

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM414543

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Atotech Deutschland GmbH		01/31/2017	Gesellschaft Mit Beschränkter Haftung (GmbH): GERMANY
Atotech USA Inc.		01/31/2017	Corporation: DELAWARE

RECEIVING PARTY DATA

Name:	Barclays Bank PLC, as Collateral Agent
Street Address:	745 7th Ave.
City:	New York
State/Country:	NEW YORK
Postal Code:	10019
Entity Type:	Public Limited Company: ENGLAND

PROPERTY NUMBERS Total: 113

Property Type	Number	Word Mark
Registration Number:	3593608	ACIDCLEAN
Registration Number:	0807896	ACTISALT
Registration Number:	0579602	ALKALUME
Registration Number:	1191002	ALPHA
Registration Number:	1455971	ALSTAN
Registration Number:	2603970	ALUMETCH
Registration Number:	2594032	ALUMSEAL
Registration Number:	1427051	ANOKLEEN
Registration Number:	1635201	ARMOR
Registration Number:	3593607	BASICLEAN
Registration Number:	0864839	BESPLATE
Registration Number:	3833259	BIO BOOSTER
Registration Number:	2339271	BONDFILM
Registration Number:	2459150	CERABOND
Registration Number:	2521499	COBALLOY
Registration Number:	3232176	CORRO TRIBLUE
Registration Number:	3197089	CORROSIL
Registration Number:	3474344	CORROTRIBLACK

TRADEMARK

Property Type	Number	Word Mark
Registration Number:	3617969	CORROTRIBLUE
Registration Number:	0779284	CUFLEX
Registration Number:	1924374	CU-LINK
Registration Number:	3609295	CUPRABASE
Registration Number:	0907002	CUPRACID
Registration Number:	3617971	CUPRAETCH
Registration Number:	3673371	CUPRA PRO
Registration Number:	2364524	CUPRAPULSE
Registration Number:	2345800	CUPRASPEED
Registration Number:	4796106	CUPRATECH
Registration Number:	0864087	DC-700
Registration Number:	0789867	DUOZINC
Registration Number:	1595920	DURABOND
Registration Number:	2241064	DYNACHROME
Registration Number:	0943893	ECOLOZINC
Registration Number:	0745643	ECONO-CHROME
Registration Number:	3086502	ECOTRI
Registration Number:	2742826	EDEN
Registration Number:	3786523	ELEVEN 11 END OF LIFE VEHICLE EN
Registration Number:	2438138	EVERPLATE
Registration Number:	0870598	FERRODEX
Registration Number:	0673349	FUMETROL
Registration Number:	2185328	FUTURON
Registration Number:	1460498	HEEF
Registration Number:	4796107	INITECH
Registration Number:	2595292	IMPULSE
Registration Number:	0694410	INTERLOX
Registration Number:	3942922	INTERLOX
Registration Number:	0934772	KLEER AID
Registration Number:	2187120	LUMACHROME
Registration Number:	3596957	MAGNIFY
Registration Number:	0764886	MARK
Registration Number:	4431393	MASTER REMOVER
Registration Number:	1943216	MULTIBOND
Registration Number:	3911283	MULTIPREP
Registration Number:	1394540	NEOGANTH
Registration Number:	4309433	NEOLINK
Registration Number:	2359159	NEOPACT

Property Type	Number	Word Mark
Registration Number:	4796108	NICCOTECH
Registration Number:	2506509	NICHEM
Registration Number:	1382726	NIFLOR
Registration Number:	1343698	NIFLOR
Registration Number:	2650225	NIKOTECT
Registration Number:	1193475	NORTEX
Registration Number:	0823240	NOVIGANTH
Registration Number:	4224620	PALLABOND
Registration Number:	2128462	PD-TECH
Registration Number:	1394539	PRINTOGANTH
Registration Number:	3990390	PROTECTOSTAN
Registration Number:	1076198	PROTOLUX
Registration Number:	0766559	QUATRASID
Registration Number:	4156131	RECOTECT
Registration Number:	0946153	REFLECTA
Registration Number:	1988409	REFLECTALLOY
Registration Number:	3593609	RESISTSTRIP
Registration Number:	0647290	RODIP
Registration Number:	0786989	ROGARD
Registration Number:	0758971	ROKLEEN
Registration Number:	0834938	ROPLATE
Registration Number:	2410592	SATILUME
Registration Number:	4135673	SBP
Registration Number:	1394538	SECURIGANTH
Registration Number:	0666740	SILVERLUME
Registration Number:	4053268	SINGLE BOARD PROCESSOR
Registration Number:	2441559	SOLDERBOND
Registration Number:	4082886	SPHEROLYTE
Registration Number:	0614153	SRHS
Registration Number:	3529591	STANNOPURE
Registration Number:	1363874	SUPREME
Registration Number:	2572820	TECHSEAL
Registration Number:	4941850	TELOTECH
Registration Number:	1129752	TINPEST GARD
Registration Number:	3468468	TRICHROME
Registration Number:	1088444	TRI-CHROME
Registration Number:	3918383	TRIDUR
Registration Number:	1611809	TRI-MAX

Property Type	Number	Word Mark
Registration Number:	1651249	TRI-MAX
Registration Number:	1064214	TRU-PLATE
Registration Number:	1839149	UNIBRITE
Registration Number:	0328162	UNICHROME
Registration Number:	0422307	UNICHROME
Registration Number:	2188776	UNICLEAN
Registration Number:	3624341	UNIFIX
Registration Number:	2334982	UNIPLATE
Registration Number:	3024158	UNIPREP
Registration Number:	3025193	UNIPREP
Registration Number:	3078258	UNISTRIP
Registration Number:	4340307	VIA2
Registration Number:	2699176	ZINTEK
Registration Number:	0991786	ZODIAC
Registration Number:	2886179	ZYLITE
Registration Number:	1589573	MAKROLUX
Registration Number:	1379894	ELECTROPURE
Serial Number:	86873217	TECHDIP
Serial Number:	87177194	UNICOAT

CORRESPONDENCE DATA

Fax Number: 2028357586

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 2028357500

Email: dcip@milbank.com

Correspondent Name: Javier J. Ramos

Address Line 1: 1850 K Street, NW, Suite 1100

Address Line 2: Milbank, Tweed, Hadley & McCloy, LLP

Address Line 4: Washington, D.C. 20006

ATTORNEY DOCKET NUMBER: 28804.14400

NAME OF SUBMITTER: Javier J. Ramos

SIGNATURE: /Javier J. Ramos/

DATE SIGNED: 02/01/2017

Total Attachments: 46

source=Atotech US IP Security Agreement (Execution)#page1.tif

source=Atotech US IP Security Agreement (Execution)#page2.tif

source=Atotech US IP Security Agreement (Execution)#page3.tif

source=Atotech US IP Security Agreement (Execution)#page4.tif

source=Atotech US IP Security Agreement (Execution)#page5.tif

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This **INTELLECTUAL PROPERTY SECURITY AGREEMENT** (as amended, amended and restated, supplemented or otherwise modified from time to time, the "IP Security Agreement") dated January 31, 2017, is among the Persons listed on the signature pages hereof (collectively, the "Grantors") and Barclays Bank PLC, as collateral agent (the "Collateral Agent") for the Secured Parties (as defined in the Credit Agreement referred to below).

WHEREAS, ALPHA 3 B.V., a private company with limited liability (*besloten vennootschap met beperkte aansparakelijkheid*) incorporated under the laws of the Netherlands (the "**Dutch Borrower**") and ALPHA US BIDCO, INC., a Delaware corporation and the direct subsidiary of the Dutch Borrower have entered into the Credit Agreement dated as of January 31, 2017 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), with the Lenders, the L/C Issuers and the Administrative Agent and the other parties thereto. Capitalized terms defined in the Credit Agreement or in the Security Agreement (as defined below) and not otherwise defined herein are used herein as defined in the Credit Agreement or the Security Agreement, as the case may be (and in the event of a conflict, the applicable definition shall be the one given to such term in the Security Agreement).

WHEREAS, as a condition precedent to the making of the Loans by the Lenders from time to time and the issuance of Letters of Credit by the L/C Issuers from time to time, the entry into Secured Hedge Agreements by the Hedge Banks from time to time and the entry into Secured Cash Management Agreements by the Cash Management Banks from time to time, each Grantor has executed and delivered that certain Security Agreement dated January 31, 2017 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), among the Grantors from time to time party thereto and the Collateral Agent.

WHEREAS, under the terms of the Security Agreement, the Grantors have granted to the Collateral Agent, for the benefit of the Secured Parties, a security interest in, among other property, certain intellectual property of the Grantors, and have agreed thereunder to execute this IP Security Agreement for recording with the USPTO and/or the USCO, as applicable.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor agrees as follows:

Section 1. Grant of Security. Each Grantor hereby collaterally assigns and pledges to the Collateral Agent (and its successors and permitted assigns), for the benefit of the Secured Parties, and each Grantor hereby grants to the Collateral Agent (and its successors and permitted assigns), for the benefit of the Secured Parties, a security interest in all of such Grantor's right, title and interest in and to the following, whether now owned or hereafter acquired by the undersigned (the "Collateral"):

(i) all patents and patent applications, including, without limitation, those set forth in Schedule A hereto (the "Patents");

(ii) all trademark and service mark registrations and applications, including, without limitation, those set forth in Schedule B hereto (provided that no security interest shall be granted in United States intent-to-use trademark applications to the extent that, and so long as creation of a security interest therein or the assignment thereof would result in the loss of any material rights therein), together with the goodwill symbolized thereby (the "Trademarks");

(iii) all copyrights, whether registered or unregistered, including, without limitation, the copyright registrations and applications and exclusive copyright licenses set forth in Schedule C hereto (the "Copyrights");

(iv) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Grantor accruing thereunder or pertaining thereto;

(v) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages; and

(vi) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the Collateral of or arising from any of the foregoing;

provided that notwithstanding anything to the contrary contained in the foregoing clauses (i) through (vi), the security interest created hereby shall not extend to, and the term "Collateral" shall not include, any Excluded Assets.

Section 2. Security for Obligations. The grant of a security interest in, the Collateral by each Grantor under this IP Security Agreement secures the payment of all Secured Obligations of such Grantor now or hereafter existing under or in respect of the Secured Documents (as such Secured Documents may be amended, amended and restated, supplemented, replaced, refinanced or otherwise modified from time to time (including any increases of the principal amount outstanding thereunder)), whether direct or indirect, absolute or contingent, and whether for principal, reimbursement obligations, interest, premiums, penalties, fees, indemnifications, contract causes of action, costs, expenses or otherwise. Without limiting the generality of the foregoing, this IP Security Agreement secures, as to each Grantor, the payment of all amounts that constitute part of the Secured Obligations that would be owed by such Grantor to any Secured Party under the Secured Documents but for the fact that they are unenforceable or not allowable due to the existence of a bankruptcy, or reorganization or similar proceeding involving a Loan Party.

