

Topic 5-12

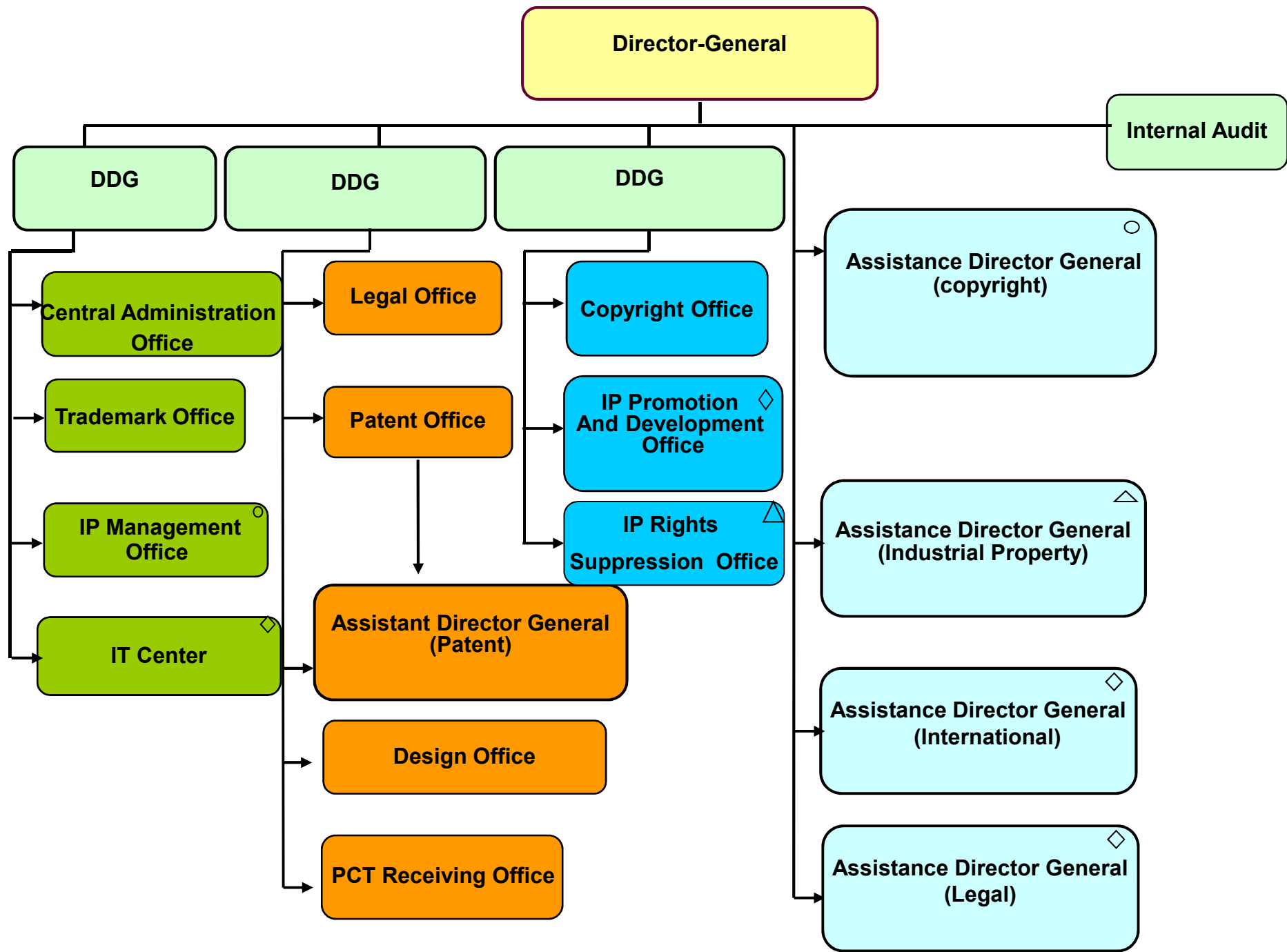


Department of Intellectual Property  
Ministry of Commerce , Thailand

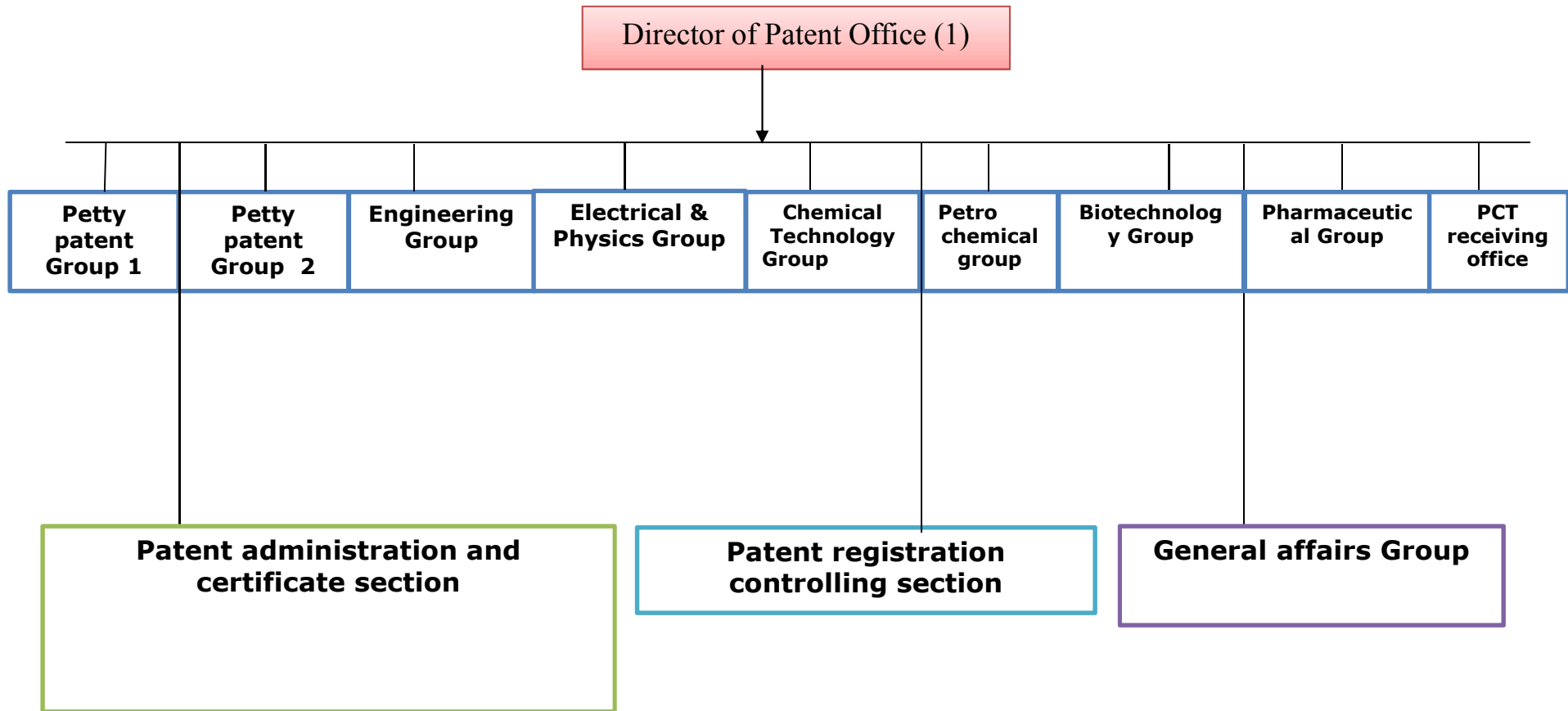
# Regional Seminar on Effective Utilization of Patent Classification System

Tokyo, Japan  
December 11 and 12 , 2013

Suwatchai Boon-aree



# Organization Chart of Patent Office



Note: Patent examiner = 53 People  
Supporting staff = 40 People

## Invention Patent Examination Group

Examination Group	Persons
<b>Invention Patent Examination Group</b>	<b>37 [ 24 Examiners / 13 Assistants ]</b>
<b>Biotechnology &amp; pharmaceutical Group</b>	<b>10</b>
Patent Examiner	7
Assistant Patent Examiner	3
<b>Chemical Technology &amp; Petrochemical Group</b>	<b>10</b>
Patent Examiner	6
Assistant Patent Examiner	4
<b>Engineering Group</b>	<b>8</b>
Patent Examiner	5
Assistant Patent Examiner	3
<b>Electrical &amp; Physics Group</b>	<b>9</b>
Patent Examiner	6
Assistant Patent Examiner	3

