferro Corporation
PARTIALLY CRYSTALLIZING LEAD-FREE ENAMEL COMPOSITION FOR AUTOMOBILE GLASS	08784924	5783507	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

Title	App. No.	Patent No.	Owner
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
LYOPHILIZATION METHOD AND APPARATUS FOR PRODUCING PARTICLES	11078554	7073349	Ferro Corporation
METHOD AND APPARATUS FOR ENHANCED SIZE REDUCTION OF PARTICLES USING SUPERCRITICAL FLUID LIQUEFACTION OF MATERIALS	10932559	6986846	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
METHOD AND APPARATUS FOR PRODUCING PARTICLES USING SUPERCRITICAL FLUID	10789422	7455797	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
INORGANIC PIGMENTS	10649317	7014701	Ferro Corporation
CHROMIUM BEARING FOREHEARTH COLOR CONCENTRATE	10602533	6984597	Ferro Corporation
PRODUCTION OF POROUS MATERIALS BY SUPERCRITICAL FLUID PROCESSING	10552008	7901606	Ferro Corporation
METHOD AND APPARATUS FOR ENHANCED SIZE REDUCTION OF PARTICLES	10541909	8535720	Ferro Corporation
METHOD AND APPARATUS FOR SUPERCRITICAL FLUID ASSISTED PARTICLE PRODUCTION	10541292	8142814	Ferro Corporation
METHOD FOR PREPARATION OF PARTICLES FROM SOLUTION-IN-SUPERCRITICAL FLUID OR COMPRESSED GAS EMULSIONS	10534665	7279181	Ferro Corporation
NANOPARTICLES FROM SUPERCRITICAL FLUID ANTISOLVENT PROCESS USING PARTICLE GROWTH AND AGGLOMERATION RETARDANTS	10531160	7767118	Ferro Corporation
METHOD AND APPARATUS FOR PRODUCING COMPOSITE PARTICLES USING SUPERCRITICAL FLUID AS PLASTICIZING AND EXTRACTING AGENT	10531008	7449136	Ferro Corporation



<b>Title</b>	<b>App. No.</b>	<b>Patent No.</b>	<b>Owner</b>
METHOD OF MICRO AND NANO TEXTURING GLASS	10452845	6997018	Ferro Corporation
SLURRY COMPOSITION AND METHOD OF USE	10444104	7300478	Ferro Corporation
COMPOSITE PARTICLES AND METHOD FOR PREPARING	10441137	6966990	Ferro Corporation
LYOPHILIZATION METHOD AND APPARATUS FOR PRODUCING PARTICLES	10434435	6931888	Ferro Corporation
METHOD AND APPARATUS FOR CONTINUOUS PARTICLE PRODUCTION USING SUPERCRITICAL FLUID	10434426	7083748	Ferro Corporation
ELECTRONIC DEVICE HAVING LEAD AND CADMIUM FREE ELECTRONIC OVERGLAZE APPLIED THERETO	10431346	7740899	Ferro Corporation
PARTICLES FROM SUPERCRITICAL FLUID EXTRACTION OF EMULSION	10423492	6998051	Ferro Corporation
DURABLE GLASS ENAMEL COMPOSITION	10408737	6936556	Ferro Corporation
GLYCERIN TRIESTER PLASTICIZER	10314917	6740254	Ferro Corporation
PORCELAIN ENAMEL HAVING METALLIC APPEARANCE	10274835	6831027	Ferro Corporation
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
HIGH DURABILITY LOW TEMPERATURE LEAD-FREE GLASS AND ENAMEL COMPOSITIONS WITH LOW BORON CONTENT	09916302	6624104	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