Section 3. Recordation. Each Grantor authorizes and requests that the Register of Copyrights, the Commissioner for Patents and the Commissioner for Trademarks record this IP Security Agreement.

Section 4. Execution in Counterparts. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

Section 5. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this IP Security Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

Section 6. Governing Law; Jurisdiction; Etc. (a) THIS IP SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK WITHOUT GIVING EFFECT TO THE CONFLICTS OF LAWS PRINCIPLES THEREOF, BUT INCLUDING SECTION 5-1401 OF THE NEW YORK GENERAL OBLIGATIONS LAW.

(b) EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK CITY IN THE BOROUGH OF MANHATTAN AND OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK SITTING IN THE BOROUGH OF MANHATTAN, AND ANY APPELLATE COURT FROM ANY THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS IP SECURITY AGREEMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS IP SECURITY AGREEMENT SHALL AFFECT ANY RIGHT THAT THE ADMINISTRATIVE AGENT, THE COLLATERAL AGENT, ANY LENDER OR ANY L/C ISSUER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT AGAINST ANY LOAN PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

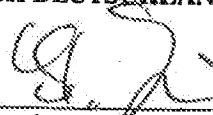
(c) EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS IP SECURITY AGREEMENT IN ANY COURT REFERRED TO IN PARAGRAPH (b) OF THIS SECTION. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 10.02 OF THE CREDIT AGREEMENT. NOTHING IN THIS IP SECURITY AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

(e) EACH PARTY TO THIS IP SECURITY AGREEMENT HEREBY EXPRESSLY WAIVES ANY RIGHT TO TRIAL BY JURY OF ANY CLAIM, DEMAND, ACTION OR CAUSE OF ACTION ARISING UNDER THIS IP SECURITY AGREEMENT OR IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES HERETO OR ANY OF THEM WITH RESPECT TO THIS IP SECURITY AGREEMENT, OR THE TRANSACTIONS RELATED THERETO, IN EACH CASE WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER

FOUNDED IN CONTRACT OR TORT OR OTHERWISE; AND EACH PARTY HEREBY AGREES AND CONSENTS THAT ANY SUCH CLAIM, DEMAND, ACTION OR CAUSE OF ACTION SHALL BE DECIDED BY COURT TRIAL WITHOUT A JURY, AND THAT ANY PARTY TO THIS IP SECURITY AGREEMENT MAY FILE AN ORIGINAL COUNTERPART OR A COPY OF THIS SECTION 6(e) WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE SIGNATORIES HERETO TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

ATOTECH DEUTSCHLAND GMBH




By:

Name: Stephan Loesch

Title: Authorized Signatory

[Atotech -- Intellectual Property Security Agreement]

ATOTECH USA INC.

By: 
Name: Dr. Roland Hagemeyer
Title: Authorized Signatory

[Atotech – Intellectual Property Security Agreement]

TRADEMARK
REEL: 005979 FRAME: 0243

BARCLAYS BANK PLC,
as Collateral Agent

By: 

Name:

Title: **Filippo Crosara**

Director

**SCHEDULE A
PATENTS**

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	palladium layers deposition process	5882736	16-Mar-1999
ATOTECH DEUTSCHLAND GMBH	Electrolytic deposition of Cu with predetermined physical properties	5976341	02-Nov-1999
ATOTECH DEUTSCHLAND GMBH	CONTACT ELEMENT	6887113	03-May-2005
ATOTECH DEUTSCHLAND GMBH	Aqueous, alkaline, cyanide-free zinc (alloy) plating bath containscationic polycondensate of N,N'-bis(dialkylaminoalkyl)urea anddihaloalkane.	6652728	25-Nov-2003
ATOTECH DEUTSCHLAND GMBH	FILM-STRIPPING PROCESS	6059919	09-May-2000
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR THE ELECTROLYTIC DEPOSITION OF METAL LAYERS	6099711	08-Aug-2000
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR MAINTAINING A CONSTANT CONCENTRATION OF SUBSTANCES IN AN ELECTROPLATING BATH	6083374	04-Jul-2000
ATOTECH DEUTSCHLAND GMBH	PROCESS AND SYSTEM FOR ELECTROCHEMICAL TREATMENT OF LONG STRETCHED-OUT ITEMS	6168691	02-Jan-2001
ATOTECH DEUTSCHLAND GMBH	Aqueous bath for electrolytic copper plating.	6425996	30-Jul-2002
ATOTECH DEUTSCHLAND GMBH	PROCESS AND SOLUTION FOR THE PRELIMINARY TREATMENT OF COPPER SURFACES	6562149	13-May-2003
ATOTECH DEUTSCHLAND GMBH	Device for partial electrochemical treatment of bar-shaped objects.	6508926	21-Jan-2003
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR THE ELECTROLYTIC DEPOSITION	6129830	10-Oct-2000

Owner	Title	Patent No.	Issue Date
	OF COPPER LAYERS		
ATOTECH DEUTSCHLAND GMBH	Chemische Mikroreaktoren und Verfahren zu deren Herstellung ¹	6409072	25-Jun-2002
ATOTECH DEUTSCHLAND GMBH	Process for the preliminary treatment of copper surfaces.	6723385	20-Apr-2004
ATOTECH DEUTSCHLAND GMBH	CATHODE FOR ELECTROCHEMICAL REGENERATION OF PERMANGANATE ETCHING SOLUTIONS	7,056,424	06-Jun-2006
ATOTECH DEUTSCHLAND GMBH	METHOD FOR APPLYING A METAL LAYER TO A LIGHT METAL SURFACE	7138043	21-Nov-2006
ATOTECH DEUTSCHLAND GMBH	Elektrisches Kontaktierelement aus elastischem Werkstoff.Electrical contact element made of an elastic material.	6926813	09-Aug-2005
ATOTECH DEUTSCHLAND GMBH	Rotary Element for making electrical contact	7033468	25-Apr-2006
ATOTECH DEUTSCHLAND GMBH	Method of connecting module layers suitable for the production of microstructure modules and a microstructure module ²	7380698	03-Jun-2008
ATOTECH DEUTSCHLAND GMBH	Acid galvanic nickel bath	6919014	19-Jul-2005
ATOTECH DEUTSCHLAND GMBH	Acidic Treatment Liquid and Method of treating Copper Surfaces.	7153449	26-Dec-2006
ATOTECH DEUTSCHLAND GMBH	Bath and Method of Electroless Plating of Silver on Metal Surfaces ³	6,869,637	22-Mar-2005
ATOTECH DEUTSCHLAND GMBH	COPPER BATH AND METHOD OF DEPOSITING A MATT COPPER COATING	7074315	11-Jul-2006

¹ To be abandoned.

² To be abandoned.

³ To be abandoned.

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	METHOD FOR ELECTROLESS NICKEL PLATING	6902765	07-Jun-2005
ATOTECH DEUTSCHLAND GMBH	VERTICAL SYSTEM FOR THE PLATING TREATMENT OF A WORK PIECE AND METHOD FOR CONVEYING THE WORK PIECE	8540853	24-Sep-2013
ATOTECH DEUTSCHLAND GMBH	APPARATUS AND METHOD FOR THE WET CHEMICAL TREATMENT OF A PRODUCT AND METHOD FOR INSTALLING A FLOW MEMBER INTO THE APPARATUS (Lamellenanströmer)	8277602	02-Oct-2012
ATOTECH DEUTSCHLAND GMBH	Segmented counter electrode for an electrolytic treatment system	7473344	06-Jan-2009
ATOTECH DEUTSCHLAND GMBH	Method and Conveyorized System for Electrolytically Processing Work Pieces	7563352	21-Jul-2009
ATOTECH DEUTSCHLAND GMBH	Microstructured cooler for electronic devices and method of production thereof. ⁴	6,865,081	08-Mar-2005
ATOTECH DEUTSCHLAND GMBH	Aqueous Alkaline Zincate Solution and Methods	6790265	14-Sep-2004
ATOTECH DEUTSCHLAND GMBH	AQUEOUS ACIDIC IMMERSION PLATING SOLUTIONS AND METHODS FOR PLATING ALUMINUM AND ALLOYS	7407689	05-Aug-2008
ATOTECH DEUTSCHLAND GMBH	COMPOSITION AND PROCESS FOR IMPROVING THE ADHESION OF A SICCATIVE ORGANIC COATING COMPOSITIONS TO METAL SURFACES.	7223299	29-May-2007
ATOTECH DEUTSCHLAND GMBH	BATHS, SYSTEMS AND PROCESSES FOR	7442286	28-Oct-2008

⁴ To be abandoned.

Owner	Title	Patent No.	Issue Date
	ELECTROPLATING ZINC-NICKEL TERNARY AND HIGHER ALLOYS AND ARTICLES SO ELECTROPLATED		
ATOTECH DEUTSCHLAND GMBH	Iron-phosphorus electroplating bath and method.	7494578	24-Feb-2009
ATOTECH DEUTSCHLAND GMBH	Chromate-plating bath and process for finishing zinc zinc alloy orcadmium surfaces	5876517	02-Mar-1999
ATOTECH DEUTSCHLAND GMBH	Aqueous composition for desmutting aluminum comprises acid, oxidizingagent and optionally a halogenated compound.	6407047	18-Jun-2002
ATOTECH DEUTSCHLAND GMBH	Pre coated micro reactor ⁵	7909987	22-Mar-2011
ATOTECH DEUTSCHLAND GMBH	Multilayer circuit boards and processes of making the same	5928790	27-Jul-1999
ATOTECH DEUTSCHLAND GMBH	Aqueous immersion plating bath and method for plating	6063172	16-May-2000
ATOTECH DEUTSCHLAND GMBH	Copper etching compositions and method for etching copper	6086779	11-Jul-2000
ATOTECH DEUTSCHLAND GMBH	Process for whisker-free aqueous electroless tin plating	6361823	26-Mar-2002
ATOTECH DEUTSCHLAND GMBH	Improved adhesion of polymeric materials to metal surfaces (Durabond + BondFilm)	6506314	14-Jan-2003
ATOTECH DEUTSCHLAND GMBH	Aqueous plating bath for electrodeposition of tin-zinc alloy, comprisesbath-soluble stannous salt(s), zinc salt(s) and quaternary ammoniumpolymer e.g. ureylene quaternary ammonium polymer.	6436269	20-Aug-2002
ATOTECH DEUTSCHLAND GMBH	CONVEYORIZED PLATING LINE AND METHOD FOR ELECTROLYTICALLY METAL	7449089	11-Nov-2008

⁵ To be abandoned.

