

# Cooperative Patent Classification (CPC): CPC User Interaction and Resources



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July 10, 2012

F16G5/14

with reinforcement provided by the plate and

# Agenda

CPC Implementation Key Milestones

CPC System

Scheme and Definitions

Symbols and Attributes

Revision

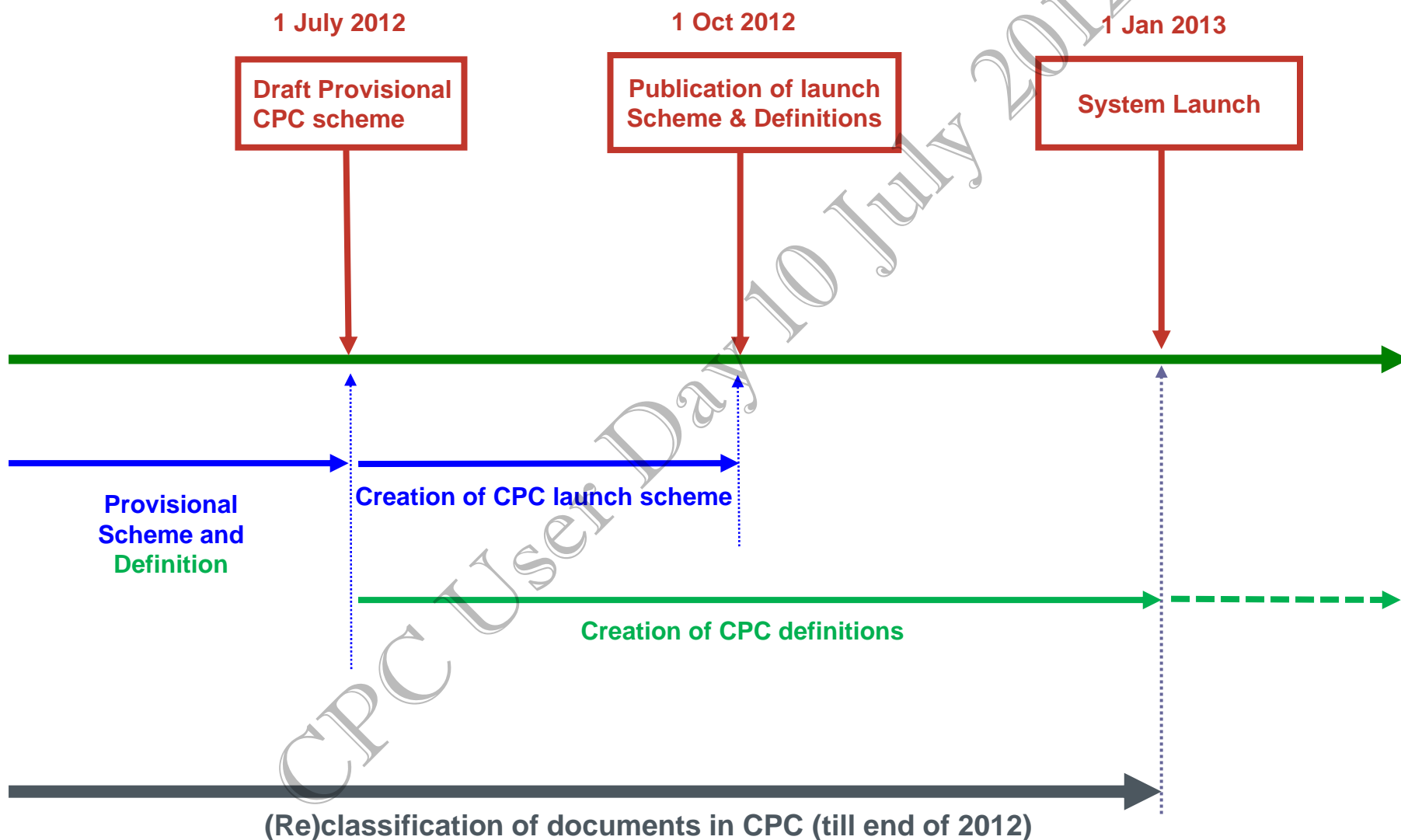
Quality Assurance

Training

Commercial Products and Services

Where to find CPC Scheme/Schedule for Early Users

# CPC Implementation Milestones



# CPC System

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## CPC Scheme and CPC Definitions

