

Cooperative Patent Classification at the USPTO



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with reinforcement bonded by the plate and

Overview

- CPC Milestones
- CPC Goes Global
- CPC Products
- CPC Training
- CPC Transition at the USPTO
- CPC in Biotechnology: an overview
 - Where are Biotechnology inventions classified?
 - Examples

CPC milestones (1/3)

- **October 2010**
 - The EPO and the USPTO have agreed to jointly develop a patent classification system on the basis of the European Classification system (ECLA) including best practices of the USPC
- **October 2012**
 - CPC scheme made public: CPC scheme and first batch of definitions publicly available from 1 October
- **January 2013**
 - EPO and USPTO launch Cooperative Patent Classification System (CPC)
- **March 2013**
 - First US patent applications published with CPC symbols

CPC milestones (2/3)

April 2013

The first revised version of the CPC scheme enters into force

May 2013

First US patent grant published with CPC symbols

August 2013

All CPC Definitions become available on the Internet (626 CPC Definitions amounting to around 50 000 pages)

January 2014

USPTO begins the first stage of transition of ~8500 Examiners from USPC to CPC

January 2015

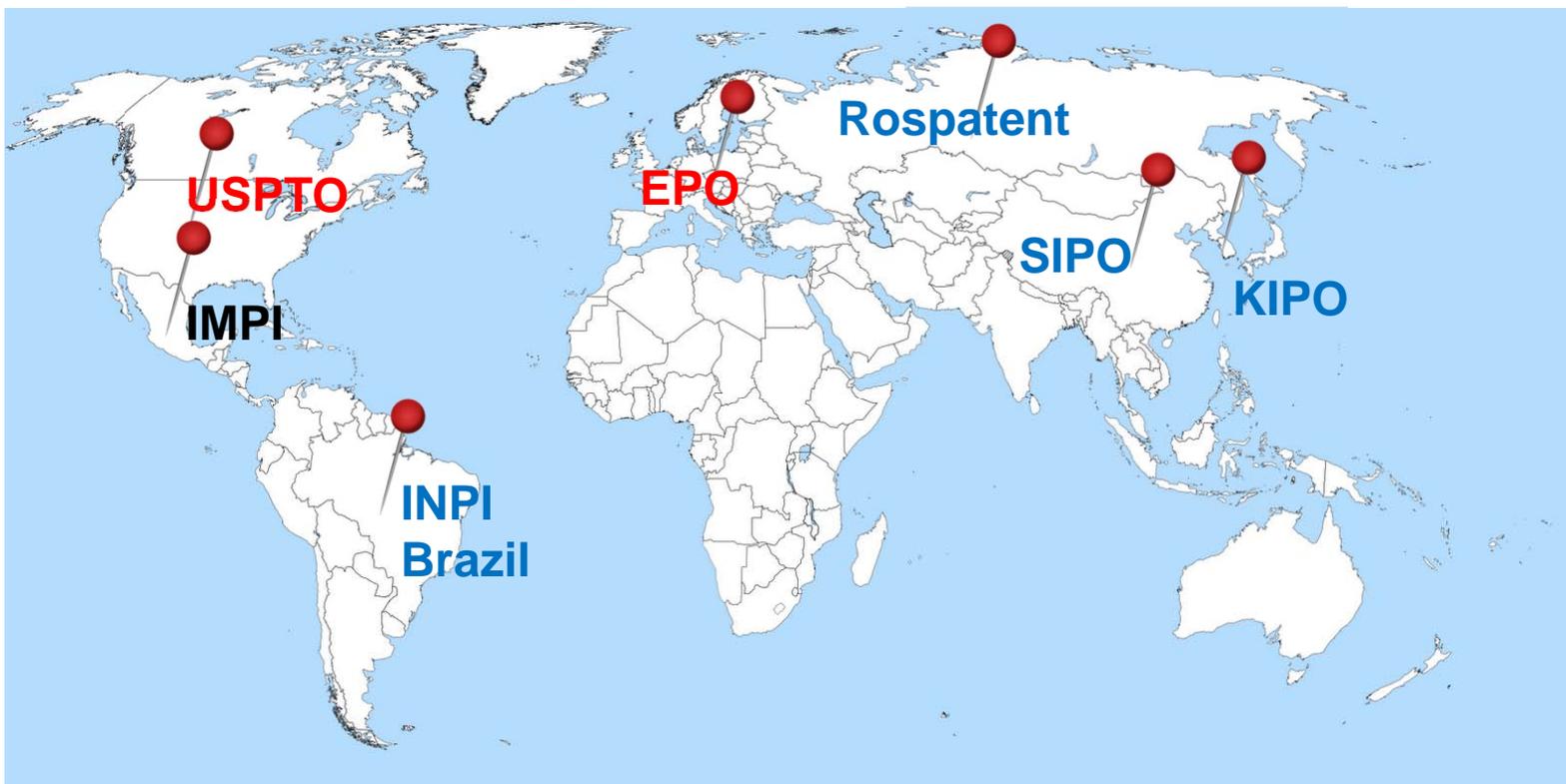
USPTO completes the first stage of transition of ~8500 Examiners from USPC to CPC
CPC is now the classification system of record at the USPTO and all U.S. Patent Publications now carry CPC symbols.