Owner	Title	Patent No.	Issue Date
	PLATING A WORKPIECE		
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR THE REGULATION OF THE CONCENTRATION OF METAL IONS IN AN ELECTROLYTE AND USE THEREOF	6899803	31-May-2005
ATOTECH DEUTSCHLAND GMBH	Aqueous passivating coating composition for zinc or zinc alloys and method for using same	8262811	11-Sep-2012
ATOTECH DEUTSCHLAND GMBH	DEVICE FOR ELECTROLYTIC TREATMENT OF PRINTED CIRCUIT BOARDS AND CONDUCTIVE FILMS	6238529	29-May-2001
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR REGULATING THE CONCENTRATION OF SUBSTANCES IN ELECTROLYTES	6350362	26-Feb-2002
ATOTECH DEUTSCHLAND GMBH	DEVICE AND METHOD FOR CHEMICALLY AND ELECTROLYTICALLY TREATING WORK PIECES	8656858	25-Feb-2014
ATOTECH DEUTSCHLAND GMBH	DEVICE AND METHOD FOR ELECTROLYTICALLY TREATING FLAT WORK PIECES	7955487	07-Jun-2011
ATOTECH DEUTSCHLAND GMBH	DIRECT ELECTROLYTIC METALLIZATION OF NON-CONDUCTING SUBSTRATES	7025867	11-Apr-2006
ATOTECH DEUTSCHLAND GMBH	Polyvinylammonium halides and its use in galvanic copper deposition baths	8114263	14-Feb-2012
ATOTECH DEUTSCHLAND GMBH	Anti-corrosion treatment for conversion coatings	8435360	07-May-2013
ATOTECH DEUTSCHLAND GMBH	Solderability Enhancer	8337606	25-Dec-2012
ATOTECH DEUTSCHLAND GMBH	Non etching adhesion promoters	8,945,298	03-Feb-2015

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	Amino acids and Peptides for use as Levellers in Copper Plating	8679316	25-Mar-2014
ATOTECH DEUTSCHLAND GMBH	Aqueous Alkaline Zincate Solution and Methods	6811819	02-Nov-2004
ATOTECH DEUTSCHLAND GMBH	COMPOSITION AND METHOD FOR IMPROVED ADHESION OF POLYMERIC MATERIALS TO COPPER OR COPPER ALLOY SURFACES	8192636	05-Jun-2012
ATOTECH DEUTSCHLAND GMBH	Means for manufacturing corrosion protection coats on metal surfaces	8,764,916	01-Jul-2014
ATOTECH DEUTSCHLAND GMBH	APPARATUS AND METHOD FOR THE ELECTROLYTIC TREATMENT OF A PLATE-SHAPED PRODUCT (Plater-Single Board Production)	8545687	01-Oct-2013
ATOTECH DEUTSCHLAND GMBH	ELECTROLESS NICKERL PLATING SOLUTIONS	6800121	05-Oct-2004
ATOTECH DEUTSCHLAND GMBH	IMMERSION PLATING OF SILVER ⁶	7479305	20-Jan-2009
ATOTECH DEUTSCHLAND GMBH	Zincate pretreatment of magnesium	8231743	31-Jul-2012
ATOTECH DEUTSCHLAND GMBH	Iron-phosphorus electroplating bath and method.	7,588,675	15-Sep-2009
ATOTECH DEUTSCHLAND GMBH	Method for Regeneration of etch cleaners containing ferric salts	7520973	21-Apr-2009
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR THE TRANSFER OF POWDERS AND POWDER COATINGS TO SUBSTRATES	7615256	10-Nov-2009
ATOTECH DEUTSCHLAND GMBH	Method for depositing copper in apertures with high aspect ratios	8784634	22-Jul-2014
ATOTECH DEUTSCHLAND GMBH	Soldering of nickel and nickel alloys with NiP ⁷	8042726	25-Oct-2011

⁶ To be abandoned.

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	Crystalline Chromium from trivalent Cr salts at high pH	8187448	29-May-2012
ATOTECH DEUTSCHLAND GMBH	Device for electric supply unit in an apparatus for electrochemical treatment	7815777	19-Oct-2010
ATOTECH DEUTSCHLAND GMBH	Control of the desmear and roughening process in the production of printed circuit boards (especially for sequential build up (SBU) or semi additive process (SAP) - technology) by means of gloss measurement.	8137575	20-Mar-2012
ATOTECH DEUTSCHLAND GMBH	Agent for sealing metallic ground coats, especially ground coats consisting of zinc or zinc alloys	6478886	12-Nov-2002
ATOTECH DEUTSCHLAND GMBH	Device and method for electrolytically treating a workpiece at least superficially electrical conducting	7767065	03-Aug-2010
ATOTECH DEUTSCHLAND GMBH	METHOD FOR CONTINUOUSLY OPERATING ACID OR ALKALINE ZINC OR ZINC ALLOY BATHS	8475874	02-Jul-2013
ATOTECH DEUTSCHLAND GMBH	Crystalline chromium deposit from high pH trivalent chromium plating baths	7887930	15-Feb-2011
ATOTECH DEUTSCHLAND GMBH	NITRIC ACID AND CHROMIC ACID-FREE COMPOSITONS AND PROCESS FOR CLEANING ALUMINUM AND ALUMINUM ALLOYS (Orig.)NITRIC ACID AND CHROMIC ACID-FREE COMPOSITONS AND PROCESS FOR CLEANING ALUMINUM AND ALUMINUM ALLOYS.	7384901	10-Jun-2008
ATOTECH DEUTSCHLAND GMBH	Metal plating composition and method for the deposition of	9263609	16-Feb-2016

⁷ To be abandoned.

Owner	Title	Patent No.	Issue Date
	Copper-Zinc-Tin suitable for manufacturing thin film solar cell		
ATOTECH DEUTSCHLAND GMBH	Online Control of galvanic bath additives	9057145	16-Jun-2015
ATOTECH DEUTSCHLAND GMBH	Method for synthesis of halogenated and pseudo halogenated aromatic phenazinium compounds.	7786303	31-Aug-2010
ATOTECH DEUTSCHLAND GMBH	TREATMENT UNIT FOR THE WET-CHEMICAL OR ELECTROLYTIC TREATMENT OF FLAT WORKPIECES	7993486	09-Aug-2011
ATOTECH DEUTSCHLAND GMBH	METHOD OF MANUFACTURING A CIRCUIT CARRIER AND THE USE OF THE METHOD	8927899	06-Jan-2015
ATOTECH DEUTSCHLAND GMBH	Alkaline galvanizing bath comprising a filtration membrane	8293092	23-Oct-2012
ATOTECH DEUTSCHLAND GMBH	METHOD, CLIP AND DEVICE FOR TRANSPORTING AN ARTICLE TO BE TREATED IN AN ELECTROLYTIC SYSTEM (Folienklammer)	8567590	29-Oct-2013
ATOTECH DEUTSCHLAND GMBH	Electrodialytic regeneration of electroless hypophosphites involves simultaneously guiding bath liquid through dilute compartments in a cathode and anode having second electro dialysis device	6379517	30-Apr-2002
ATOTECH DEUTSCHLAND GMBH	Nozzle Arrangement	7650897	26-Jan-2010
ATOTECH DEUTSCHLAND GMBH	Mixture of oligomeric phenazinium compounds	7872130	18-Jan-2011
ATOTECH DEUTSCHLAND GMBH	Chrome(VI)-free black passivates for surfaces containing zinc	8460534	11-Jun-2013
ATOTECH DEUTSCHLAND GMBH	MICROBIAL DEGRADATION OF WATER-BORNE PAINT CONTAINING HIGH LEVELS	8202424	19-Jun-2012

Owner	Title	Patent No.	Issue Date
	OF ORGANIC SOLVENT		
ATOTECH DEUTSCHLAND GMBH	Antifriction coatings, methods of producing such coatings and articles including such coatings.	7842403	30-Nov-2010
ATOTECH DEUTSCHLAND GMBH	METHOD OF MANUFACTURING PATTERN-FORMING METAL STRUCTURES ON A CARRIER SUBSTRATE	8202567	19-Jun-2012
ATOTECH DEUTSCHLAND GMBH	Mikrostrukturierter Flüssigkeitskühler für IT-Anwendungen ⁸	7987899	02-Aug-2011
ATOTECH DEUTSCHLAND GMBH	Vorbehandlungsverfahren zur direkten leitfähigen Metallisierung von Nichtleitern unter Verwendung eines neuen Culinks	8152914	10-Apr-2012
ATOTECH DEUTSCHLAND GMBH	METHODS OF TREATING A SURFACE TO PROMOTE METAL PLATING AND DEVICES FORMED	8323769	04-Dec-2012
ATOTECH DEUTSCHLAND GMBH	Sulfonated fatty acid additive for electroless nickel plating	8557100	15-Oct-2013
ATOTECH DEUTSCHLAND GMBH	METHOD AND SYSTEM FOR THE TREATMENT OF FLAT FEEDSTOCK, AND DEVICE FÜR REMOVING OR KEEPING AWAY TREATMENT LIQUID (Flüssigkeitsentfernung)	9016230	28-Apr-2015
ATOTECH DEUTSCHLAND GMBH	SILICON SOLAR CELL	8,759,120	24-Jun-2014
ATOTECH DEUTSCHLAND GMBH	Measurement of Satilume Effect	8405833	26-Mar-2013
ATOTECH DEUTSCHLAND GMBH	Corrosion protection treatment for surfaces made of zinc and zinc coatings	8951363	10-Feb-2015
ATOTECH DEUTSCHLAND GMBH	Acidic plating bath and process for electrolytic deposition and	7361262	22-Apr-2008

⁸ To be abandoned.

Owner	Title	Patent No.	Issue Date
	process for deposition of satin bright nickel layers		
ATOTECH DEUTSCHLAND GMBH	Device and method for regenerating an electroless nickel plating bath	7,662,266	16-Feb-2010
ATOTECH DEUTSCHLAND GMBH	Polymers with amino end groups and their use as additives for galvanic zinc and zinc alloy baths	9322107	26-Apr-2016
ATOTECH DEUTSCHLAND GMBH	Treatment solution for producing chromium- and cobalt-free black conversion layers	9005373	14-Apr-2015
ATOTECH DEUTSCHLAND GMBH	White Bronze Plating Bath containing N-methylpyrrolidone	8647491	11-Feb-2014
ATOTECH DEUTSCHLAND GMBH	Highly corrosion resistant NiAu coatings	8304658	06-Nov-2012
ATOTECH DEUTSCHLAND GMBH	Use of thiourea-derivatives for deposition of homogeneous CISE layers	8,828,278	09-Sep-2014
ATOTECH DEUTSCHLAND GMBH	Powder Dispenser for RCF Foil Manufacture	8,715,780	06-May-2014
ATOTECH DEUTSCHLAND GMBH	Composition and method for micro etching of copper and copper alloys	8,758,634	24-Jun-2014
ATOTECH DEUTSCHLAND GMBH	Stress-reduced Ni-Pd Stacks for Bondable or Solderable Waver Surfaces	8986789	24-Mar-2015
ATOTECH DEUTSCHLAND GMBH	Method for Improving the Adhesion Between Silver Surfaces and Resin Materials	8819930	02-Sep-2014
ATOTECH DEUTSCHLAND GMBH	Method to form solder alloy deposits on substrates	8497200	30-Jul-2013
ATOTECH DEUTSCHLAND GMBH	Method to form solder deposits on substrates	8507376	13-Aug-2013
ATOTECH DEUTSCHLAND GMBH	Online STEP Test	8,894,835	25-Nov-2014
ATOTECH DEUTSCHLAND GMBH	METHOD TO FORM SOLDER	8,871,631	28-Oct-2014