- CPC will include:
  - **ECLA/ICO** titles and active subdivisions
  - USPTO special areas, e.g. business methods, and special collections
  - Capability to expand (for future revisions)
  - Up to 6 last digits for subgroup (after the “/”)
- CPC will use **IPC-like numbering**: e.g., H01L21/02**002** instead of H01L21/02**D**
- **ECLA, ICO, and USPC symbols** will be converted to CPC symbols
- **CPC Definitions**:
  - Can be regularly updated on request;
  - Will require agreement between the EPO and USPTO for updates;
  - Will be publically available via the "collaborative platform".

# ECLA/ICO-to-CPC renumbering algorithm

- Take the available three schemes as three "layers":
  - A. IPC
  - B. ECLA
  - C. ICO - mirrors, further breakdowns and orthogonal
- Flatten the three layers into one
- Renumber

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# CPC renumbering algorithm (2)

*Include ECLA subdivisions in CPC*

**ECLA**

H01L21/285  
H01L21/285B  
H01L21/285B4  
H01L21/285B4A  
H01L21/285B4C  
  
H01L21/285B4F  
H01L21/285B4H  
H01L21/285B6  
H01L21/285B6B  
H01L21/285B6C  
H01L21/288

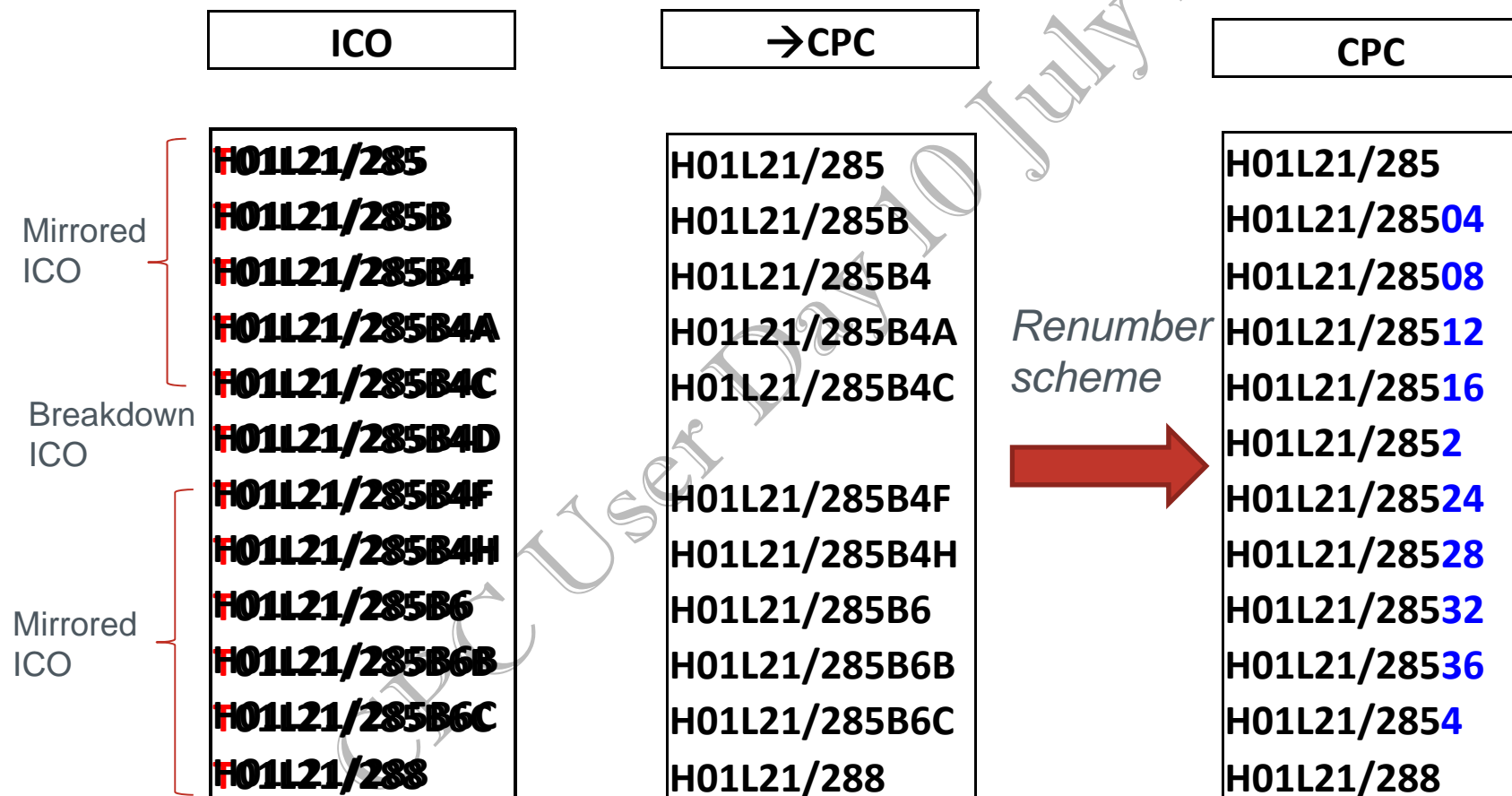
**→CPC**

H01L21/285  
  
  
  
  
  
  
  
  
  
  
H01L21/288



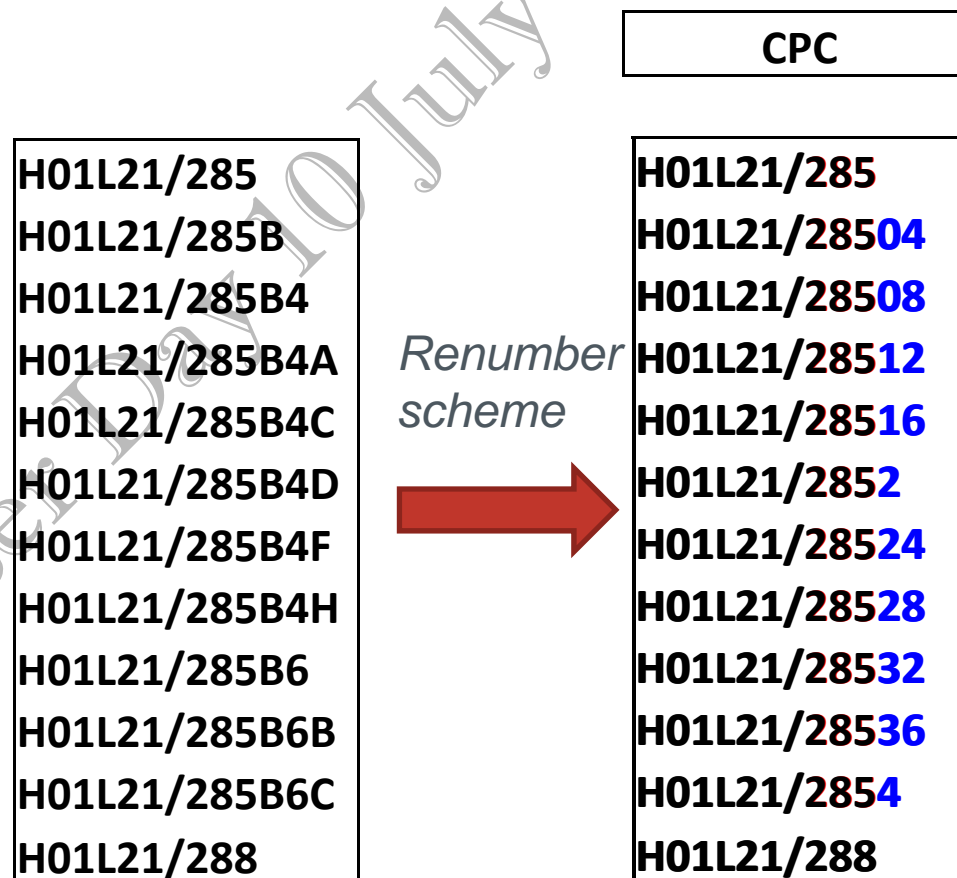
# CPC renumbering algorithm (3)

*Include mirrored (& further breakdown) ICO subdivisions in CPC*  
*Convert ICO section symbol T to ECLA section symbol H*