April 2015

USPTO stops publishing USPC on US patents

CPC Goes Global

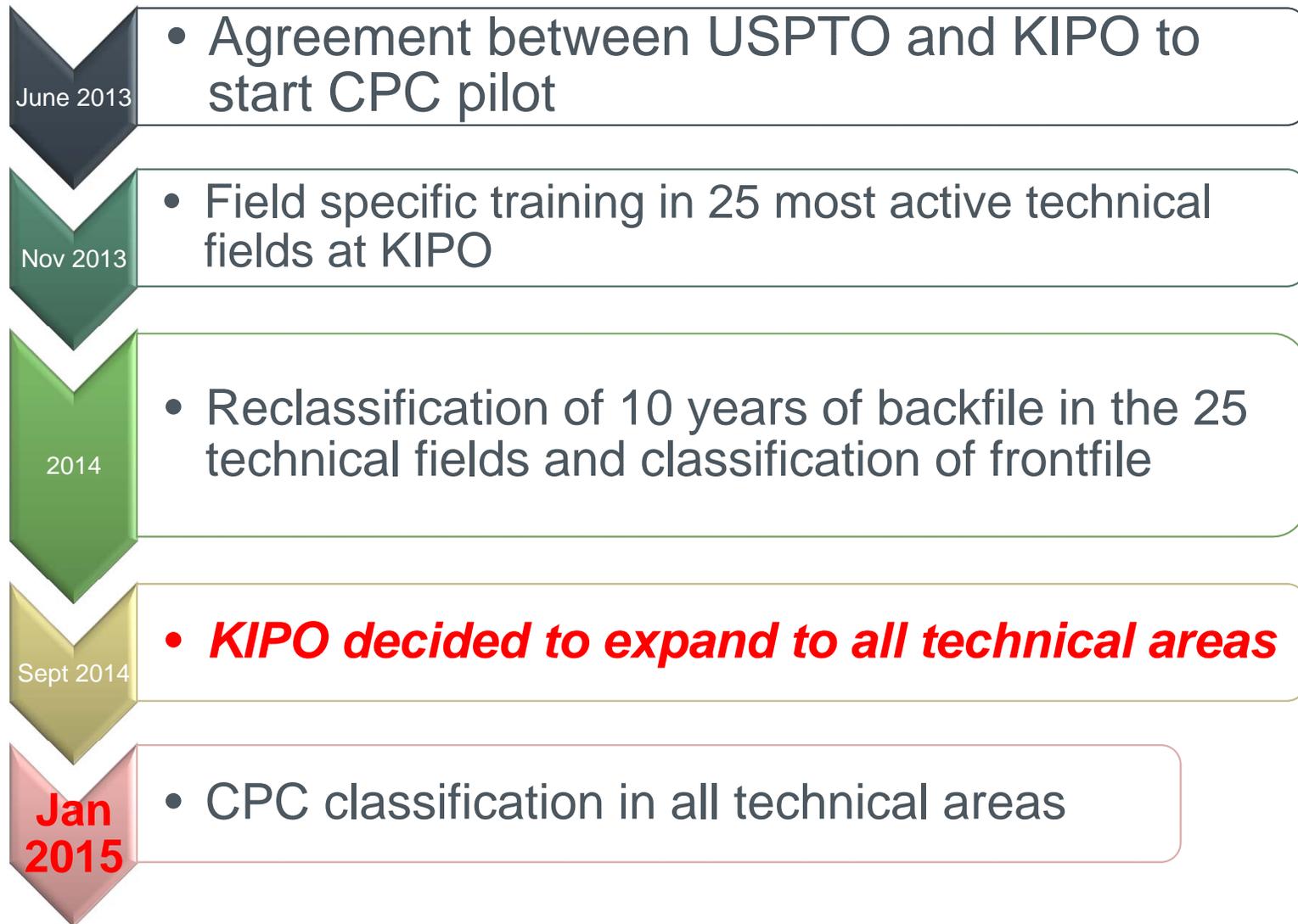
Since 2010



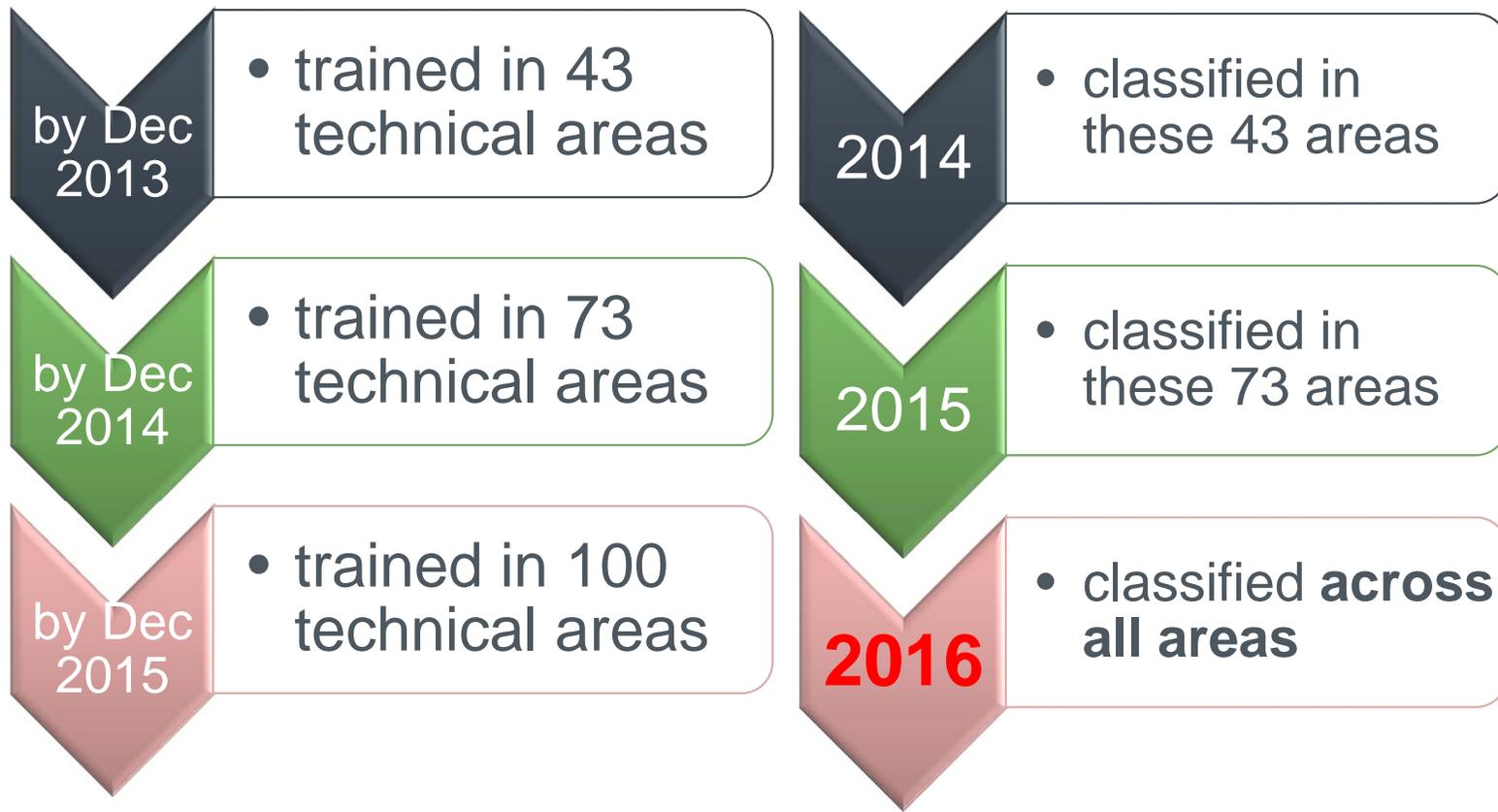
New in 2013

Furthermore, CPC is used for search by more than 45 Patent Offices and by more than 25 000 examiners