Owner	Title	Patent No.	Issue Date
	DEPOSITS ON SUBSTRATES		
ATOTECH DEUTSCHLAND GMBH	Method for control of stabilizer additives in electroless metal and metal alloy plating electrolytes	8648601	11-Feb-2014
ATOTECH DEUTSCHLAND GMBH	Solution and process for increasing the solderability and corrosion resistance of metal or metal alloy surface	8491713	23-Jul-2013
ATOTECH DEUTSCHLAND GMBH	Immersion Tin Plating Bath	9,057,141	16-Jun-2015
ATOTECH DEUTSCHLAND GMBH	Electroless Tin Plating Bath with Amines	8,801,844	12-Aug-2014
ATOTECH DEUTSCHLAND GMBH	Direct Pure Pd surface finish designed for copper wire bonding on printed circuit boards and IC-substrates	8987910	24-Mar-2015
ATOTECH DEUTSCHLAND GMBH	Differential tin etch	9332652	03-May-2016
ATOTECH DEUTSCHLAND GMBH	Wire bondable surface for microelectronic devices	9076773	07-Jul-2015
ATOTECH DEUTSCHLAND GMBH	Electroless Palladium Plating Bath Composition	8,888,903	18-Nov-2014
ATOTECH DEUTSCHLAND GMBH	Method for electroless nickel-phosphorous alloy deposition onto flexible substrates	9089062	21-Jul-2015
ATOTECH DEUTSCHLAND GMBH	Process for metallizing nonconductive plastic surfaces (Rack protection)	9181622	10-Nov-2015
ATOTECH DEUTSCHLAND GMBH	Process for metallizing nonconductive plastic surfaces	9051643	09-Jun-2015
ATOTECH DEUTSCHLAND GMBH	Alkaline plating bath for electroless deposition of cobalt alloys (Bleifreies außenstromloses Cobaltwolframbad)	8,961,670	24-Feb-2015
ATOTECH DEUTSCHLAND GMBH	Method and regeneration apparatus for regenerating a plating composition which is suitable for depositing at least one	9249510	02-Feb-2016

Owner	Title	Patent No.	Issue Date
	first metal on a substrate		
ATOTECH DEUTSCHLAND GMBH	Plating bath for electroless deposition of nickel layers	9175399	03-Nov-2015
ATOTECH DEUTSCHLAND GMBH	Holding Device for a Product and Treatment Method (Waferhalter)	9222192	29-Dec-2015
ATOTECH DEUTSCHLAND GMBH	Manufacture of coated copper pillars	9331040	03-May-2016
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR IMPROVING THE CORROSION RESISTANCE OF METAL SURFACES AND METAL PIECES HAVING IMPROVED CORRSION RESISTANCE	7,101,469	05-Sep-2006
ATOTECH DEUTSCHLAND GMBH	High current density semi-bright and bright zinc sulfur-acid salt electrogalvanizing process and composition	5788822	04-Aug-1998
ATOTECH DEUTSCHLAND GMBH	Apparatus and method for recovering photoresist developers and strippers	5753135	19-May-1998
ATOTECH DEUTSCHLAND GMBH	Silane compositions	6215011	10-Apr-2001
ATOTECH DEUTSCHLAND GMBH	Display Screen with Graphical User Interface	D751592	15-Mar-2016
ATOTECH DEUTSCHLAND GMBH	Device for chemical and/or electrolytic (galvanic) metal deposition on a substrate (MULTIPLATE)	D753734	12-Apr-2016
ATOTECH DEUTSCHLAND GMBH	GALVANIC PROCESS FOR FILLING THROUGH-HOLES WITH METALS, IN PARTICULAR OF PRINTED CIRCUIT BOARDS WITH COPPER	9526183	20-Dec-2016
ATOTECH DEUTSCHLAND GMBH	METHOD AND REGENERATION APPARATUS FOR REGENERATING A PLATING COMPOSITION	9435041	06-Sep-2016

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	METHOD FOR CATHODIC CORROSION PROTECTION OF CHROMIUM SURFACES	9441306	September 13, 2016
ATOTECH DEUTSCHLAND GMBH	METHOD FOR ACTIVATING A COPPER SURFACE FOR ELECTROLESS PLATING	9441299	September 13, 2016
ATOTECH DEUTSCHLAND GMBH	DEVICE FOR VERTICAL GALVANIC METAL, PREFERABLY COPPER, DEPOSITION ON A SUBSTRATE AND A CONTAINER SUITABLE FOR RECEIVING SUCH A DEVICE	9534310	January 3, 2017
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR CORROSION PROTECTION OF IRON CONTAINING MATERIALS	9435047	September 6, 2016
ATOTECH DEUTSCHLAND GMBH	AQUEOUS COMPOSITION FOR ETCHING OF COPPER AND COPPER ALLOYS	9441304	September 13, 2016
ATOTECH DEUTSCHLAND GMBH	METHOD FOR MANUFACTURE OF WIRE BONDABLE AND SOLDERABLE SURFACES ON NOBLE METAL ELECTRODES	9401466	July 26, 2016
ATOTECH DEUTSCHLAND GMBH	Device and Method for the Treatment of Flat Material to Be Treated	9394622	July 19, 2016
ATOTECH DEUTSCHLAND GMBH	ELECTROLESS NICKEL PLATING BATH	9399820	July 26, 2016
ATOTECH DEUTSCHLAND GMBH	METHOD FOR COPPER PLATING	9506158	November 29, 2016
ATOTECH DEUTSCHLAND GMBH	SOLUTION AND PROCESS FOR THE PRE-TREATMENT OF COPPER SURFACES USING AN N-ALKOXYLATED ADHESION-PROMOTING COMPOUND	9504161	November 22, 2016

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	METHOD FOR ELECTROLESS PLATING OF TIN AND TIN ALLOYS	9458541	October 4, 2016
ATOTECH DEUTSCHLAND GMBH	GALVANIC PROCESS FOR FILLING THROUGH-HOLES WITH METALS, IN PARTICULAR OF PRINTED CIRCUIT BOARDS WITH COPPER	9445510	September 13, 2016
ATOTECH DEUTSCHLAND GMBH	PYROPHOSPHATE-CONTAINING BATH FOR CYANIDE-FREE DEPOSITION OF COPPER-TIN ALLOYS	9399824	July 26, 2016
ATOTECH DEUTSCHLAND GMBH	METHOD, RETAINING MEANS, APPARATUS AND SYSTEM FOR TRANSPORTING A FLAT MATERIAL FEEDSTOCK, AND LOADING OR UNLOADING DEVICE	9380708	June 28, 2016
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR THE ELECTROLYTIC TREATMENT OF ELECTRICALLY CONDUCTING STRUCTURES WHICH ARE INSULATED FROM EACH OTHER AND POSITIONED ON THE SURFACE OF ELECTRICALLY INSULATING FILM MATERIALS AND USE OF THE METHOD	6979391	December 27, 2005
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR THE ELECTROLYTIC TREATMENT OF ELECTRICALLY CONDUCTING SURFACES SEPARATED PLATES AND FILM MATERIAL PIECES IN ADDITION TO USES OF SAID METHOD	6939455	September 6, 2005

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	TREATMENT OF CIRCUIT SUPPORT WITH IMPULSE EXCITATION	6908515	June 21, 2005
ATOTECH DEUTSCHLAND GMBH	METHOD OF FORMING A CONDUCTIVE PATTERN ON DIELECTRIC SUBSTRATES	6806034	October 19, 2004
ATOTECH DEUTSCHLAND GMBH	METHOD FOR GALVANICALLY FORMING CONDUCTOR STRUCTURES OF HIGH-PURITY COPPER IN THE PRODUCTION OF INTEGRATED CIRCUITS	6793795	September 21, 2004
ATOTECH DEUTSCHLAND GMBH	METHOD FOR PRODUCING MICROCOMPONENTS	6736983	May 18, 2004
ATOTECH DEUTSCHLAND GMBH	Tin whisker-free printed circuit board	6720499	April 13, 2004
ATOTECH DEUTSCHLAND GMBH	METHOD FOR PRODUCING METALLIZED SUBSTRATE MATERIALS	6706201	March 16, 2004
ATOTECH DEUTSCHLAND GMBH	METHOD FOR PRODUCING SOLDERABLE AND FUNCTIONAL SURFACES ON CIRCUIT CARRIERS	6698648	March 2, 2004
ATOTECH DEUTSCHLAND GMBH	CARRIER SERVING TO SUPPLY CURRENT TO WORKPIECES OR COUNTER-ELECTRODES THAT ARE TO BE TREATED ELECTROLYTICALLY AND A METHOD FOR ELECTROLYTICALLY TREATING WORKPIECE	6695961	February 24, 2004
ATOTECH DEUTSCHLAND GMBH	METALLIZATION OF NON-CONDUCTIVE SURFACES WITH SILVER CATALYST AND ELECTROLESS METAL COMPOSITIONS	6645557	November 11, 2003
ATOTECH DEUTSCHLAND GMBH	Method of producing copper surfaces for improved bonding,	6602440	August 5, 2003

Owner	Title	Patent No.	Issue Date
	compositions used therein and articles made therefrom		
ATOTECH DEUTSCHLAND GMBH	METHOD FOR FORMING A METAL PATTERN ON A DIELECTRIC SUBSTRATE	6593249	July 15, 2003
Atotech USA, Inc.	High current density zinc sulfate electrogalvanizing process and composition	6585812	July 1, 2003
ATOTECH DEUTSCHLAND GMBH	Method of producing copper surfaces for improved bonding, compositions used therein and articles made therefrom	6579591	June 17, 2003
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR THE APPLICATION OF A METAL FILM ON A POLYMER SURFACE OF A SUBJECT	6506293	January 14, 2003
ATOTECH DEUTSCHLAND GMBH	MOUNTING FOR A QUARTZ CRYSTAL	6463787	October 15, 2002
ATOTECH DEUTSCHLAND GMBH	Photosensitive composition	6451498	September 17, 2002
ATOTECH DEUTSCHLAND GMBH	Process for plating metal coatings	6403168	June 11, 2002
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR THE ELECTROLYTIC PROCESSING ESPECIALLY OF FLAT ITEMS AND ARRANGEMENT FOR IMPLEMENTING THE PROCESS	6395163	May 28, 2002
ATOTECH DEUTSCHLAND GMBH	High current density zinc sulfate electrogalvanizing process and composition	6365031	April 2, 2002
ATOTECH DEUTSCHLAND GMBH	METHOD AND SOLUTION FOR PRODUCING GOLD COATING	6336962	January 8, 2002
ATOTECH DEUTSCHLAND GMBH	PALLADIUM COLLOID SOLUTION AND ITS UTILIZATION	6325910	December 4, 2001
DYCONEX PATENTE AG Atotech Deutschland GmbH	Connection substrate	6321443	November 27, 2001