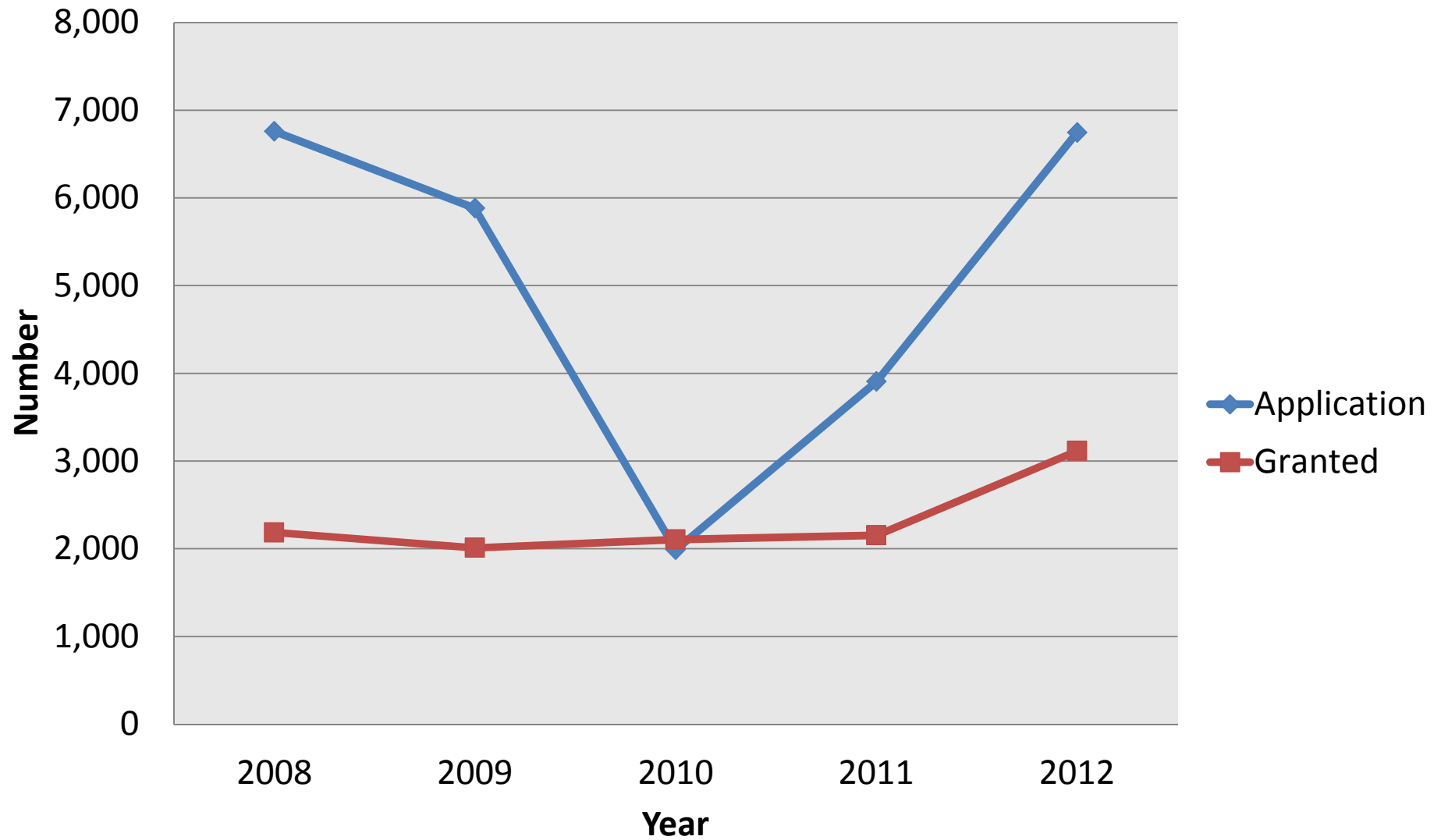
## Petty Patent Group

<b>Examination Group</b>	<b>Persons</b>
<b>Petty Patent Group</b>	<b>11 (6 Examiners / 5 Assistants)</b>
<b>Petty Patent Group 1</b>	<b>7</b>
Patent Examiner	3
Assistant Patent Examiner	4
<b>Petty Patent Group 2</b>	<b>4</b>
Patent Examiner	3
Assistant Patent Examiner	1