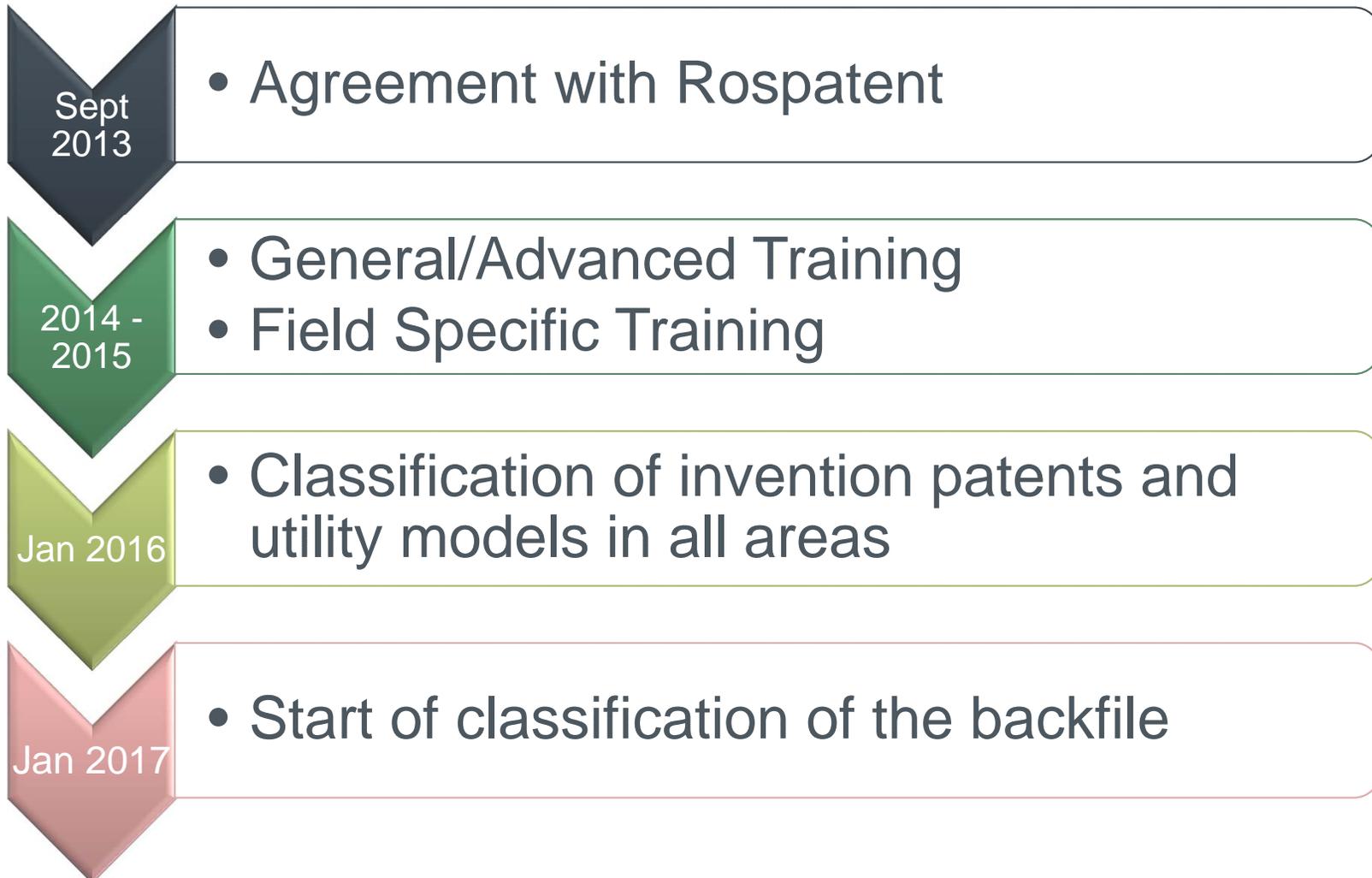
CPC at KIPO



CPC at SIPO



CPC at Rospatent



CPC at INPI Brazil

Aug 2013

- General and advanced training at INPI Brazil
- Field Specific Training

Dec 2013

- Agreement between INPI Brazil and EPO

2014

- Field Specific Training
- Start of classification in the trained fields

2015

- Field Specific Training at the EPO to remaining 9 divisions (D12-D20)
- Further expansion

CPC Products via www.cpcinfo.org (1/2)

- **CPC Scheme - 250 000 symbols (PDF, XML)**
 - organised per section, from A to H and Y, and subdivided at subclass level
 - 1 PDF file per subclass
 - all XML files compressed together in a ZIP file
 - previous versions stored in “Archive” area
- **CPC definitions (PDF, XML)**
 - 626 CPC Definitions, one per subclass (50 000 pages of detailed CPC search and classification information)
 - 1 PDF file per subclass
 - all XML files compressed together in a ZIP file
 - No CPC Definitions for subclasses which are used for indexing additional information
 - CPC Definitions are adapted after the revision of the corresponding part of the CPC Scheme

CPC Products via www.cpcinfo.org (2/2)

- **CPC Concordances (TXT, PDF, XML)**
 - **CPC → IPC** (adapted after each CPC or IPC revision)
 - **CPC ↔ ECLA** (static table, not updated after CPC revisions)
- **CPC Notice of Changes (NoC) (PDF)**
 - documents detailing the changes made to the scheme following a CPC Scheme revision as well as their impact
 - available one to two months prior to the entry into force of a new version of the CPC Scheme

CPC Scheme and Definitions

CPC Revisions

Notice of Changes

Projects

CPC Concordances

CPC Training

Impact

Events

Publications

Press releases

Links

FAQ

Archive

Contact Us

Notice of Changes

CPC 2013.07:

- [CPC Classification order 1](#)
- [CPC Classification order 2](#)

CPC 2013.09:

- [CPC Notice of Changes 3](#)
- [CPC Notice of Changes 4](#)
- [CPC Notice of Changes 5](#)
- [CPC Notice of Changes 6](#)
- [CPC Notice of Changes 7](#)

CPC 2013.11:

- [CPC Notice of Changes 8](#)
- [CPC Notice of Changes 9](#)
- [CPC Notice of Changes 10](#)

CPC training

- Training e-learning modules by
 - the EPO European Patent Academy
(<https://e-courses.epo.org/course/view.php?id=167>)
 - the USPTO
(http://www.uspto.gov/patents/resources/classification/CPC_Training.jsp)
- Field Specific Training (FST)
 - For training patent examiners at patent offices classifying into CPC

- 476 "field specific training" sessions have been held at the EPO via video conference and recorded at the USPTO. They are being made available to the Offices classifying in the CPC.

