Cooperative Patent Classification (CPC):

CPC User Interaction and Resources

Christopher Kim  July 10, 2012
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

1 July 2012
Draft Provisional CPC scheme

1 Oct 2012
Publication of launch Scheme & Definitions

1 Jan 2013
System Launch

Provisional Scheme and Definition

Creation of CPC launch scheme

Creation of CPC definitions

(Re)classification of documents in CPC (till end of 2012)
CPC System
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., H01L21/02002 instead of H01L21/02D

- **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
CPC renumbering algorithm (1)

Include IPC subdivisions in CPC

IPC

\[ \text{H01L21/285} \]

\[ \text{H01L21/288} \]
CPC renumbering algorithm (2)

Include ECLA subdivisions in CPC

<table>
<thead>
<tr>
<th>ECLA</th>
<th>CPC</th>
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CPC renumbering algorithm (3)

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

<table>
<thead>
<tr>
<th>ICO</th>
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Renumber scheme

CPC User Day 10 July 2012
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

<table>
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ECLA

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)]

Breakdown ICOs

K22C11/00  Sausage making

K22C11/10  • Apparatus for twisting sausages

K22C11/10A  • for pinching and twisting

K22C11/10A2  ••• and twisting in opposite directions
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)]

CPC 20XX area - Breakdown ICOs

A22C2011/00 Sausage making

A22C2011/10 • Apparatus for twisting sausages

A22C2011/104 • for pinching and twisting
A22C2011/108 ••• and twisting in opposite directions

Dummy symbols greyed out - non-allocatable

INV / ADD
CPC scheme renumbered

Classification (INV/ADD)

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

Indexing (ADD)

- H01L2021/2852
- H01L2925/065
- H01L2925/06504
- H01L2925/06508

Origin:

- IPC
- ECLA
- mirrored ICO
- further breakdown ICO
- orthogonal ICO

CPC User Day 10 July 2012
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
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

<table>
<thead>
<tr>
<th>Themes</th>
<th>Target Groups</th>
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<tbody>
<tr>
<td></td>
<td>USPTO examiners</td>
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<tr>
<td>CPC scheme and numbering</td>
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<tr>
<td>Joint revision &amp; maintenance (scheme and definitions)</td>
<td>✔</td>
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<tr>
<td>Quality Assurance</td>
<td>✔</td>
</tr>
<tr>
<td>Search Tools</td>
<td>✔</td>
</tr>
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2. CPC Commercial Products
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.
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 cramped 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)

D02G1/0222

(while simultaneously drawing the yarn)

D02G1/0228

(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 Scheme in XML

```xml
<classification-item level="5">
  <classification-symbol>DO2G</classification-symbol>
  <title>
    CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS
  </title>
</classification-item>

<classification-item level="6">
  <classification-symbol>DO2G1/00</classification-symbol>
  <title>
    Producing crimped or curled fibres, filaments, yarns, or threads; giving them latent characteristics
  </title>
</classification-item>

<classification-item level="7" additional-only="0">
  <classification-symbol>DO2G1/00</classification-symbol>
  <title>
    YARNS OR THREADS
  </title>
</classification-item>
```

---

# CPC Scheme in XML

- `<classification-item level="5">` CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS
- `<classification-item level="6">` Producing crimped or curled fibres, filaments, yarns, or threads; giving them latent characteristics
- `<classification-item level="7">` YARNS OR THREADS
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:

<table>
<thead>
<tr>
<th>Process / Characteristics</th>
<th>Class</th>
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</thead>
<tbody>
<tr>
<td>Unwinding, paying-out, forwarding, winding or coiling filamentary material not intimately associated with spinning or twisting</td>
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</tr>
<tr>
<td>Cores, formers, supports or holders for coiled or wound material, e.g. bobbins</td>
<td>B05H</td>
</tr>
<tr>
<td>Mechanical methods or apparatus in the manufacture of artificial filaments, threads, fibres, bristles, or ribbons</td>
<td>D01D</td>
</tr>
<tr>
<td>Chemical features in the manufacture of artificial filaments, threads, fibres, bristles, or ribbons; apparatus specially adapted for the manufacture of carbon filaments</td>
<td>D01F</td>
</tr>
<tr>
<td>Twisting oakum</td>
<td>D01G35/00</td>
</tr>
<tr>
<td>Spinning or twisting</td>
<td>D01H</td>
</tr>
<tr>
<td>Yarn or threads, e.g. fancy yarns; Processes or apparatus for the production thereof</td>
<td>D02G3/00</td>
</tr>
<tr>
<td>Making chenille</td>
<td>D03D, D04D3/00</td>
</tr>
<tr>
<td>General aspects of chemical treatment</td>
<td>D06M</td>
</tr>
<tr>
<td>Testing yarns, rovings, slivers, fibres, or fibre webs</td>
<td>G01</td>
</tr>
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</table>

**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>
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      - <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>
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  - <paragraph-text>The "common rule" applies in each of the subgroups</paragraph-text>
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- <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>
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  - <term-row>
    - <paragraph-text> Filament</paragraph-text>
    - <term>an endless or quasi-endless, elongated member of natural or artificial material.</term>
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  - <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>
  </term-row>
  </glossary-of-terms>
3. Where to find CPC Scheme for Early Adopters
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/