Owner	Title	Patent No.	Issue Date
Vantico, Inc. Fraunhofer-Gesellschaft zur Förderung der Angewandten Forschung E.V. Techn. Universität Dresden			
ATOTECH DEUTSCHLAND GMBH	DEVICE AND METHOD FOR EVENING OUT THE THICKNESS OF METAL LAYERS ON ELECTRICAL CONTACT POINTS ON ITEMS THAT ARE TO BE TREATED	6319383	November 20, 2001
ATOTECH DEUTSCHLAND GMBH	Method of producing copper surfaces for improved bonding, compositions used therein and articles made therefrom	6284309	September 4, 2001
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR TREATING HOLES OR RECESSES EXTENDING INTO WORKPIECES WITH LIQUID TREATMENT MEDIA	6240934	June 5, 2001
ATOTECH DEUTSCHLAND GMBH	SOLUTION FOR PRETREATMENT OF ELECTRICALLY NON- CONDUCTIVE SURFACES, AND METHOD OF COATING THE SURFACES WITH SOLID MATERIAL PARTICLES	6235182	May 22, 2001
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR PLATING METAL COATINGS	6221440	April 24, 2001
ATOTECH DEUTSCHLAND GMBH	METHOD AND APPARATUS FOR ELECTROLYTICALLY TREATING A BOARD- SHAPED SUBSTRATE COMPRISING SHIELDING EDGE REGIONS OF THE SUBSTRATE DURING ELECTROLYTIC TREATMENT	6217736	April 17, 2001
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR THE PRECISE ELECTROLYTIC DEPOSITION AND ETCHING OF METAL LAYERS ON CIRCUIT	6186316	February 13, 2001

Owner	Title	Patent No.	Issue Date
	BOARDS AND CONDUCTORS FOILS IN CONTINUOUS SYSTEMS		
ATOTECH DEUTSCHLAND GMBH	CIRCUITRY AND METHOD FOR AN ELECTROPLATING PLANT OR ETCHING PLANT PULSE POWER SUPPLY	6179984	January 30, 2001
ATOTECH DEUTSCHLAND GMBH	METHOD AND APPARATUS FOR ELECTROLYTICALLY METALLISING OR ETCHING MATERIAL	6176995	January 23, 2001
ATOTECH DEUTSCHLAND GMBH	COMPUTERIZED METHOD AND SYSTEM FOR DESIGNING AN UHOLSTERED PART	6144890	November 7, 2000
ATOTECH DEUTSCHLAND GMBH	PROCESS AND CIRCUITRY FOR GENERATING CURRENT PULSES FOR ELECTROLYTIC METAL DEPOSITION	6132584	October 17, 2000
ATOTECH DUETSCHLAND GMBH	PROCESS FOR MANUFACTURING INDUCTIVE COUNTING SYSTEMS	6120672	September 19, 2000
ATOTECH DEUTSCHLAND GMBH	PROCEDURE AND DEVICE FOR THE CHEMICAL AND ELECTROLYTIC TREATMENT OF PRINTED CIRCUIT BOARDS AND CONDUCTOR FILMS	6077359	June 20, 2000
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR THE ELECTROCHEMICAL TREATMENT WITH TREATMENT LIQUID OF AN ITEM TO BE TREATED	6071400	June 6, 2000
ATOTECH DEUTSCHLAND GMBH	REMOVAL OF ORTHOPHOSPHITE IONS FROM ELECTROLESS NICKEL PLATING BATHS	6048585	April 11, 2000
Atotech USA, Inc.	Fluid delivery method	6045874	April 4, 2000

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR THE TREATMENT OF PLATE-SHAPED WORKPIECES HAVING SMALL HOLES	6016817	January 25, 2000
ATOTECH DEUTSCHLAND GMBH	DEPOSITION OF CHROMIUM OXIDES FROM A TRIVALENT CHROMIUM SOLUTION CONTAINING A COMPLEXING AGENT FOR A BUFFER	6004448	December 21, 1999
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR GALVANIZING PLATE-SHAPED PRODUCTS IN HORIZONTAL CONTINUOUS PLANTS	5932081	August 3, 1999
ATOTECH DEUTSCHLAND GMBH	ETCHANT FOR ALUMINUM ALLOYS	5895563	April 20, 1999
ATOTECH DEUTSCHLAND GMBH	Acid bath for copper plating and process with the use of this combination	5849171	December 15, 1998
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR CONTINUOUS UNIFORM ELECTROLYTIC METALLISING OR ETCHING	5804052	September 8, 1998
ATOTECH DEUTSCHLAND GMBH	DEVICE FOR PROCESSING FLAT WORKPIECES, IN PARTICULAR PRINTED CIRCUIT BOARDS	5772765	June 30, 1998
Atotech USA, Inc.	High current density zinc sulfate electrogalvanizing process and composition	5718818	February 17, 1998
ATOTECH DEUTSCHLAND GMBH	Process for metallization of a nonconductor surface	5693209	5,693,209
ATOTECH DEUTSCHLAND GMBH	ALUMINUM DESMUT COMPOSITION AND PROCESS	5669980	September 23, 1997
ATOTECH DEUTSCHLAND GMBH	HIGH CURRENT DENSITY ZINC CHLORIDE ELECTROGALVANIZING	5656148	August 12, 1997

Owner	Title	Patent No.	Issue Date
	PROCESS AND COMPOSITION		
ATOTECH USA, INC.	HALOGEN TIN COMPOSITION AND ELECTROLYTIC PLATING PROCESS	5628893	May 13, 1997
ATOTECH USA, INC.	FLUID DELIVERY APPARATUS AND METHOD	5614264	March 25, 1997
ATOTECH DEUTSCHLAND GMBH	ETCHANT FOR ALUMINUM ALLOYS	5601695	February 11, 1997
ATOTECH DEUTSCHLAND GMBH	Apparatus for removing resist particles from stripping solutions for printed wireboards	5599444	February 4, 1997
ATOTECH DEUTSCHLAND GMBH	SOLUTION FOR COATING NON-CONDUCTORS WITH CONDUCTIVE POLYMERS AND THEIR METALLIZATION PROCESS	5597471	January 28, 1997
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR TREATING PLASTIC SURFACES AND SWELLING SOLUTION	5591488	January 7, 1997
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR IMPROVING THE COATING OF ELECTROLYTICALLY TREATED WORK PIECES, AND ARRANGEMENT FOR CARRYING OUT THE PROCESS	5558757	September 24, 1996
ATOTECH USA, INC.	TREATMENT METHOD AND APPARATUS FOR PRINTED CIRCUIT BOARDS AND THE LIKE	5553700	September 10, 1996
ATOTECH USA, INC.	Apparatus for treatment of printed circuit boards and the like	5553633	September 10, 1996
ATOTECH DEUTSCHLAND GMBH	Self-accelerating and replenishing non-formaldehyde immersion coating method	5543182	August 6, 1996

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	Method and apparatus for removing resist particles from stripping solutions for printed wireboards	5531889	2-Jul-96
ATOTECH DEUTSCHLAND GMBH	COMPLEX OLIGOMERIC OR POLYMERIC COMPOUNDS FOR THE GENERATION OF METAL SEEDS ON A SUBSTRATE	5503877	2-Apr-96
ATOTECH DEUTSCHLAND GMBH DAN/HOVER C/O LEIF QVIST	SKIRT FOR AN AIR CUSHION VEHICLE AND FILAMENT MEMBER THERETO	5501291	26-Mar-96
ATOTECH USA INC.	TREATMENT METHOD FOR CLEANING AND DRYING PRINTED CIRCUIT BOARDS AND THE LIKE	5494529	27-Feb-96
ATOTECH DEUTSCHLAND GMBH	PROTECTION OF LEAD-CONTAINING ANODES DURING CHROMIUM ELECTROPLATING	5453175	26-Sep-95
ATOTECH DEUTSCHLAND GMBH	ACID BATH FOR THE GALVANIC DEPOSITION OF COPPER, AND THE USE OF SUCH A BATH	5433840	18-Jul-95
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR THE METALLIZATION OF NONCONDUCTIVE SUBSTRATES WITH ELIMINATION OF ELECTROLESS METALLIZATION	5421989	6-Jun-95
ATOTECH DEUTSCHLAND GMBH	DEVICE FOR MASKING FIELD LINES IN AN ELECTROPLATING PLANT	5401370	28-Mar-95
ATOTECH DEUTSCHLAND GMBH	DEVICE FOR SCREENING OFF LINES OF ELECTRIC FLUX IN AN INSTALLATION FOR ELECTROLYTICALLY PROCESSING ESSENTIALLY FLAT ELEMENTS	5391276	21-Feb-95

Owner	Title	Patent No.	Issue Date
ATOTECH DEUTSCHLAND GMBH	X-Plating	9445510	13-Sep-2016
ATOTECH DEUTSCHLAND GMBH	X-Plating (Redox)	9526183	20-Dec-2016
ATOTECH DEUTSCHLAND GMBH	White bronze plating bath using novel additives formed upon reaction of secondary amines and diglycidyl ethers	9399824	26-Jul-2016
ATOTECH DEUTSCHLAND GMBH	Electroless Nickel Plating Bath (Low temperature NiP)	9399820	26-Jul-2016

Patent Applications:

Owner	Title	Application No.	Application Date
ATOTECH DEUTSCHLAND GMBH	Method for copper plating	N/A Filing instructed; not yet filed	N/A
ATOTECH DEUTSCHLAND GMBH	Solution and process to treat surfaces of copper alloys in order to improve the adhesion between the metal surface and the bonded polymeric material	12/224016	31-Jan-2007
ATOTECH DEUTSCHLAND GMBH	Sulfonated fatty acid additive for electroless nickel plating	61/106038	16-Oct-2008
ATOTECH DEUTSCHLAND GMBH	MPS Nickel and Trichrome for improved corrosion resistance (Nissan Joint Patent)	13/148807	13-Feb-2009
ATOTECH DEUTSCHLAND GMBH	Pre-Treatment Process for Electroless Nickel Plating ⁹	13/254239	12-Mar-2010
ATOTECH DEUTSCHLAND GMBH	METHOD, TREATMENT STATION, AND SYSTEM FOR THE TREATMENT OF FLAT FEEDSTOCK	13/320,522	12-May-2010
ATOTECH DEUTSCHLAND GMBH	Process for transfer of plated copper structures	13/260,756	30-Mar-2010
ATOTECH DEUTSCHLAND GMBH	EDEN with bipolar membranes	13/576,028	13-Apr-2011

⁹ To be abandoned.