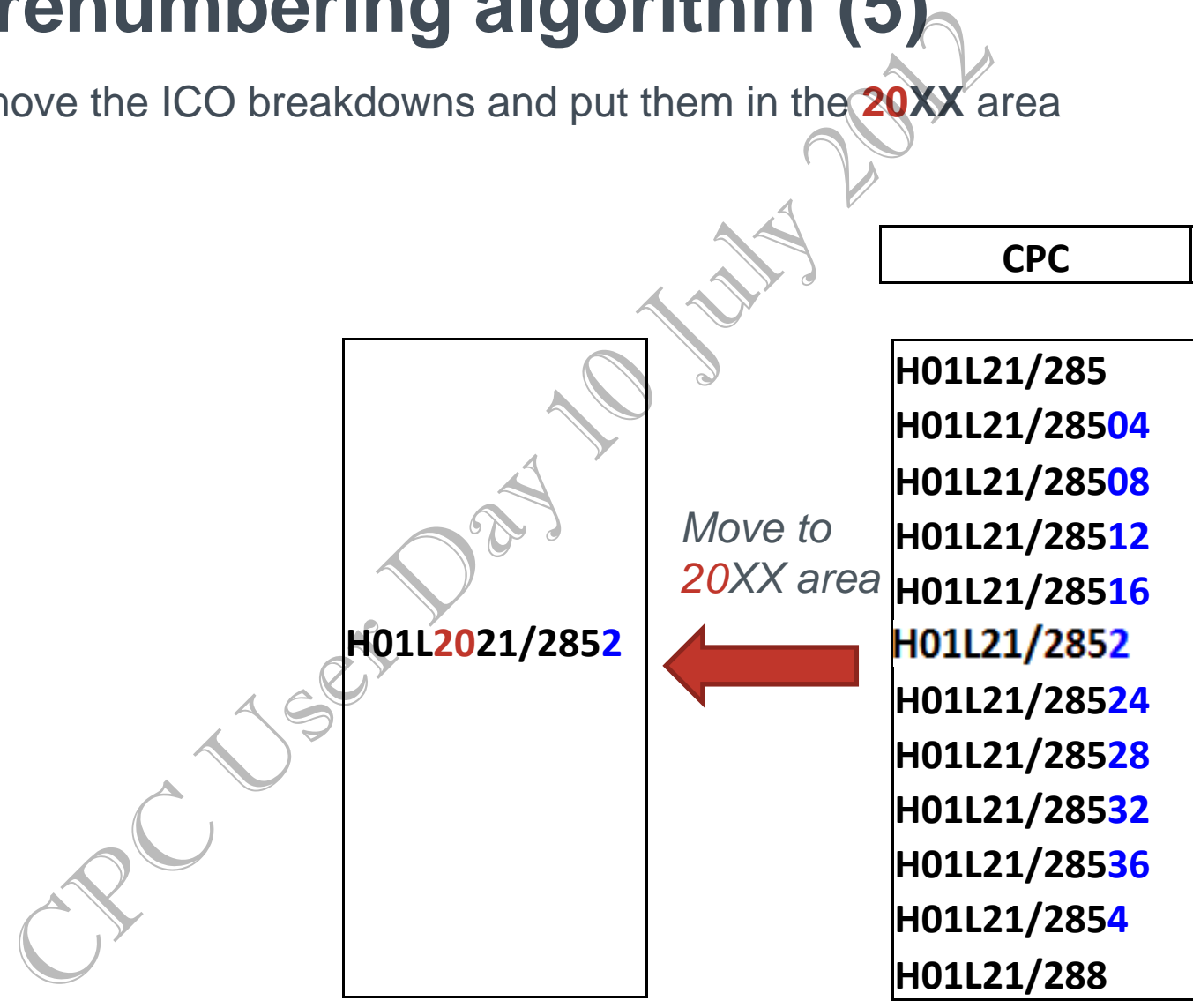
# CPC renumbering algorithm (4)

- IPC part after the "/" remains visible: subdivision takes place while keeping the last digits of the corresponding IPC symbol