The screenshot shows a video conference interface. On the left, a presentation slide titled "About the classification scheme for hydrocarbons" is displayed. The slide contains the following information:

- C07C1/00 to C07C15/62
 - IPC derived
 - used **only** for CPC "inventive" information
 - **not** used for "additional" information
- C07C2101/00 to C07C2531/38 (ECLA: C07M101-531)
 - not IPC based
 - used **only** for CPC "additional" information
 - relevant for hydrocarbons: C07C2101/00 to C07C2531/00
- C07B2200/00 to C07B2200/13
 - not IPC based
 - used **only** for CPC "additional" information

The use of C07C2#### and C07B2200/### according to the Definitions document (**Special Rules** for C07C) is compulsory.

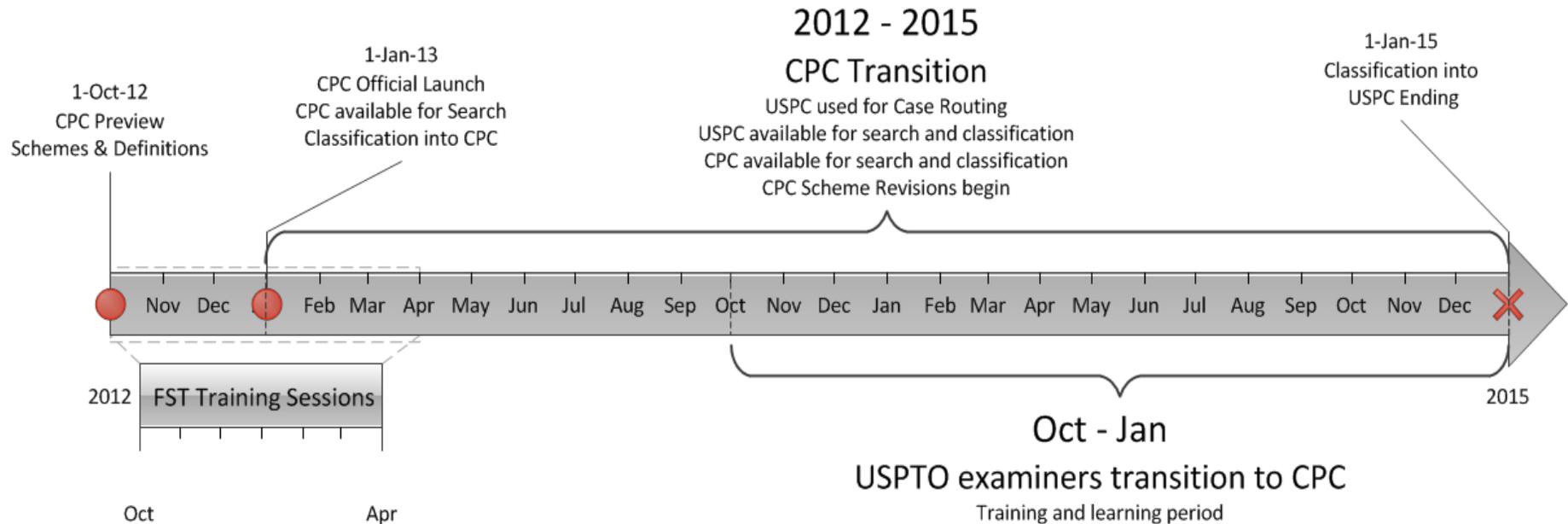
On the right side of the video conference, a participant's name "Paul O'Sullivan, Marc van Bergen" is visible above a chat window. The chat window contains the following text:

and just to give you an example, if you have a particular process, which involves a condensed system having three rings, perhaps that three-ring condensed system won't be part of the invention information, however, you

The video conference interface also shows a taskbar at the bottom with various application windows open, including "Intro-C...", "Intro-CO...", and "US Paten...".

The Transition to CPC at the USPTO

CPC - USPTO Implementation Timeline



**** FST = field specific training**

CPC at USPTO

- **January 2014**
 - USPTO begins the first stage of transition of ~8500 Examiners from USPC to CPC
- **January 2015**
 - USPTO completes the first stage of transition of ~8500 Examiners from USPC to CPC
 - CPC is now the classification system of record at the USPTO and all U.S. Patent Publications now carry CPC symbols.
- **USPC** collection is static
 - used for search as a historical collection
 - used for administrative workflow
- USPTO will continue to classify into IPC

Benefits to USPTO ... and beyond

- US, EPO, KR, CN collections classified into one classification system for search
- USPTO has one official detailed classification system for efficient search (next to IPC)
- CPC based on IPC. USPTO on same footing as most of the world's IPOs.
- USPTO has an up-to-date, dynamic classification system.
- Many users around the world using the same patent collection classified in a harmonized way for classification search.
- MAJOR milestone reached in the CPC implementation and contribution towards harmonization efforts.

CPC in Biotechnology: an overview

- Where are Biotechnology inventions classified?
 - CPC Section, Class, Subclass, Group, Subgroup

Example CPC Subclasses in TC 1600

- A01B
- A01H
- A01K
- A01N
- A23D
- A23F
- A23G
- A23J
- A23K
- A23L
- A61B
- A61K
- A61L
- A61Q
- B01D
- B01F
- B01J
- B03C
- B81B
- B82Y
- C01B
- C01C
- C01F
- C01G
- C01P
- C02F
- C03C
- C04B
- C05D
- C06B
- C06F
- C07B
- C07D
- C07F
- C07J
- C07K
- C08B
- C08C
- C08F
- C08G
- C08J
- C08K
- C09B
- C09K
- C10G
- C10M
- C11B
- C11D
- C12M
- C12N
- C12P
- C12Q
- C12R
- C14C
- C40B
- C22B
- C23B
- C23F
- C23G
- D01C
- D06L
- D06M
- D06P
- D12H
- D21C
- G01N
- G03C
- G03F
- G03G
- G06F
- G11B
- G12C
- H01L

CPC in Biotechnology – CPC subclasses (1/4)

- **Section A, C, G**
- **Subclasses**
- A01H (1660s)
 - New plants or processes for obtaining them; Plant reproduction by tissue culture techniques
- A01N (1610s)
 - Preservation of bodies of humans, animals or plants or parts thereof; Biocides, Disinfectants including Pesticides and Herbicides
- C12M (1650s)
 - Apparatus for enzymology or microbiology
 - Tissue, human, animal or plant cells, or virus culture apparatus
- C12N (1630s/1650s)
 - Microorganisms or Enzymes; Compositions thereof;
 - Propagating, preserving or maintaining Microorganisms;
 - Mutation or Genetic Engineering;
 - Culture Media, Animal Cells

CPC in Biotechnology – CPC subclasses (2/4)