Owner	Title	Application No.	Application Date
ATOTECH DEUTSCHLAND GMBH	METHOD AND DEVICE FOR THE WET CHEMICAL TREATMENT OF MATERIAL FEEDSTOCK	13/519816	28-Dec-2010
ATOTECH DEUTSCHLAND GMBH	Process for forming corrosion protection layers on metal surfaces	13699322	26-May-2010
ATOTECH DEUTSCHLAND GMBH	PROCESS AND DEVICE FOR CLEANING GALVANIC BATHS TO PLATE METALS	13/123,934	17-Nov-2009
ATOTECH DEUTSCHLAND GMBH	Passivate solution for zinc and zinc alloy surfaces containing organic oxidising agents	13/125357	23-Nov-2009
ATOTECH DEUTSCHLAND GMBH	ALKALINE AQUEOUS ZINC-IRON ALLOY PLATING BATH AND METHOD USING THE SAME	13/985294	30-Jan-2012
ATOTECH DEUTSCHLAND GMBH	Aqueous acidic bath for electrolytic depositon of copper	14/114482	25-Apr-2012
ATOTECH DEUTSCHLAND GMBH	Additive zur Erzeugung dunkler Chromschichten aus dreiwertigen chloridhaltigen Chromelektrolyten	14113247	27-Apr-2012
ATOTECH DEUTSCHLAND GMBH	Device and method for recovering a recovering material from a recovering fluid containing the recovering material	14/124059	24-May-2012
ATOTECH DEUTSCHLAND GMBH	Method for electroless plating / Metallization of sputtered seed layers	14/116810	17-Apr-2012
ATOTECH DEUTSCHLAND GMBH	Method for providing resist adhesion to a copper or copper alloy surface	14/123964	29-Jun-2012
ATOTECH DEUTSCHLAND GMBH	Formaldehyde-free electroless copper plating solution	14/350,153	01-Oct-2012
ATOTECH DEUTSCHLAND GMBH	Composition and method for removal of organic paint coatings	14/355,238	11-Feb-2013

Owner	Title	Application No.	Application Date
	from substrates (Recover 5000 improvement)		
ATOTECH DEUTSCHLAND GMBH	Method of treating metal surfaces and devices formed thereby	14/009517	06-Jul-2010
ATOTECH DEUTSCHLAND GMBH	METHOD FOR COMBINED THROUGH-HOLE PLATING AND VIA FILLING	14/367,242	27-Nov-2012
ATOTECH DEUTSCHLAND GMBH	Novel adhesion promoting agents for metallization of substrate surfaces	14/362,604	05-Dec-2012
ATOTECH DEUTSCHLAND GMBH	Method for manufacture of fine line circuitry	14/373,961	06-Feb-2013
ATOTECH DEUTSCHLAND GMBH	Method and apparatus for electrolytically depositing a deposition metal on a workpiece (Hochstromkontakt)	PCT/EP2013/057946	16-Apr-2013
ATOTECH DEUTSCHLAND GMBH	Method for producing matt copper deposits	14/374,000	27-Nov-2012
ATOTECH DEUTSCHLAND GMBH	Process for metallizing nonconductive plastic surfaces	14/379,502	15-Mar-2013
ATOTECH DEUTSCHLAND GMBH	Method for promoting adhesion between dielectric substrates and metal layers	14/385,779	21-Mar-2013
ATOTECH DEUTSCHLAND GMBH	GALVANIC NICKEL OR NICKEL ALLOY ELECTROPLATING BATH FOR DEPOSITING A SEMI-BRIGHT NICKEL OR NICKEL ALLOY	14/421568	20-Mar-2014
ATOTECH DEUTSCHLAND GMBH	Method for metallization of solar cell substrates	14/427638	15-Aug-2013
ATOTECH DEUTSCHLAND GMBH	Process for metallizing nonconductive plastic surfaces (Vilnius)	14/647499	06-Dec-2013
ATOTECH DEUTSCHLAND GMBH	Device for vertical galvanic metal deposition on a substrate	14653462	03-Dec-2013

Owner	Title	Application No.	Application Date
	(Düsenscheibe)		
ATOTECH DEUTSCHLAND GMBH	Device for vertical galvanic metal, preferably copper, deposition on a substrate and a container suitable for receiving such a device (Baukasten)	14649003	03-Dec-2013
ATOTECH DEUTSCHLAND GMBH	Copper plating bath composition	14/646,739	12-Nov-2013
ATOTECH DEUTSCHLAND GMBH	Plated electrical contacts for solar modules	14/650342	16-Dec-2013
ATOTECH DEUTSCHLAND GMBH	Electroless copper plating solution	14/779866	25-Mar-2014
ATOTECH DEUTSCHLAND GMBH	Method for depositing a first metallic layer onto non-conductive polymers	14/765594	15-Jan-2014
ATOTECH DEUTSCHLAND GMBH	Electroless copper plating solution	14/777,793	25-Mar-2014
ATOTECH DEUTSCHLAND GMBH	Functional chromium layer with improved corrosion resistance	14/765609	22-Jan-2014
ATOTECH DEUTSCHLAND GMBH	Apparatus and method for electrolytic deposition of metal layers on workpieces	14/774,716	20-Mar-2014
ATOTECH DEUTSCHLAND GMBH	Method for depositing thick copper layers onto sintered materials	14/888762	09-May-2014
ATOTECH DEUTSCHLAND GMBH	Additive zur Erzeugung dunkler Chromschichten aus dreiwertigen chloridhaltigen Chromelektrolyten	14/945027	27-Apr-2012
ATOTECH DEUTSCHLAND GMBH	Method for depositing a copper seed layer onto a barrier layer	14/906370	11-Sep-2014
ATOTECH DEUTSCHLAND GMBH	Method for treatment of recessed structures in dielectric materials for smear removal	14/912,169	05-Sep-2014
ATOTECH DEUTSCHLAND GMBH	Novel adhesion promoting process for metallisation of substrate surfaces	14/915,285	22-Sep-2014

Owner	Title	Application No.	Application Date
ATOTECH DEUTSCHLAND GMBH	Novel adhesion promoting agents for metallisation of substrate surfaces	15/024043	22-Sep-2014
ATOTECH DEUTSCHLAND GMBH	Method of selectively treating copper in the presence of further metal	15/021005	14-Oct-2014
ATOTECH DEUTSCHLAND GMBH	Copper electroplating method	N/A Filed; examination requested	09-Oct-2014
ATOTECH DEUTSCHLAND GMBH	Verwendung von Fluorid, bzw. fluoridhaltiger Verbindungen in intergranularen Ätz-Lösungen (MoldPrep LF)	15/095645	31-Jan-2007
ATOTECH DEUTSCHLAND GMBH; INTRINSIQ MATERIALS LTD.	Composition and forming of a catalytic seed layer for subsequent wet-chemical metallization	14/414120	12-Jul-2013
ATOTECH DEUTSCHLAND GMBH; NISSAN MOTOR CO. LTD.	CrIII Postdip (Nissan Joint Patent)	14/294881	03-Jun-2014
ATOTECH DEUTSCHLAND GMBH	PRE-TREATMENT PROCESS FOR ELECTROLESS PLATING	15/112205	18-Jul-16
ATOTECH DEUTSCHLAND GMBH	COPPER ELECTROPLATING METHOD	15/031317	22-Apr-16
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR METALLIZING NONCONDUCTIVE PLASTIC SURFACES	14/399987	10-Nov-14
ATOTECH DEUTSCHLAND GMBH	METHOD AND APPARATUS FOR ELECTROLYTICALLY DEPOSITING A DEPOSITION METAL ON A WORKPIECE	14/396348	22-Oct-14
ATOTECH DEUTSCHLAND GMBH	AQUEOUS COMPOSITION FOR ETCHING OF COPPER AND COPPER ALLOYS	14/350856	10-Apr-14
ATOTECH DEUTSCHLAND GMBH	ELECTROLESS NICKEL PLATING BATH COMPOSITION	14/131949	10-Jan-14

Owner	Title	Application No.	Application Date
ATOTECH DEUTSCHLAND GMBH	ZINC-IRON ALLOY LAYER MATERIAL	13/985294	14-Aug-13
ATOTECH DEUTSCHLAND GMBH	COMPOSITE BUILD-UP MATERIALS FOR EMBEDDING OF ACTIVE COMPONENTS	13/817827	20-Feb-13
ATOTECH DEUTSCHLAND GMBH	COMPOSITE BUILD-UP MATERIAL FOR EMBEDDING OF CIRCUITRY	13/817825	20-Feb-13
ATOTECH DEUTSCHLAND GMBH	Method and Arrangement for Depositing a Metal Coating	13/809257	25-Feb-13
ATOTECH DEUTSCHLAND GMBH	METHOD TO FORM SOLDER DEPOSITS AND NON-MELTING BUMP STRUCTURES ON SUBSTRATES	13/808655	7-Jan-13
ATOTECH DEUTSCHLAND GMBH	METHOD FOR ETCHING OF COPPER AND COPPER ALLOYS	13/701063	25-Jan-13
ATOTECH DEUTSCHLAND GMBH	Method for Metallising Objects Which Have at Least Two Different Plastics on the Surface	13/578315	28-Aug-12
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR APPLYING A METAL COATING TO A NON-CONDUCTIVE SUBSTRATE	13/394165	5-Mar-12
ATOTECH DEUTSCHLAND GMBH	MULTILAYER PRINTED CIRCUIT BOARD MANUFACTURE	13/265545	21-Oct-11
ATOTECH DEUTSCHLAND GMBH	POST-TREATMENT COMPOSITION FOR INCREASING CORROSION RESISTANCE OF METAL AND METAL ALLOY SURFACES	13/121479	29-Mar-11
ATOTECH DEUTSCHLAND GMBH	Method for Electrochemically Depositing a Metal on a Substrate	12/994325	23-Nov-10

Owner	Title	Application No.	Application Date
ATOTECH DEUTSCHLAND GMBH	PYROPHOSPHATE-CONTAINING BATH FOR CYANIDE-FREE DEPOSITION OF COPPER-TIN ALLOYS	12/866996	10-Aug-10
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR ELECTRODEPOSITION OF COPPER CHIP TO CHIP, CHIP TO WAFER AND WAFER TO WAFER INTERCONNECTS IN THROUGH-SILICON VIAS (TSV) WITH HEATED SUBSTRATE AND COOLED ELECTROLYTE	12/845801	29-Jul-10
ATOTECH DEUTSCHLAND GMBH	SOLID POWDER FORMULATIONS FOR THE PREPARATION OF RESIN-COATED FOILS AND THEIR USE IN THE MANUFACTURE OF PRINTED CIRCUIT BOARDS	12/747374	23-Aug-10
ATOTECH DEUTSCHLAND GMBH	CHROMIUM-FREE PASSIVATION OF VAPOR DEPOSITED ALUMINUM SURFACES	12/711431	24-Feb-10
NISSAN MOTOR CO., LTD. ATOTECH DEUTSCHLAND GMBH	CHROME-PLATED PART AND MANUFACTURING METHOD OF THE SAME	12/675002	24-Feb-10
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR THE PREPARATION OF ELECTRODES FOR USE IN A FUEL CELL	12/450530	11-Mar-10
ATOTECH DEUTSCHLAND GMBH	PROCESS FOR ELECTRODEPOSITION OF COPPER CHIP TO CHIP, CHIP TO WAFER AND WAFER TO WAFER INTERCONNECTS IN THROUGH-SILICON VIAS (TSV)	12/372113	17-Feb-09
ATOTECH DEUTSCHLAND GMBH	Aqueous,alkaline,cyanide-free bath for the galvanic deposition	12/308615	9-Feb-09