# CPC renumbering algorithm (5)

- Remove the ICO breakdowns and put them in the **20XX** area



# CPC renumbering algorithm (6)

- Rebuild hierarchical structure and grey out mirrored symbols

H01L2021/285  
H01L2021/28504  
H01L2021/28508  
**H01L2021/2852**



CPC

H01L21/285  
H01L21/28504  
H01L21/28508  
H01L21/28512  
H01L21/28516  
  
H01L21/28524  
H01L21/28528  
H01L21/28532  
H01L21/28536  
H01L21/2854  
H01L21/288

## ECLA

## Breakdown ICOs

A22C11/00

Sausage making [N: (chemical aspects A23L1/31 ); Apparatus for handling or conveying sausage products during manufacture]

A22C11/10

- Apparatus for twisting [N: or linking] sausages [N: (subdividing filled flexible tubes to form packages, involving displacement of contents B65B9/12, by applying pressure and heat successively B65B51/26)]

INV

K22C11/00

Sausage making

K22C11/10

- Apparatus for twisting sausages

K22C11/10A

- for pinching and twisting

K22C11/10A2

- and twisting in opposite directions

ADD

## CPC Main Trunk

A22C11/00

Sausage making [N: (chemical aspects A23L1/31)]; Apparatus for handling or conveying sausage products during manufacture]

A22C11/10

- Apparatus for twisting [N: or linking] sausages [N: (subdividing filled flexible tubes to form packages, involving displacement of contents B65B9/12, by applying pressure and heat successively B65B51/26)]

INV /  
ADD

## CPC 20XX area - Breakdown ICOs

A22C2011/00

Sausage making

A22C2011/10

- Apparatus for twisting sausages

Dummy symbols greyed out - non-allocatable

A22C2011/104

- for pinching and twisting

A22C2011/108

- and twisting in opposite directions

ADD

# CPC scheme renumbered

Classification  
(INV/ADD)

....  
H01L21/285 .....  
H01L21/28504 .....  
H01L21/28508 .....  
H01L21/28512 .....  
H01L21/28516 .....  
  
H01L21/28524 .....  
H01L21/28528 .....  
H01L21/28532 .....

Origin:

- IPC
- ECLA
- mirrored ICO

Indexing  
(ADD)

...  
H01L~~20~~21/2852 .....  
...  
H01L2925/065 ...  
H01L2925/06504 .....  
H01L2925/06508 .....  
...

- further breakdown ICO
- orthogonal ICO

## CPC Scheme and CPC Definitions

- CPC = **one scheme** that also includes "indexing codes":
  - Currently ECLA and ICO schemes in use at the EPO;
  - USPC Cross reference collections and digests in Y section;
  - In CPC all symbols belong to a single scheme but differentiate by use and scope;
  - Resembles the current IPC practice.
- For **search** purposes:
  - CPC invention information
  - CPC additional information

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# CPC Revision

- From 1 January 2013 onwards CPC **jointly** administered by the EPO and USPTO
  - ⇒ **Joint decisions** to amend the CPC scheme and definitions
    - There must be an EPO-USPTO agreement to start revision project
    - **Reclassification** shared between USPTO-EPO (50%-50% overall)
- **Maintenance and revision** projects
  - Maintenance projects WHEN there is no change in scope, it is for the scheme or definitions. "Fast procedure" used.
  - Revision projects WHEN there is change in scope, i.e., reclassification needed or scheme and definitions are changed
- **CPC monthly updates**

# CPC Quality Assurance

- **Correctness**
- **Completeness**
- **Consistency**

Correctness and completeness are assessed in terms of what's documented in the **scheme and Definitions**

Consistency requires comparison between Offices

- **Quality assurance** from 2013 onwards

# CPC Training

Themes	Target Groups	
	USPTO examiners	Public Users
CPC scheme and numbering	✓	✓
Joint revision & maintenance (scheme and definitions)	✓	
Quality Assurance	✓	
Search Tools	✓	✓

## 2. CPC Commercial Products

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## USPTO CPC Commercial Products in 2013, what to expect?