- C12Q (1650s)
 - Measuring or testing processes involving Enzymes or Microorganisms;
 - Compositions or test papers therefor;
 - Processes of preparing such compositions
- C12R (1650s)
 - Indexing scheme associated with subclasses C12N and C12Q relating to microorganisms
- C12Y (1650s)
 - Enzymes
 - More like an indexing scheme
 - Created at change-over to CPC
 - Based on the Enzyme Commission (EC) number for classification of enzymes

CPC in Biotechnology – CPC Main groups (3/4)

- A01G33/00 (1650s)
 - Cultivation of seaweed {or algae}
- A61K48/00 - A61K48/0091 (1630s)
 - Medicinal preparations containing genetic material which is inserted into cells of the living body to treat genetic diseases; Gene therapy
- A61K39/00 - A61K39/70 (1640s)
 - Medicinal preparations containing antigens or antibodies
- A61K6/00; A61K8/00 (1610s)
 - Preparation for dentistry; Cosmetics
- A61K9/00 (1610s)
 - Medicinal preparations characterised by special physical form
- A61K31/00-A61K35/00 (1610s; 1620s)
 - Medicinal preparations containing various ingredients including organic, inorganic, etc.
- C07K14/00 - C07K14/825 (1640s)
 - Peptides having more than 20 amino acids; Gastrins; Somatostatins; Melanotropins; Derivatives thereof

CPC in Biotechnology – CPC Main groups (4/4)

- C07K16/00 - C07K16/468 (1640s)
 - Immunoglobulins [IGs], e.g. monoclonal or polyclonal antibodies
- C07K19/00 (1670s; 1630s)
 - Hybrid peptides
 - Hybrid peptides characterised by their non-peptide moiety, e.g. a nucleic acid; non-covalently bound complexes of two (or more) different peptides.
- A01K 67/027 - A01K 67/0278 (1630s)
 - New breeds of vertebrates
- A01K 67/0333 - A01K67/0339 (1630s)
 - {Genetically modified invertebrates, e.g. transgenic, polyploid}
- G01N 33/50 - G01N33/98 (1670s)
 - Chemical analysis of biological material, e.g. blood, urine; Testing involving biospecific ligand binding methods; Immunological testing

Major Subject Matter Areas In TC1700 (1 of 12)

CPC Subclasses	Subject Matter	Division
A01J	MANUFACTURE OF DAIRY PRODUCTS	1790
A21C	MACHINES OR EQUIPMENT FOR MAKING OR PROCESSING DOUGHS; HANDLING BAKED ARTICLES MADE FROM DOUGH	1790
A21D	TREATMENT, e.g. PRESERVATION, OF FLOUR OR DOUGH, e.g. BY ADDITION OF MATERIALS; BAKING; BAKERY PRODUCTS; PRESERVATION THEREOF [2013-01]	1790
A22C	PROCESSING MEAT, POULTRY, OR FISH	1790
A23B	PRESERVING, e.g. BY CANNING, MEAT, FISH, EGGS, FRUIT, VEGETABLES, EDIBLE SEEDS; CHEMICAL RIPENING OF FRUIT OR VEGETABLES; THE PRESERVED, RIPENED, OR CANNED PRODUCTS	1790
A23C	DAIRY PRODUCTS, e.g. MILK, BUTTER, CHEESE; MILK OR CHEESE SUBSTITUTES; MAKING THEREOF	1790
A23D	EDIBLE OILS OF FATS, e.g. MARGARINES, SHORTENINGS, COOKING OILS	1790
A23F	COFFEE; TEA; THEIR SUBSTITUTES; MANUFACTURE, PREPARATION, OR INFUSION THEREOF	1790
A23G	COCOA; COCOA PRODUCTS, e.g. CHOCOLATE; SUBSTITUTES FOR COCOA OR COCOA PRODUCTS; CONFECTIONERY; CHEWING GUM; ICE-CREAM; PREPARATION THEREOF	1790
A23J	PROTEIN COMPOSITIONS FOR FOODSTUFFS; WORKING-UP PROTEINS FOR FOODSTUFFS; PHOSPHATIDE COMPOSITIONS FOR FOODSTUFFS	1790

Major Subject Matter Areas In TC1700 (2 of 12)

CPC Subclasses	Subject Matter	Division
A23K	FODDER	1790
A23L	FOODS, FOODSTUFFS, OR NON-ALCOHOLIC BEVERAGES, NOT COVERED BY SUBCLASSES A23B TO A23J ; THEIR PREPARATION OR TREATMENT, e.g. COOKING, MODIFICATION OF NUTRITIVE QUALITIES, PHYSICAL TREATMENT	1790
A23N	MACHINES OR APPARATUS FOR TREATING HARVESTED FRUIT, VEGETABLES OR FLOWER BULBS IN BULK, NOT OTHERWISE PROVIDED FOR; PEELING VEGETABLES OR FRUIT IN BULK; APPARATUS FOR PREPARING ANIMAL FEEDING- STUFFS	1790
A23P	SHAPING OR WORKING OF FOODSTUFFS, NOT FULLY COVERED BY A SINGLE OTHER SUBCLASS	1790
A24B	MANUFACTURE OR PREPARATION OF TOBACCO FOR SMOKING OR CHEWING; TOBACCO; SNUFF [2013-01]	1740
A24C	MACHINES FOR MAKING CIGARS OR CIGARETTES [2013-01]	1740
A24D	CIGARS; CIGARETTES; TOBACCO SMOKE FILTERS; MOUTHPIECES FOR CIGARS OR CIGARETTES; MANUFACTURE OF TOBACCO SMOKE FILTERS OR MOUTHPIECES	1740
A24F	SMOKERS` REQUISITES; MATCH BOXES	1740
A47L	DOMESTIC WASHING OR CLEANING	1710
A61C	DENTISTRY; APPARATUS OR METHODS FOR ORAL OR DENTAL HYGIENE	1740, 1780

Major Subject Matter Areas In TC1700 (3 of 12)