Owner	Title	Application No.	Application Date
	of zinc and zinc alloy coatings		
ATOTECH DEUTSCHLAND GMBH	Aqueous, alkaline, cyanide-free bath for the galvanic deposition of zinc alloy coatings	12/308614	19-Dec-08
ATOTECH DEUTSCHLAND GMBH	MICROBIAL DEGRADATION OF WATER-BORNE PAINT CONTAINING HIGH LEVELS OF ORGANIC SOLVENT	12/021483	29-Jan-08
ATOTECH DEUTSCHLAND GMBH	Aqueous Solution and Method for Removing Ionic Contaminants from the Surface of a Workpiece	11/995138	9-Jan-08
ATOTECH DEUTSCHLAND GMBH	Method for Bonding Work pieces and Micro-Structured Component	11/994583	3-Jan-08
ATOTECH DEUTSCHLAND GMBH	Methods of Treating a Surface to Promote Metal Plating and Devices Formed	11/848860	31-Aug-07
ATOTECH DEUTSCHLAND GMBH	METHOD FOR COATING SUBSTRATES CONTAINING ANTIMONY COMPOUNDS WITH TIN AND TIN ALLOYS	11/661237	12-Dec-08
ATOTECH DEUTSCHLAND GMBH	Transport device	11/596142	10-Nov-06
ATOTECH DEUTSCHLAND GMBH	Method Of Manufacturing An Electronic Circuit Assembly	11/572524	23-Jan-07
ATOTECH DEUTSCHLAND GMBH	TRANSLATORY MANIPULATOR, PROCESSING LINE AND METHOD OF PROCESSING WORK PIECES	11/570460	12-Dec-06
ATOTECH DEUTSCHLAND GMBH	Aqueous coating compositions and process for treating metal plated substrates	11/102976	11-Apr-05
ATOTECH DEUTSCHLAND GMBH	Alkaline zinc-nickel alloy plating compositions, processes and articles therefrom	10/742265	19-Dec-03
ATOTECH DEUTSCHLAND GMBH	Apparatus and method for treatment of metal surfaces by	10/731648	9-Dec-03

Owner	Title	Application No.	Application Date
	inorganic electrophoretic passivation		
ATOTECH DEUTSCHLAND GMBH	Method for micro-roughening treatment of copper and mixed-metal circuitry	10/675019	30-Sep-03
ATOTECH DEUTSCHLAND GMBH	Device and method for drying a treated product	10/575996	9-Nov-06
ATOTECH DEUTSCHLAND GMBH	Aqueous, Acidic Solution and Method for Electrolytically Depositing Copper Coatings as Well as Use of Said Solution	10/566913	3-Feb-06
ATOTECH DEUTSCHLAND GMBH	Device and method for electrolytically treating electrically insulated structures	10/566227	27-Jan-06
ATOTECH DEUTSCHLAND GMBH	Solution for etching copper surfaces and method of depositing metal on copper surfaces	10/550829	23-Sep-05
ATOTECH DEUTSCHLAND GMBH	Powder coating and process for the preparation of thin layers in the manufacture of printed circuit boards	10/550468	18-Aug-06
ATOTECH DEUTSCHLAND GMBH	Method of electroplating a workpiece having high-aspect ratio holes	10/544252	2-Aug-05
ATOTECH DEUTSCHLAND GMBH	Device and method for monitoring an electrolytic process	10/518100	15-Dec-04
ATOTECH DEUTSCHLAND GMBH	Acidic solution for silver deposition and method for silver layer deposition on metal surfaces	10/513250	2-Nov-04
ATOTECH DEUTSCHLAND GMBH	Method and device for treating flat and flexible work pieces	10/507137	9-Sep-04
ATOTECH DEUTSCHLAND GMBH	Method for storage of a metal ion supply source in a plating equipment	10/502557	24-Jan-05

Owner	Title	Application No.	Application Date
ATOTECH DEUTSCHLAND GMBH	Conveyorized horizontal processing line and method of wet-processing a workpiece	10/501492	13-Jul-04
ATOTECH DEUTSCHLAND GMBH	Device and method for transporting flat workpieces in conveyorized processing lines	10/500497	29-Jun-04
ATOTECH DEUTSCHLAND GMBH	Regeneration method for a plating solution	10/494217	3-May-04
ATOTECH DEUTSCHLAND GMBH	Precious metal recovery	10/490004	18-Mar-04
ATOTECH DEUTSCHLAND GMBH	Metal pattern formation	10/469374	27-Aug-03
ATOTECH DEUTSCHLAND GMBH	Nitric acid and chromic acid-free compositions and process for cleaning aluminum and aluminum alloy surfaces	10/452111	2-Jun-03
ATOTECH DEUTSCHLAND GMBH	Method for the treatment of work pieces with a palladium colloid solution	10/276351	21-Apr-03
ATOTECH DEUTSCHLAND GMBH	Primer for metallizing substrate surfaces	09/757810	10-Jan-01
ATOTECH DEUTSCHLAND GMBH	Device for chemical and/or electrolytic (galvanic) metal deposition on a substrate (MULTIPLATE 2)	29/575984	30-Aug-2016

**SCHEDULE B
TRADEMARKS**

Registered Trademarks

Owner	Mark	Registration Date	Registration No.
ATOTECH DEUTSCHLAND GMBH	A (fig.)	18-Jan-2007	921803
ATOTECH DEUTSCHLAND GMBH	ACIDCLEAN	24-Mar-2009	3593608
ATOTECH DEUTSCHLAND GMBH	ACTISALT	03-May-1966	807896
ATOTECH DEUTSCHLAND GMBH	Adhemax	14-Jun-2006	901840
ATOTECH DEUTSCHLAND GMBH	ALKALUME	08-Sep-1953	579602
ATOTECH DEUTSCHLAND GMBH	ALPHA	02-Mar-1982	1191002
ATOTECH DEUTSCHLAND GMBH	ALSTAN	08-Sep-1987	1455971
ATOTECH DEUTSCHLAND GMBH	ALUMETCH	06-Aug-2002	2603970
ATOTECH DEUTSCHLAND GMBH	ALUMSEAL	16-Jul-2002	2594032
ATOTECH DEUTSCHLAND GMBH	ANOKLEEN	03-Feb-1987	1427051
ATOTECH DEUTSCHLAND GMBH	APLUS	05-Jul-2014	1228914
ATOTECH DEUTSCHLAND GMBH	ARMOR	19-Feb-1991	1635201
ATOTECH DEUTSCHLAND GMBH	Atomplate	20-Sep-2014	1226492
ATOTECH DEUTSCHLAND GMBH	ATOTECH	18-Jan-2007	925528
ATOTECH DEUTSCHLAND GMBH	BASICLEAN	24-Mar-2009	3593607
ATOTECH DEUTSCHLAND GMBH	BESPLATE	18-Feb-1969	864839
ATOTECH DEUTSCHLAND GMBH	Bio Booster	17-Aug-2010	3833259
ATOTECH DEUTSCHLAND GMBH	BondFilm	04-Apr-2000	2339271
ATOTECH DEUTSCHLAND GMBH	CeraBond	12-Jun-2001	2459150
ATOTECH DEUTSCHLAND GMBH	COBALLOY	25-Dec-2001	2521499
ATOTECH DEUTSCHLAND GMBH	Condimat	18-Jun-2013	1174490
ATOTECH DEUTSCHLAND GMBH	CORRO TRIBLUE	24-Apr-2007	3232176
ATOTECH DEUTSCHLAND GMBH	CORROSIL	09-Jan-2007	3197089

Owner	Mark	Registration Date	Registration No.
ATOTECH DEUTSCHLAND GMBH	CorroTriBlack	29-Jul-2008	3474344
ATOTECH DEUTSCHLAND GMBH	CorroTriBlue	12-May-2009	3617969
ATOTECH DEUTSCHLAND GMBH	COVABOND	14-Mar-2012	1117951
ATOTECH DEUTSCHLAND GMBH	CUFLEX	03-Nov-1964	779,284
ATOTECH DEUTSCHLAND GMBH	CU-LINK	03-Oct-1995	1924374
ATOTECH DEUTSCHLAND GMBH	CUPRABASE	21-Apr-2009	3609295
ATOTECH DEUTSCHLAND GMBH	CUPRACID	02-Feb-1971	907002
ATOTECH DEUTSCHLAND GMBH	CUPRAETCH	12-May-2009	3617971
ATOTECH DEUTSCHLAND GMBH	CUPRAPRO	25-Aug-2009	3673371
ATOTECH DEUTSCHLAND GMBH	CUPRAPULSE	04-Jul-2000	2364524
ATOTECH DEUTSCHLAND GMBH	CUPRASPEED	25-Apr-2000	2345800
ATOTECH DEUTSCHLAND GMBH	CupraTech	18-Aug-2015	4,796,106
ATOTECH DEUTSCHLAND GMBH	DC-700	28-Jan-1969	864087
ATOTECH DEUTSCHLAND GMBH	DUOZINC	25-May-1965	789867
ATOTECH DEUTSCHLAND GMBH	DURABOND	15-May-1990	1595920
ATOTECH DEUTSCHLAND GMBH	DYNACHROME	20-Apr-1999	2241064
ATOTECH DEUTSCHLAND GMBH	ECOGANTH	10-Mar-2011	1076660
ATOTECH DEUTSCHLAND GMBH	ECOLOZINC	03-Oct-1972	943893
ATOTECH DEUTSCHLAND GMBH	ECONO-CHROME	26-Feb-1963	745643
ATOTECH DEUTSCHLAND GMBH	ECOPACT	25-Feb-2014	1200462
ATOTECH DEUTSCHLAND GMBH	ECOPASS	20-Jan-2015	1243548
ATOTECH DEUTSCHLAND GMBH	ECOTRI	25-Apr-2006	3086502
ATOTECH DEUTSCHLAND GMBH	EDEN	29-Jul-2003	2742826
ATOTECH DEUTSCHLAND GMBH	ELEVEN (fig.)	11-May-2010	3786523
ATOTECH DEUTSCHLAND GMBH	EVERPLATE	27-Mar-2001	2438138
ATOTECH DEUTSCHLAND GMBH	FERRODEX	03-Jun-1969	870598