Title	App. No.	Patent No.	Owner
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL COMPOSITION CONTAINING BISMUTH SILICATE, AND USE THEREOF	09305357	6207285	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
MIXING SYSTEM FOR PROCESSES USING SUPERCRITICAL FLUIDS	08882022	5993747	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
LEAD-FREE GLASS FRITS FOR CERAMIC ENAMELS	08661894	5616417	Ferro Corporation
METHOD OF MAKING INSULATED ELECTRICAL HEATING ELEMENT USING LTCC TAPE	08587312	5657532	Ferro Corporation
NPO DIELECTRIC CERAMIC COMPOSITIONS AND CAPACITORS MADE THEREFROM	08548710	5599757	Ferro Corporation
METHOD OF INTEGRATING ELECTRONIC COMPONENTS INTO ELECTRONIC CIRCUIT STRUCTURES MADE USING LTCC TAPE	08497239	5661882	Ferro Corporation
LEAD-FREE GLASS ENAMELS FOR DECORATING GLASS BEVERAGE CONTAINERS AND METHODS FOR USING THE SAME	08403259	5725919	Ferro Corporation
SCREEN PRINTABLE DECORATIVE COATING COMPOSITION	08390884	5549929	Ferro Corporation
POLYMER-WOOD COMPOSITES AND ADDITIVE SYSTEMS THEREFOR	10426943	6942829	Ferro Corporation
METHOD OF FORMING PARTICLES	10536330	7208106	Ferro Corporation
EASY-TO-CLEAN MATTE ACID RESISTANT GROUND COAT	09906177	6511931	Ferro Corporation
METHOD OF FORMING PARTICLES FOR USE IN CHEMICAL-MECHANICAL POLISHING SLURRIES AND THE PARTICLES FORMED BY THE PROCESS	09992485	6596042	Ferro Corporation

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

Title	App. No.	Patent No.	Owner
OPHTHALMIC SUBSTRATES			
AUTO-STOPPING SLURRIES FOR CHEMICAL-MECHANICAL POLISHING OF TOPOGRAPHIC DIELECTRIC SILICON DIOXIDE	11678248	7696095	Ferro Corporation
X8R DIELECTRIC COMPOSITION FOR USE WITH NICKEL ELECTRODES	11623905	7541306	Ferro Corporation
LEAD-FREE AND CADMIUM-FREE CONDUCTIVE COPPER THICK FILM PASTES	11609998	7504349	Ferro Corporation
METHOD OF MAKING MULTILAYER STRUCTURES USING TAPES ON NON-DENSIFYING SUBSTRATES	11468798	7547369	Ferro Corporation
SYNTHESIS OF NICKEL NANOPOWDERS	11462729	7819939	Ferro Corporation
BUTYL LACTATE EMULSIONS FOR THE PRECIPITATION OF WATER-INSOLUBLE DRUG NANOPARTICLES	11420035	7595348	Ferro Corporation
SUBSTANTIALLY SPHERICAL COMPOSITE CERIA/TITANIA PARTICLES	11380980	7687401	Ferro Corporation
SLURRY FOR CHEMICAL MECHANICAL POLISHING SILICON DIOXIDE	10617510	7091164	Ferro Corporation
COG DIELECTRIC COMPOSITION FOR USE WITH NICKEL ELECTRODES	10599925	7858548	Ferro Corporation
EXTENDED FIRING RANGE ENAMELS TO PRODUCE FROST EFFECTS	10599370	8092911	Ferro Corporation
METHODS OF FORMING AND DETECTING NON-VISIBLE MARKS AND ARTICLES MARKED IN ACCORDANCE WITH THE METHODS	10597781	8006909	Ferro Corporation
PORCELAIN ENAMEL HAVING A METALLIC APPEARANCE	10585526	7763557	Ferro Corporation
X7R DIELECTRIC COMPOSITION	10440051	6828266	Ferro Corporation
SLURRY FOR CHEMICAL MECHANICAL POLISHING SILICON DIOXIDE	09526286	6491843	Ferro Corporation
SLURRY FOR CHEMICAL MECHANICAL POLISHING SILICON DIOXIDE	09456612	6468910	Ferro Corporation
LEAD-FREE ALKALI METAL-FREE GLASS COMPOSITIONS	09205287	6255239	Ferro Corporation
PARTIALLY CRYSTALLIZING ENAMEL CONTAINING CRYSTALLINE ZINC BORATE SEED MATERIAL	09022477	5900319	Ferro Corporation
PARTIALLY CRYSTALLIZING ENAMEL CONTAINING CRYSTALLINE ZINC BORATE SEED MATERIAL	08637445	5677251	Ferro Corporation
PARTIALLY CRYSTALLIZING CERAMIC ENAMEL COMPOSITION CONTAINING BISMUTH SILICATE, AND USE THEREOF	08569905	5714420	Ferro Corporation
LEAD-FREE GLASS FRITS FOR CERAMIC ENAMELS	08447055	5559059	Ferro Corporation