CPC Subclasses	Subject Matter	Division
A61Q	SPECIFIC USE OF COSMETICS OR SIMILAR TOILET PREPARATIONS	1760, 1780
A62D	CHEMICAL MEANS FOR EXTINGUISHING FIRES OR FOR COMBATING OR PROTECTING AGAINST HARMFUL CHEMICAL AGENTS; CHEMICAL MATERIALS FOR USE IN BREATHING APPARATUS	1730, 1760
B01D	SEPARATION	1750, 1770
B01F	MIXING, e.g. DISSOLVING, EMULSIFYING, DISPERSING	1750, 1760, 1770
B01J	CHEMICAL OR PHYSICAL PROCESSES, e.g. CATALYSIS, COLLOID CHEMISTRY; THEIR RELEVANT APPARATUS	1730, 1750, 1770
B01L	CHEMICAL OR PHYSICAL LABORATORY APPARATUS FOR GENERAL USE	1750, 1770
B02B	PREPARING GRAIN FOR MILLING; REFINING GRANULAR FRUIT TO COMMERCIAL PRODUCTS BY WORKING THE SURFACE	1790
B03C	MAGNETIC OR ELECTROSTATIC SEPARATION OF SOLID MATERIALS FROM SOLID MATERIALS OR FLUIDS; SEPARATION BY HIGH-VOLTAGE ELECTRIC FIELDS	1750, 1770
B05C	APPARATUS FOR APPLYING LIQUIDS OR OTHER FLUENT MATERIALS TO SURFACES, IN GENERAL	1710, 1740
B05D	PROCESSES FOR APPLYING LIQUIDS OR OTHER FLUENT MATERIALS TO SURFACES, IN GENERAL	1710, 1780
B08B	CLEANING IN GENERAL; PREVENTION OF FOULING IN GENERAL	1710
B22C	FOUNDRY MOULDING	1730
B22D	CASTING OF METALS; CASTING OF OTHER SUBSTANCES BY THE SAME PROCESSES OR DEVICES	1730

Major Subject Matter Areas In TC1700 (4 of 12)

CPC Subclasses	Subject Matter	Division
B22F	WORKING METALLIC POWDER; MANUFACTURE OF ARTICLES FROM METALLIC POWDER; MAKING METALLIC POWDER	1730, 1780
B23H	WORKING OF METAL BY THE ACTION OF A HIGH CONCENTRATION OF ELECTRIC CURRENT ON A WORKPIECE USING AN ELECTRODE WHICH TAKES THE PLACE OF A TOOL; SUCH WORKING COMBINED WITH OTHER FORMS OF WORKING OF METAL	1750
B23K	SOLDERING OR UNSOLDERING; WELDING; CLADDING OR PLATING BY SOLDERING OR WELDING; CUTTING BY APPLYING HEAT LOCALLY, e.g. FLAME CUTTING; WORKING BY LASER BEAM	1730, 1740, 1780
B24D	TOOLS FOR GRINDING, BUFFING, OR SHARPENING	1730, 1780
B27D	WORKING VENEER OR PLYWOOD	1740, 1780
B28B	SHAPING CLAY OR OTHER CERAMIC COMPOSITIONS, SLAG, OR MIXTURES CONTAINING CEMENTITIOUS MATERIAL, e.g. PLASTER	1740, 1780
B28C	PREPARING CLAY; PRODUCING MIXTURES CONTAINING CLAY OR CEMENTITIOUS MATERIAL, e.g. PLASTER	1730
B29B	PREPARATION OR PRETREATMENT OF THE MATERIAL TO BE SHAPED; MAKING GRANULES OR PREFORMS; RECOVERY OF PLASTICS OR OTHER CONSTITUENTS OF WASTE MATERIAL CONTAINING PLASTICS	1740, 1780
B29C	SHAPING OR JOINING OF PLASTICS; SHAPING OF SUBSTANCES IN A PLASTIC STATE, IN GENERAL; AFTER-TREATMENT OF THE SHAPED PRODUCTS, e.g. REPAIRING	1740, 1780
B29D	PRODUCING PARTICULAR ARTICLES FROM PLASTICS OR FROM SUBSTANCES IN A PLASTIC STATE	1740, 1780
B31D	MAKING ARTICLES OF PAPER OR CARDBOARD NOT PROVIDED FOR IN SUBCLASSES B31B OR B31C	1740, 1780
B32B	LAYERED PRODUCTS, i.e. PRODUCTS BUILT-UP OF STRATA OF FLAT OR NON-FLAT, e.g. CELLULAR OR HONEYCOMB, FORM	1740, 1780

Major Subject Matter Areas In TC1700 (5 of 12)

CPC Subclasses	Subject Matter	Division
B33Y	ADDITIVE MANUFACTURING, i.e. MANUFACTURING OF THREE-DIMENSIONAL [3-D] OBJECTS BY ADDITIVE DEPOSITION, ADDITIVE AGGLOMERATION OR ADDITIVE LAYERING, e.g. BY 3-D PRINTING, STEREOGRAPHY OR SELECTIVE LASER SINTERING	1740
B42C	BOOKBINDING	1740
B44F	SPECIAL DESIGNS OR PICTURES	1740, 1780
B60C	VEHICLE TYRES	1740, 1780
B65C	LABELLING OR TAGGING MACHINES, APPARATUS, OR PROCESSES	1740
B65H	HANDLING THIN OR FILAMENTARY MATERIAL, e.g. SHEETS, WEBS, CABLES	1740
B81C	PROCESSES OR APPARATUS SPECIALLY ADAPTED FOR THE MANUFACTURE OR TREATMENT OF MICRO-STRUCTURAL DEVICES OR SYSTEMS	1710
C01B	NON-METALLIC ELEMENTS; COMPOUNDS THEREOF	1730
C01C	AMMONIA; CYANOGEN; COMPOUNDS THEREOF	1730
C01D	COMPOUNDS OF ALKALI METALS, i.e. LITHIUM, SODIUM, POTASSIUM, RUBIDIUM, CAESIUM, OR FRANCIUM	1730
C01F	COMPOUNDS OF THE METALS BERYLLIUM, MAGNESIUM, ALUMINIUM, CALCIUM, STRONTIUM, BARIUM, RADIUM, THORIUM, OR OF THE RARE-EARTH METALS	1730
C01G	COMPOUNDS CONTAINING METALS NOT COVERED BY SUBCLASSES C01D OR C01F	1730
C02F	TREATMENT OF WATER, WASTE WATER, SEWAGE, OR SLUDGE	1750, 1770

Major Subject Matter Areas In TC1700 (6 of 12)

CPC Subclasses	Subject Matter	Division
C03B	MANUFACTURE, SHAPING, OR SUPPLEMENTARY PROCESSES	1740, 1780
C03C	CHEMICAL COMPOSITION OF GLASSES, GLAZES, OR VITREOUS ENAMELS; SURFACE TREATMENT OF GLASS; SURFACE TREATMENT OF FIBRES OR FILAMENTS FROM GLASS, MINERALS OR SLAGS; JOINING GLASS TO GLASS OR OTHER MATERIALS	1730, 1780
C04B	LIME, MAGNESIA; SLAG; CEMENTS; COMPOSITIONS THEREOF, e.g. MORTARS, CONCRETE OR LIKE BUILDING MATERIALS; ARTIFICIAL STONE) } ; CERAMICS; REFRACTORIES; TREATMENT OF NATURAL STONE	1730, 1740, 1780
C05B	FERTILISERS; MANUFACTURE THEREOF	1730
C05C	PHOSPHATIC FERTILISERS	1730
C05D	NITROGENOUS FERTILISERS	1730
C05F	ORGANIC FERTILISERS NOT COVERED BY SUBCLASSES C05B , C05C , e.g. FERTILISERS FROM WASTE OR REFUSE	1730
C05G	MIXTURES OF FERTILISERS COVERED INDIVIDUALLY BY DIFFERENT SUBCLASSES OF CLASS C05	1730
C06B	EXPLOSIVES OR THERMIC COMPOSITIONS	1730
C06C	DETONATING OR PRIMING DEVICES; FUSES; CHEMICAL LIGHTERS; PYROPHORIC COMPOSITIONS	1730
C06D	MEANS FOR GENERATING SMOKE OR MIST; GAS-ATTACK COMPOSITIONS; GENERATION OF GAS FOR BLASTING OR PROPULSION (CHEMICAL PART)	1730
C07C	ACYCLIC OR CARBOCYCLIC COMPOUNDS	1720, 1780