Owner	Mark	Registration Date	Registration No.
ATOTECH DEUTSCHLAND GMBH	FUMETROL	03-Feb-1959	673349
ATOTECH DEUTSCHLAND GMBH	FUTURON	01-Sep-1998	2185328
ATOTECH DEUTSCHLAND GMBH	GEMENI	21-Jan-2010	1033298
ATOTECH DEUTSCHLAND GMBH	HEEF	12-Oct-1987	1460498
ATOTECH DEUTSCHLAND GMBH	IniTech	18-Aug-2015	4,796,107
ATOTECH DEUTSCHLAND GMBH	INPULSE	16-Jul-2002	2595292
ATOTECH DEUTSCHLAND GMBH	INTERLOX	15-Mar-1960	694410
ATOTECH DEUTSCHLAND GMBH	INTERLOX	12-Apr-2011	3942922
ATOTECH DEUTSCHLAND GMBH	KLEER AID	30-May-1972	934772
ATOTECH DEUTSCHLAND GMBH	KleerAid	06-Jul-2006	901943
ATOTECH DEUTSCHLAND GMBH	LUMACHROME	08-Sep-1998	2187120
ATOTECH DEUTSCHLAND GMBH	Magnify	31-Mar-2009	3596957
ATOTECH DEUTSCHLAND GMBH	MARK	18-Feb-1964	0764886
ATOTECH DEUTSCHLAND GMBH	MASTER REMOVER	12-Nov-2013	4431393
ATOTECH DEUTSCHLAND GMBH	MULTIBOND	19-Dec-1995	1943216
ATOTECH DEUTSCHLAND GMBH	Multiplate	08-Apr-2013	1161776
ATOTECH DEUTSCHLAND GMBH	MultiPrep	25-Jan-2011	3911283
ATOTECH DEUTSCHLAND GMBH	NEOGANTH	27-May-1986	1394540
ATOTECH DEUTSCHLAND GMBH	NeoLink	26-Mar-2013	4,309,433
ATOTECH DEUTSCHLAND GMBH	NEOPACT	20-Jun-2000	2359159
ATOTECH DEUTSCHLAND GMBH	NiccoTech	18-Aug-2015	4,796,108
ATOTECH DEUTSCHLAND GMBH	NICHEM	13-Nov-2001	2506509
ATOTECH DEUTSCHLAND GMBH	NIFLOR	11-Feb-1986	1382726
ATOTECH DEUTSCHLAND GMBH	NIFLOR	25-Jun-1985	1343698
ATOTECH DEUTSCHLAND GMBH	NIKOTECT	12-Nov-2002	2650225
ATOTECH DEUTSCHLAND GMBH	NORTEX	13-Apr-1982	1193475

Owner	Mark	Registration Date	Registration No.
ATOTECH DEUTSCHLAND GMBH	NOVIGANTH	31-Jan-1967	823240
ATOTECH DEUTSCHLAND GMBH	PallaBond	16-Oct-2012	4224620
ATOTECH DEUTSCHLAND GMBH	PD-TECH	13-Jan-1998	2128462
ATOTECH DEUTSCHLAND GMBH	PRINTOGANTH	27-May-1986	1394539
ATOTECH DEUTSCHLAND GMBH	PROTECTOSTAN	05-Jul-2011	3990390
ATOTECH DEUTSCHLAND GMBH	PROTOLUX	01-Nov-1977	1076198
ATOTECH DEUTSCHLAND GMBH	QUATRASID	17-Mar-1964	766559
ATOTECH DEUTSCHLAND GMBH	RECOTECT	12-Jun-2012	4156131
ATOTECH DEUTSCHLAND GMBH	REFLECTA	31-Oct-1972	946153
ATOTECH DEUTSCHLAND GMBH	REFLECTALLOY	23-Jul-1996	1988409
ATOTECH DEUTSCHLAND GMBH	RESISTSTRIP	24-Mar-2009	3593609
ATOTECH DEUTSCHLAND GMBH	RODIP	25-Jun-1957	647290
ATOTECH DEUTSCHLAND GMBH	ROGARD	23-Mar-1965	786989
ATOTECH DEUTSCHLAND GMBH	ROKLEEN	22-Oct-1963	758971
ATOTECH DEUTSCHLAND GMBH	ROPLATE	12-Sep-1967	834938
ATOTECH DEUTSCHLAND GMBH	SATILUME	05-Dec-2000	2410592
ATOTECH DEUTSCHLAND GMBH	SBP	01-May-2012	4135673
ATOTECH DEUTSCHLAND GMBH	SECURIGANTH	27-May-1986	1394538
ATOTECH DEUTSCHLAND GMBH	Semilux	28-Nov-2014	1239720
ATOTECH DEUTSCHLAND GMBH	SIGMATECH	29-Aug-2011	1099371
ATOTECH DEUTSCHLAND GMBH	SILVER-LUME	09-Sep-1958	666740
ATOTECH DEUTSCHLAND GMBH	Single Board Processor	08-Nov-2011	4053268
ATOTECH DEUTSCHLAND GMBH	SOLDERBOND	03-Apr-2001	2441559
ATOTECH DEUTSCHLAND GMBH	Spherolyte	10-Jan-2012	4082886
ATOTECH DEUTSCHLAND GMBH	SRHS	18-Oct-1955	614153
ATOTECH DEUTSCHLAND GMBH	Stanna-Q	18-Jun-2013	1173547

Owner	Mark	Registration Date	Registration No.
ATOTECH DEUTSCHLAND GMBH	StannoPure	11-Nov-2008	3529591
ATOTECH DEUTSCHLAND GMBH	SUPREME	01-Oct-1985	1363874
ATOTECH DEUTSCHLAND GMBH	TECHSEAL	28-May-2002	2572820
ATOTECH DEUTSCHLAND GMBH	TeloTech	19-Apr-2016	4,941,850
ATOTECH DEUTSCHLAND GMBH	TINPEST GARD	29-Jan-1980	1129752
ATOTECH DEUTSCHLAND GMBH	TRICHROME	15-Jul-2008	3468468
ATOTECH DEUTSCHLAND GMBH	TRI-CHROME	04-Apr-1978	1088444
ATOTECH DEUTSCHLAND GMBH	TRICOTECT	17-Feb-2006	893258
ATOTECH DEUTSCHLAND GMBH	TRIDUR	15-Feb-2011	3918383
ATOTECH DEUTSCHLAND GMBH	TRI-MAX	04-Sep-1990	1611809
ATOTECH DEUTSCHLAND GMBH	TRI-MAX (fig.)	23-Jul-1991	1651249
ATOTECH DEUTSCHLAND GMBH	TriSeal	28-Nov-2005	880025
ATOTECH DEUTSCHLAND GMBH	TRU-PLATE	26-Apr-1977	1064214
ATOTECH DEUTSCHLAND GMBH	UNIBRITE (former UNI-BRITE)	14-Jun-1994	1839149
ATOTECH DEUTSCHLAND GMBH	UNICHROME	17-Sep-1935	328162
ATOTECH DEUTSCHLAND GMBH	UNICHROME	16-Jul-1946	422307
ATOTECH DEUTSCHLAND GMBH	UniClean	15-Sep-1998	2188776
ATOTECH DEUTSCHLAND GMBH	UNIFIX	19-May-2009	3624341
ATOTECH DEUTSCHLAND GMBH	UNIPLATE	28-Mar-2000	2334982
ATOTECH DEUTSCHLAND GMBH	UniPrep	06-Dec-2005	3024158
ATOTECH DEUTSCHLAND GMBH	UniPrep	13-Dec-2005	3025193
ATOTECH DEUTSCHLAND GMBH	UniSpray	14-Mar-2006	3037242
ATOTECH DEUTSCHLAND GMBH	UniStrip	11-Apr-2006	3078258
ATOTECH DEUTSCHLAND GMBH	VELOURS	13-Dec-2006	342507
ATOTECH DEUTSCHLAND GMBH	Via ²	28-May-2013	4340307

Owner	Mark	Registration Date	Registration No.
ATOTECH DEUTSCHLAND GMBH	VisioPlate	22-May-2014	1 213 699
ATOTECH DEUTSCHLAND GMBH	Xenolyte	04-May-2007	927640
ATOTECH DEUTSCHLAND GMBH	ZINNI	22-Aug-2012	1137059
ATOTECH DEUTSCHLAND GMBH	ZINTEK	25-Mar-2003	2699176
ATOTECH DEUTSCHLAND GMBH	ZODIAC	27-Aug-1974	991786
ATOTECH DEUTSCHLAND GMBH	ZYLITE	21-Sep-2004	2886179
Atotech Deutschland GmbH	CELEROLYTE	17-Jan-17	5121644
Atotech Deutschland GmbH	INNOLYTE	25-Oct-16	5066602
Atotech Deutschland GmbH	SEMILUX	24-Nov-15	4857311
Atotech Deutschland GmbH	VISIOPLATE	13-Oct-15	4829364
Atotech Deutschland GmbH	ECOPASS	25-Aug-15	4797503
Atotech Deutschland GmbH	APLUS	30-Jun-15	4762571
Atotech Deutschland GmbH	ATOMPLATE	5-May-15	4729754
Atotech Deutschland GmbH	ECOPACT	4-Nov-14	4630463
Atotech Deutschland GmbH	CONDIMAT	9-Sep-14	4599320
Atotech Deutschland GmbH	STANNA-Q	4-Feb-14	4476658
Atotech Deutschland GmbH	MULTIPLATE	21-Jan-14	4468426
Atotech Deutschland GmbH	ZINNI	9-Jul-13	4362921
Atotech Deutschland GmbH	COVABOND	22-Jan-13	4277847
Atotech Deutschland GmbH	SIGMATECH	14-Aug-12	4188643
Atotech Deutschland GmbH	ECOGANTH	27-Dec-11	4075882
Atotech Deutschland GmbH	GEMENI	9-Nov-10	3873087
Atotech Deutschland GmbH	ATOTECH	4-Nov-08	3527689
Atotech Deutschland GmbH	A	20-May-08	3431500
Atotech Deutschland GmbH	VELOURS	13-May-08	3427124
Atotech Deutschland GmbH	XENOLYTE	15-Apr-08	3411852

Owner	Mark	Registration Date	Registration No.
Atotech Deutschland GmbH	TRICOTECT	30-Oct-07	3324835
Atotech Deutschland GmbH	KLEERAID	3-Jul-07	3259000
Atotech Deutschland GmbH	ADHEMAX	29-May-07	3247855
Atotech Deutschland GmbH	TRISEAL	24-Oct-06	3162929
Atotech Deutschland GmbH	MAKROLUX	3-Apr-90	1589573
ATOTECH DEUTSCHLAND GMBH	ELECTROPURE	28-Jan-86	1379894
Atotech Deutschland GmbH	ATOMPURE	Jun. 02, 2016	1306551
ATOTECH DEUTSCHLAND GMBH	CUPRACID	2-Feb-71	907002

Trademark Applications:

Owner	Mark	Application No.	Application Date
ATOTECH DEUTSCHLAND GMBH	BLUCR	79/189816	22-Apr-2016
ATOTECH DEUTSCHLAND GMBH	Techdip	86/873217	12-Jan-2016
ATOTECH DEUTSCHLAND GMBH	HIRON	79/196947	6-Sep-16
ATOTECH DEUTSCHLAND GMBH	UNICOAT	87177194	20-Sep-16

**SCHEDULE C
COPYRIGHTS**

NONE