



Cooperative Patent Classification (CPC)

EPO and USPTO bilateral classification system



Europäisches Patentamt European Patent Office Office européen des brevets

CPC Implementation Group

October 2011







Major Intellectual Property Offices and Current Patent Classification Systems

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Office		Classification System
United States Patent and Trademark Office	(USPTO)	United States Patent Classification (USPC)
World Intellectual Property Organization (WIPO)		International Patent Classification (IPC)
European Patent Office	(EPO)	International Patent Classification (IPC) based European Classification (ECLA), Indexing Codes (ICOs)
Japan Patent Office	(JPO)	International Patent Classification (IPC) based File Index (FI), Indexing Codes (F-terms)
Korean Intellectual Property Office (KIPO)		International Patent Classification (IPC)
State Intellectual Property Office of the P.R.C. (SIPO)		International Patent Classification (IPC)





Cooperative Patent Classification (CPC)

- USPTO/EPO agree to co-operate on a joint classification system derived from IPC-based ECLA (October 2010)
- USPTO to move from USPC to CPC; EPO to move from ECLA to CPC
- CPC planned to be bilaterally operational at EPO and USPTO by end of December 2012



USPTO and EPO Work Toward Joint Patent Classification System

"In view of the significant benefit to stakeholders of developing a transparent and harmonized approach to a global classification system for patent documents; in order to make the search process more effective; and in the belief that cooperation between their two offices will facilitate progress in undertaking classification harmonization projects under the IP5 Common Hybrid Classification initiative, the USPTO and the EPO have agreed together to work toward the formation of a partnership to explore the development of a joint classification system based on the European Classification system (ECLA) that will incorporate the best classification practices of the two offices. This system would be aligned with the World Intellectual Property Organization (WIPO) classification standards and the International Patent Classification (IPC) structure. Accordingly, they have initiated discussions on governance and operational aspects of such a partnership.

The IP5 partner offices will be continually apprised of progress at appropriate IP5 forums. Stakeholders will receive regular updates on the substance and progress of classification partnership discussions between the two offices."

October 25, 2010

Benoît Battistelli





CPC Overview

- CPC is a bilateral classification system managed and maintained by EPO and USPTO
- Initially based on ECLA and Incorporates best classification practices of EPO and USPTO
- Includes all EPO classified documents
- Includes all US documents
- More subdivisions than IPC





CPC Compared to IPC, ECLA, FI & USPC

Document Coverage of the Four Major Patent Classification Systems and CPC







Benefits of Initially Basing CPC on ECLA

- ✓ ECLA is based on IPC
- ✓ USPTO documents (1920) are classified in ECLA
- ✓ Large part of PCT minimum documentation is classified in ECLA
- ✓ Enables complete search with one set of symbols (no various IPC editions to search)
- ✓ ECLA has been continuously maintained





Transition from ECLA to CPC

- CPC will include:
 - All ECLA/ICO titles and active subdivisions (one-to-one match)
 - Hierarchical structure of ECLA

A61B10/00 Note		K6 [N9
Atte	ntion is drawn to group A61F13/15 which provides for swabs	K
A61B10/00L	. [N: Devices for taking samples of body liquids (devices for taking blood samples A61B5/14B)]	K
A61B10/00L1	[N: for taking amniotic fluid samples]	K
		K
A61B10/00L2	[N: for taking saliva or sputum samples (devices for receiving spittle A61J 9/00)]	CO
A61B10/00L4	. [N: for taking sperm samples (artificial insemination A61B17/43; for animals A61D19/02B; genital receptacles for the male member A61F5/453; massage of the genitals A61H19/00)] [C9709]	K
		K
A61B10/00L6 A61B5/00E)]	[N: for taking sweat or sebum samples (measuring sweat production	[N
A61B10/00L8	[N: for taking urine samples (measuring urological functions A61B5/20;	K
AUTOTO/UULO	genital receptacles A61F5/451; urinals for bed-ridden persons A61G9/00U)] [C9412]	K

K61B10/00	Other methods or instruments for diagnosis	
K61B10/00A [N9511]	. including means for analysis by an unskilled person [C9902]	
K61B10/00A2	involving a colour change [N9511]	
K61B10/00B	. Testing for drug or alcohol abuse [N9902]	
K61B10/00D	. Ovulation-period determination	
K61B10/00D2 based on measurement of electric currents, e.g. conductivity tests		
	[N9908]	
K61B10/00D4	based on measurement of temperature [N9908]	
K61B10/00D6 [N9908]	based on measurement of viscosity or visco-elasticity	
K61B10/00D8	based on analysis of crystalisation structure [N0011]	
K61B10/00D10	based on time measurement [N0101]	
K61B10/00D12	based on measurement of pH-value [N0207]	





Transition from ECLA to CPC

- CPC will use IPC type numbering;
 ECLA letters after the "/" will be replaced by digits
 - e.g. H01L 21/02**7B** will become H01L 21/02**09**







Conversion to CPC via an intermediate stage

Include IPC groups







Conversion to CPC via an intermediate stage

Include ECLA groups

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





Conversion to CPC via an intermediate stage

Include mirrored (& breakdowns) ICO groups Convert ICO Section symbol **T** to ECLA Section symbol **H**







From the intermediate stage to CPC

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







ICO codes – orthogonal → CPC 2000 series







Final CPC scheme

H01L21/285	
H01L21/28504	
H01L21/28508	
H01L21/28512	
H01L21/28516	
H01L21/2852	
H01L21/28524	
H01L21/28528	
H01L21/28532	
H01L21/28536	
H01L21/2854	
H01L21/288	
H01L2925/065	
H01L2925/0650)4

H01L2925/06508

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Origin:

- IPC
- ECLA
- mirrored ICO
- breakdowns of mirrored ICO

<u>Origin:</u>

- orthogonal ICO
- ICO originating from KW





Transition from ECLA to CPC

What CPC will look like:







Classification Harmonization

- EPO and USPTO will jointly promote CHC harmonization in IPC
- USPTO and EPO will jointly present and promote CPC







Anticipated CPC Benefits

- More comprehensive patent document search using single classification system
 - ✓ Improves access to more prior art document collections
 - Permits search of multiple language document collection
- Collaborative maintenance of CPC
 - EPO and USPTO will undertake revision projects jointly
 - ✓ Frequent updates and revisions





January 2013 CPC Functionality

- Classification of pre-grant publications using CPC
- CPC for Prior Art Search (USPTO + EPO Collections)
- All CPC reclassification/revision work done cooperatively between the EPO and the USPTO in CPC
- CPC available for use by other IP offices
- Legacy USPC Classifications will continue
 - Design classifications in Dnn classes
 - Plant classifications in PLT classes





Thank you!