Major Subject Matter Areas In TC1700 (7 of 12)

CPC Subclasses	Subject Matter	Division
C08B	POLYSACCHARIDES; DERIVATIVES THEREOF	1730, 1760, 1780
C08F	MACROMOLECULAR COMPOUNDS OBTAINED BY REACTIONS ONLY INVOLVING CARBON-TO-CARBON UNSATURATED BONDS	1730, 1760, 1780
C08G	MACROMOLECULAR COMPOUNDS OBTAINED OTHERWISE THAN BY REACTIONS ONLY INVOLVING UNSATURATED CARBON-TO-CARBON BONDS	1760, 1780
C08K	USE OF INORGANIC OR NON-MACROMOLECULAR ORGANIC SUBSTANCES AS COMPOUNDING INGREDIENTS	1730, 1760, 1780
C08L	COMPOSITIONS OF MACROMOLECULAR COMPOUNDS	1760, 1780
C09C	TREATMENT OF INORGANIC MATERIALS, OTHER THAN FIBROUS FILLERS, TO ENHANCE THEIR PIGMENTING OR FILLING PROPERTIES	1730, 1780
C09D	COATING COMPOSITIONS, e.g. PAINTS, VARNISHES OR LACQUERS; FILLING PASTES; CHEMICAL PAINT OR INK REMOVERS; INKS; CORRECTING FLUIDS; WOODSTAINS; PASTES OR SOLIDS FOR COLOURING OR PRINTING; USE OF MATERIALS THEREFOR	1730, 1780
C09G	POLISHING COMPOSITIONS OTHER THAN FRENCH POLISH; SKI WAXES	1710, 1730
C09J	ADHESIVES; NON-MECHANICAL ASPECTS OF ADHESIVE PROCESSES IN GENERAL; ADHESIVE PROCESSES NOT PROVIDED FOR ELSEWHERE; USE OF MATERIALS AS ADHESIVES	1730, 1760, 1780
C09K	MATERIALS FOR MISCELLANEOUS APPLICATIONS, NOT PROVIDED FOR ELSEWHERE	1730, 1760
C10G	CRACKING HYDROCARBON OILS; PRODUCTION OF LIQUID HYDROCARBON MIXTURES, e.g. BY DESTRUCTIVE HYDROGENATION, OLIGOMERISATION, POLYMERISATION	1760, 1770

Major Subject Matter Areas In TC1700 (8 of 12)

CPC Subclasses	Subject Matter	Division
C10H	PRODUCTION OF ACETYLENE BY WET METHODS	1720
C10J	PRODUCTION OF PRODUCER GAS, WATER-GAS, SYNTHESIS GAS FROM SOLID CARBONACEOUS MATERIAL, OR MIXTURES CONTAINING THESE GASES	1720
C10K	PURIFYING OR MODIFYING THE CHEMICAL COMPOSITION OF COMBUSTIBLE GASES CONTAINING CARBON MONOXIDE	1720
C10M	LUBRICATING COMPOSITIONS	1770
C10L	FUELS NOT OTHERWISE PROVIDED FOR	1770
C11D	DETERGENT COMPOSITIONS	1760
C12C	BREWING OF BEER	1790
C12G	WINE; OTHER ALCOHOLIC BEVERAGES; PREPARATION THEREOF	1790
C12H	PASTEURISATION; STERILISATION; PRESERVATION; PURIFICATION; CLARIFICATION; AGEING	1790
C12J	VINEGAR; ITS PREPARATION [2013-01]	1790
C12N	MICRO-ORGANISMS OR ENZYMES; COMPOSITIONS THEREOF	1770, 1790
C12Q	MEASURING OR TESTING PROCESSES INVOLVING ENZYMES OR MICRO-ORGANISMS	1750, 1770
C13B	PRODUCTION OF SUCROSE; APPARATUS SPECIALLY ADAPTED THEREFOR	1730

Major Subject Matter Areas In TC1700 (9 of 12)

CPC Subclasses	Subject Matter	Division
C13K	SACCHARIDES, OTHER THAN SUCROSE, OBTAINED FROM NATURAL SOURCES OR BY HYDROLYSIS OF NATURALLY OCCURRING DI-, OLIGO- OR POLYSACCHARIDES	1730, 1790
C21B	MANUFACTURE OF IRON OR STEEL	1730
C21C	PROCESSING OF PIG-IRON, e.g. REFINING, MANUFACTURE OF WROUGHT-IRON OR STEEL; TREATMENT IN MOLTEN STATE OF FERROUS ALLOYS	1730
C21D	MODIFYING THE PHYSICAL STRUCTURE OF FERROUS METALS; GENERAL DEVICES FOR HEAT TREATMENT OF FERROUS OR NON-FERROUS METALS OR ALLOYS; MAKING METAL MALLEABLE BY DECARBURISATION, TEMPERING OR OTHER TREATMENTS	1730
C22B	PRODUCTION AND REFINING OF METALS	1730
C22C	ALLOYS	1730
C22F	CHANGING THE PHYSICAL STRUCTURE OF NON-FERROUS METALS AND NON-FERROUS ALLOYS	1730
C23C	COATING METALLIC MATERIAL; COATING MATERIAL WITH METALLIC MATERIAL; SURFACE TREATMENT OF METALLIC MATERIAL BY DIFFUSION INTO THE SURFACE, BY CHEMICAL CONVERSION OR SUBSTITUTION; COATING BY VACUUM EVAPORATION, BY SPUTTERING, BY ION IMPLANTATION OR BY CHEMICAL VAPOUR DEPOSITION, IN GENERAL	1710, 1730
C23F	NON-MECHANICAL REMOVAL OF METALLIC MATERIAL FROM SURFACE	1710
C23G	CLEANING OR DEGREASING OF METALLIC MATERIAL BY CHEMICAL METHODS OTHER THAN ELECTROLYSIS	1710