- **XML ST. 36 (ICE) v4.2 (a.k.a. Red Book)**
  - Patent Grant Data
  - Patent Application
- **Multi-Page Images and Single-Page Images (a.k.a. Yellow Book )**
  - Patent Grant
  - Patent Application Publication
- **USPTO Classification Information**
- **EPO Products**

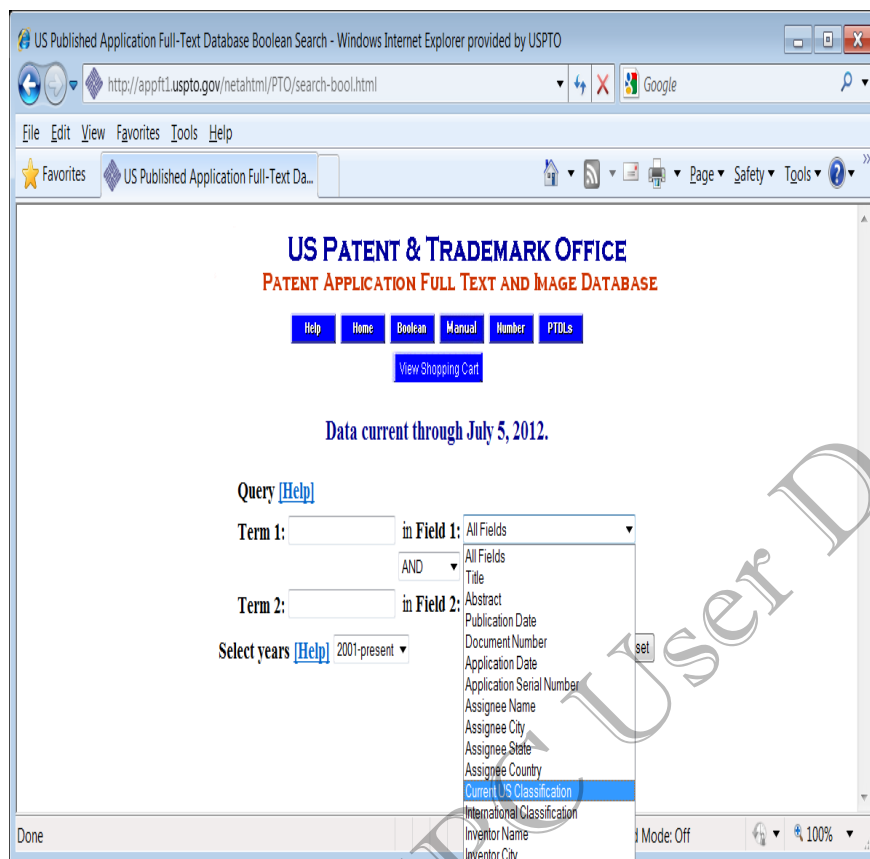
# USPTO Classification Information

The following Current Patent Classification Information are available:

- U.S. Master Classification File (MCF) Patent Grant (Patent Grant Sequence)
- U.S. Master Classification File (MCF) Patent Grant (Classification Sequence)
- U.S. Master Classification File (MCF) Patent Application
- U.S. Manual of Classification File
- Index to U.S. Patent Classification (a.k.a., Classification Index File)
- U.S. Classification Definitions
- U.S. Classification Orders Index (COI)
- U.S. Patent Classification (USPC) to International Patent Classification (IPC) Concordance

➤ Some of these products will have a CPC equivalent product.

# USPTO Search Tools



US PATENT & TRADEMARK OFFICE  
PATENT APPLICATION FULL TEXT AND IMAGE DATABASE

Home Boolean Manual Number PTDLS

Data current through July 5, 2012.

Query [Help]

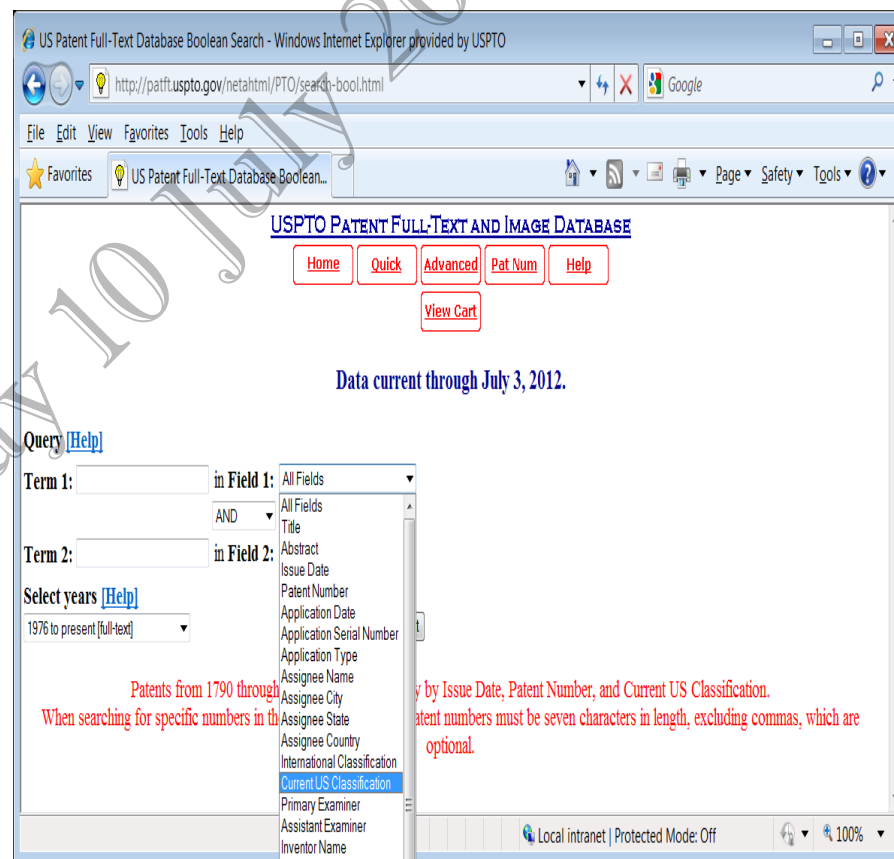
Term 1:  in Field 1: All Fields

AND

Term 2:  in Field 2: Abstract

Select years [Help] 2001-present

Field 1 dropdown options: All Fields, Title, Abstract, Publication Date, Document Number, Application Date, Application Serial Number, Assignee Name, Assignee City, Assignee State, Assignee Country, **Current US Classification**, International Classification, Inventor Name, Inventor City



USPTO PATENT FULL-TEXT AND IMAGE DATABASE

Home Quick Advanced Pat Num Help

View Cart

Data current through July 3, 2012.

Query [Help]

Term 1:  in Field 1: All Fields

AND

Term 2:  in Field 2: Abstract

Select years [Help] 1976 to present [full-text]

Field 1 dropdown options: All Fields, Title, Abstract, Issue Date, Patent Number, Application Date, Application Serial Number, Application Type, Assignee Name, Assignee City, Assignee State, Assignee Country, International Classification, **Current US Classification**, Primary Examiner, Assistant Examiner, Inventor Name

Patents from 1790 through 1975 are available by Issue Date, Patent Number, and Current US Classification. Patent numbers must be seven characters in length, excluding commas, which are optional.

➤ Search tools will have CPC search in January 2013

# CPC Scheme

## CPC COOPERATIVE PATENT CLASSIFICATION

### D02G CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS YARNS OR THREADS

#### NOTE

Attention is drawn to the note following the title of class [D02](#)

#### Guide heading:

**D02G1/00** Producing crimped or curled fibres, filaments, yarns, or threads, giving them latent characteristics (yarns per se [D02G3/00](#); during formation of artificial filaments, threads, or the like [D01D5/22](#); general aspects of chemical treatment [D06M](#))

#### NOTE

In the field of this group, the terms "texturing" or "texturising" encompass curling and crimping