Major Subject Matter Areas In TC1700 (10 of 12)

CPC Subclasses	Subject Matter	Division
C25B	ELECTROLYTIC OR ELECTROPHORETIC PROCESSES FOR THE PRODUCTION OF COMPOUNDS OR NON-METALS; APPARATUS THEREFOR	1750
C25C	PROCESSES FOR THE ELECTROLYTIC PRODUCTION, RECOVERY OR REFINING OF METALS; APPARATUS THEREFOR	1750
C25D	PROCESSES FOR THE ELECTROLYTIC OR ELECTROPHORETIC PRODUCTION OF COATINGS; ELECTROFORMING	1750
C25F	PROCESSES FOR THE ELECTROLYTIC REMOVAL OF MATERIALS FROM OBJECTS; APPARATUS THEREFOR	1750
C30B	SINGLE-CRYSTAL-GROWTH	1710
D01B	MECHANICAL TREATMENT OF NATURAL FIBROUS OR FILAMENTARY MATERIAL TO OBTAIN FIBRES OF FILAMENTS, e.g. FOR SPINNING	1780
D01D	MECHANICAL METHODS OR APPARATUS IN THE MANUFACTURE OF ARTIFICIAL FILAMENTS, THREADS, FIBRES, BRISTLES OR RIBBONS	1740, 1780
D01F	CHEMICAL FEATURES IN THE MANUFACTURE OF ARTIFICIAL FILAMENTS, THREADS, FIBRES, BRISTLES OR RIBBONS; APPARATUS SPECIALLY ADAPTED FOR THE MANUFACTURE OF CARBON FILAMENTS	1740, 1780
D02G	CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS; YARNS OR THREADS [2013-01]	1780
D03D	WOVEN FABRICS; METHODS OF WEAVING; LOOMS	1780
D04B	KNITTING	1780
D04H	MAKING TEXTILE FABRICS, e.g. FROM FIBRES OR FILAMENTARY MATERIAL	1780
D06B	TREATING TEXTILE MATERIALS BY LIQUIDS, GASES OR VAPOURS	1710, 1760

Major Subject Matter Areas In TC1700 (11 of 12)

CPC Subclasses	Subject Matter	Division
D06F	LAUNDERING, DRYING, IRONING, PRESSING OR FOLDING TEXTILE ARTICLES	1710
D06L	BLEACHING, e.g. OPTICAL BLEACHING, DRY-CLEANING, OR WASHING FIBRES, THREADS, YARNS, FABRICS, FEATHERS OR MADE-UP FIBROUS GOODS; BLEACHING LEATHER OR FURS	1760
D06M	TREATMENT, NOT PROVIDED FOR ELSEWHERE IN CLASS D06	1760, 1780
D06P	DYEING OR PRINTING TEXTILES; DYEING LEATHER, FURS, OR SOLID MACROMOLECULAR SUBSTANCES IN ANY FORM	1760, 1780
D21B	FIBROUS RAW MATERIALS OR THEIR MECHANICAL TREATMENT [2013-01]	1740
D21C	PRODUCTION OF CELLULOSE BY REMOVING NON-CELLULOSE SUBSTANCES FROM CELLULOSE-CONTAINING MATERIALS; REGENERATION OF PULPING LIQUORS; APPARATUS THEREFOR [2013-01]	1740
D21D	TREATMENT OF THE MATERIALS BEFORE PASSING TO THE PAPER-MAKING MACHINE [2013-01]	1740
D21F	PAPER-MAKING MACHINES; METHODS OF PRODUCING PAPER THEREON [2013-01]	1740
D21G	CALENDERS; ACCESSORIES FOR PAPER-MAKING MACHINES	1740
D21H	PULP COMPOSITIONS; PREPARATION THEREOF NOT COVERED BY SUBCLASSES D21C or D21D ; IMPREGNATING OR COATING OF PAPER; TREATMENT OF FINISHED PAPER NOT COVERED BY CLASS B31 OR SUBCLASS D21G ; PAPER NOT OTHERWISE PROVIDED FOR	1740

Major Subject Matter Areas In TC1700 (12 of 12)

CPC Subclasses	Subject Matter	Division
D21J	FIBREBOARD; MANUFACTURE OF ARTICLES FROM CELLULOSIC FIBROUS SUSPENSIONS OR FROM PAPIER-MACHE	1740, 1780
E04B	GENERAL BUILDING CONSTRUCTIONS; WALLS, e.g. PARTITIONS; ROOFS; FLOORS; CEILINGS; INSULATION OR OTHER PROTECTION OF BUILDINGS	1780
E04C	STRUCTURAL ELEMENTS; BUILDING MATERIALS	1780
E04D	ROOF COVERINGS; SKY-LIGHTS; GUTTERS; ROOF-WORKING TOOLS	1780
F42B	EXPLOSIVE CHARGES	1730
F28G	CLEANING OF INTERNAL OR EXTERNAL SURFACES OF HEAT-EXCHANGE OR HEAT-TRANSFER CONDUITS, e.g. WATER TUBES OR BOILERS	1710
G01N	INVESTIGATING OR ANALYSING MATERIALS BY DETERMINING THEIR CHEMICAL OR PHYSICAL PROPERTIES	1750, 1770
G03C	PHOTOSENSITIVE MATERIALS FOR PHOTOGRAPHIC PURPOSES	1720, 1780
G03F	PHOTOMECHANICAL PRODUCTION OF TEXTURED OR PATTERNED SURFACES, e.g. FOR PRINTING, FOR PROCESSING OF SEMICONDUCTOR DEVICES; MATERIALS THEREFOR; ORIGINALS THEREFOR; APPARATUS SPECIALLY ADAPTED THEREFOR	1720, 1780
G03G	ELECTROGRAPHY; ELECTROPHOTOGRAPHY; MAGNETOGRAPHY	1720, 1780
H01B	CABLES; CONDUCTORS; INSULATORS; SELECTION OF MATERIALS FOR THEIR CONDUCTIVE, INSULATING OR DIELECTRIC PROPERTIES	1760, 1780
H01L	SEMICONDUCTOR DEVICES; ELECTRIC SOLID STATE DEVICES NOT OTHERWISE PROVIDED FOR	1710
H01M	PROCESSES OR MEANS, e.g. BATTERIES, FOR THE DIRECT CONVERSION OF CHEMICAL INTO ELECTRICAL ENERGY	1720
H05K	PRINTED CIRCUITS; CASINGS OR CONSTRUCTIONAL DETAILS OF ELECTRIC APPARATUS; MANUFACTURE OF ASSEMBLAGES OF ELECTRICAL COMPONENTS	1710, 1780

Thank you!