- D02G1/002 . [by knitting, weaving or tufting, fixing and then unravelling]
- D02G1/004 . [by heating fibres, filaments, yarns or threads so as to create a temperature gradient across their diameter, thereby imparting them latent asymmetrical shrinkage properties]
- D02G1/006 . [by impinging the yarn against an uneven surface and thereby deforming it]
- D02G1/008 . [with provision for imparting irregular effects to the yarn]
- D02G1/02 . by twisting, fixing the twist and backtwisting, i.e. by imparting false twist
- D02G1/0206 . . . [by false-twisting]
- D02G1/0213 . . . [after drawing the yarn on the same machine]
- D02G1/022 . . . [while simultaneously drawing the yarn]
- D02G1/0226 . . . [multiple false-twisting]
- D02G1/0233 . . . [with real twist being imparted to the yarn before or after false-twisting]
- D02G1/024 . . . [with provision for imparting irregular effects to the yarn]
- D02G1/0246 . . . [at least some of the filaments being simultaneously broken or cut, (e.g. by stretching or abrading)]
- D02G1/0253 . . . [while bonding at least some of the filaments or fibres together]
- D02G1/026 . . . [in the presence of a crimp finish]
- D02G1/0266 . . . [false-twisting machines]
- D02G1/0273 . . . . [threading up and starting the false-twisting machine]





# CPC Definition

## D02G

### CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS; YARNS OR THREADS

#### Definition statement

*This subclass covers:*

the post treatment of fibres and filaments (usually synthetic) to give them a structure more like natural fibres i.e. crimped or curled to make them easier to work with during further processing.

#### Relationship between large subject matter areas

D02G3/00 covers the making of yarns or threads, e.g. fancy yarns; processes or apparatus for the production. D02G concerns treatments before this stage.

#### References relevant to classification in this subclass

*This subclass does not cover:*

Unwinding, paying-out, forwarding, winding or coiling filamentary material not intimately associated with spinning or twisting	B65H
Cores, formers, supports or holders for coiled or wound material, e.g. bobbins	B65H
Mechanical methods or apparatus in the manufacture of artificial filaments, threads, fibres, bristles, or ribbons	D01D
Chemical features in the manufacture of artificial filaments, threads, fibres, bristles, or ribbons; apparatus specially adapted for the manufacture of carbon filaments	D01F
Twisting oakum	D01G35/00
Spinning or twisting	D01H
Yarns or threads, e.g. fancy yarns; Processes or apparatus for the production thereof	D02G3/00
Making chenille	D03D, D04D3/00
General aspects of chemical treatment	D06M
Testing yarns, rovings, slivers, fibres, or fibre webs	G01

#### Special rules of classification within this subclass

The "common rule" applies in each of the subgroups

# CPC Definition in XML

- <list>
- <cpc-definitions-subclass symbol="D02G">
- <cpc-definition cpc="D02G">
- <definition-title>CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS; YARNS OR THREADS</definition-title>
- <definition-statement>
- <term-text>Definition statement</term-text>
- <definition-case>
- <sub-paragraph>This subclass covers:</sub-paragraph>
- <paragraph-text>the post treatment of fibres and filaments (usually synthetic) to give them a structure more like natural fibres i.e. crimped or curled to make them easier to work with during further processing.</paragraph-text>
- </definition-case>
- </definition-statement>
- <references>
- <term-text>This subclass does not cover:</term-text>
- <sub-heading>References relevant to classification in this subclass</sub-heading>
- + <reference-table>
- </references>
- <special-rules>
- <sub-paragraph>Special rules of classification within this subclass</sub-paragraph>
- <paragraph-text>The "common rule" applies in each of the subgroups</paragraph-text>
- </special-rules>
- <glossary-of-terms>
- <term-text>In this subclass, the following terms (or expressions) are used with the meaning indicated:</term-text>
- <term-row>
- <paragraph-text>Fibre</paragraph-text>
- <term>a relatively short, elongated member of natural or artificial material.</term>
- </term-row>
- <term-row>
- <paragraph-text>Filament</paragraph-text>
- <term>an endless or quasi-endless, elongated member of natural or artificial material.</term>
- </term-row>
- <term-row>
- <paragraph-text>Yarn</paragraph-text>
- <term>a unitary assembly of fibres, usually produced by spinning.</term>
- </term-row>
- <term-row>
- <paragraph-text>Thread</paragraph-text>
- <term>an assembly of yarns or filaments, usually produced by twisting.</term>

### 3. Where to find CPC Scheme for Early Adopters

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## Where to find CPC Scheme for Early Adopters

- Common CPC website

<http://www.cpcinfo.org/index.html>

- USPTO website

<http://www.uspto.gov/patents/resources/classification/index.jsp>

<http://www.uspto.gov/web/patents/classification/>

- EPO website

<http://www.epo.org/>