## Statistics of Patent Application and Granted

Year		Number				
		2008	2009	2010	2011	2012
Application	Thai	951	1,062	922	893	1,068
	Foreigner	5,807	4,820	1,066	3,013	5,678
	Total	6,758	5,882	1,988	3,906	6,746
Granted	Thai	781	768	889	726	1,212
	Foreigner	1,404	1,242	1,215	1,427	1,903
	Total	2,185	2,010	2,104	2,153	3,115

## Statistics of Patent Application and Granted

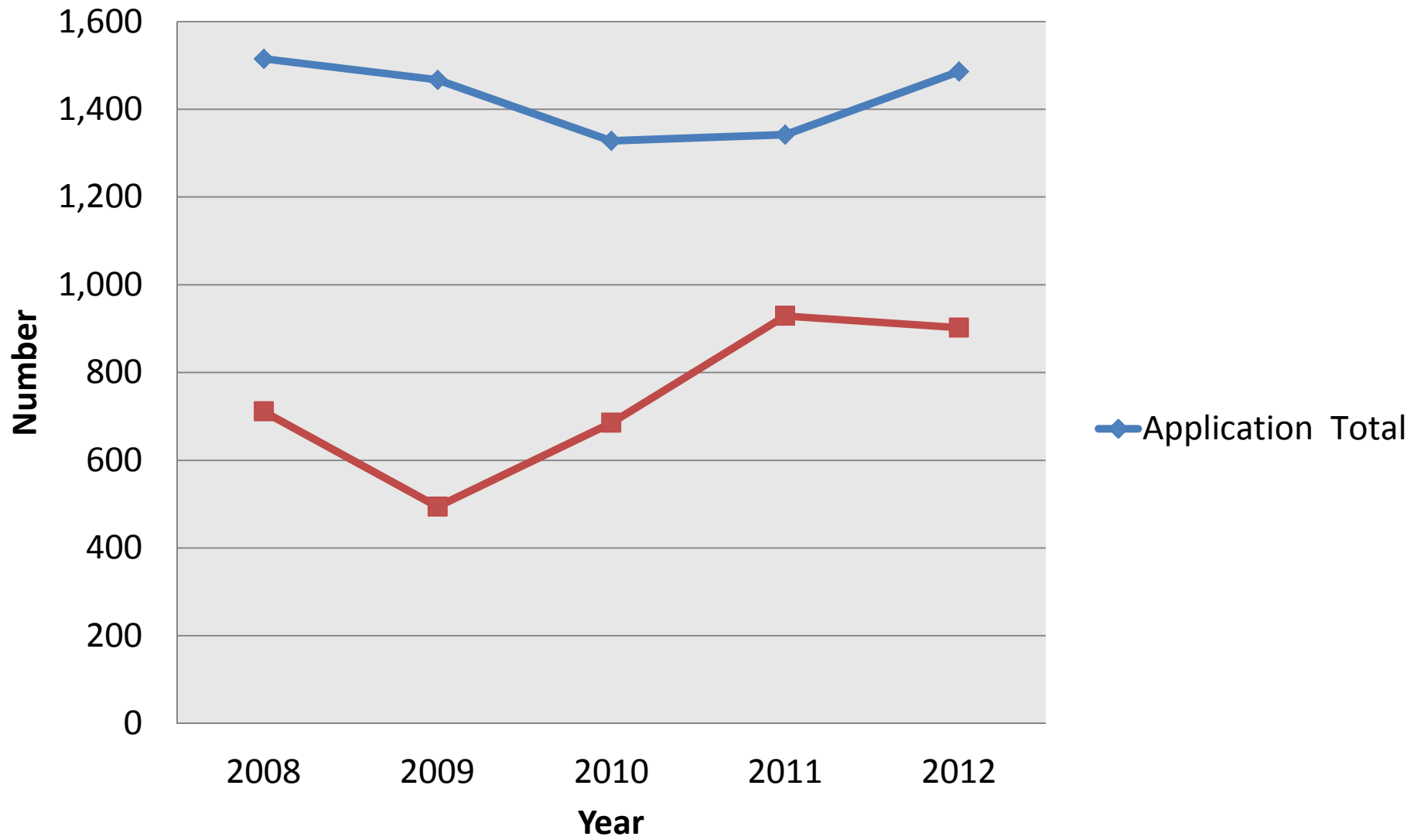


# Statistics of Petty Patent Application and Registration

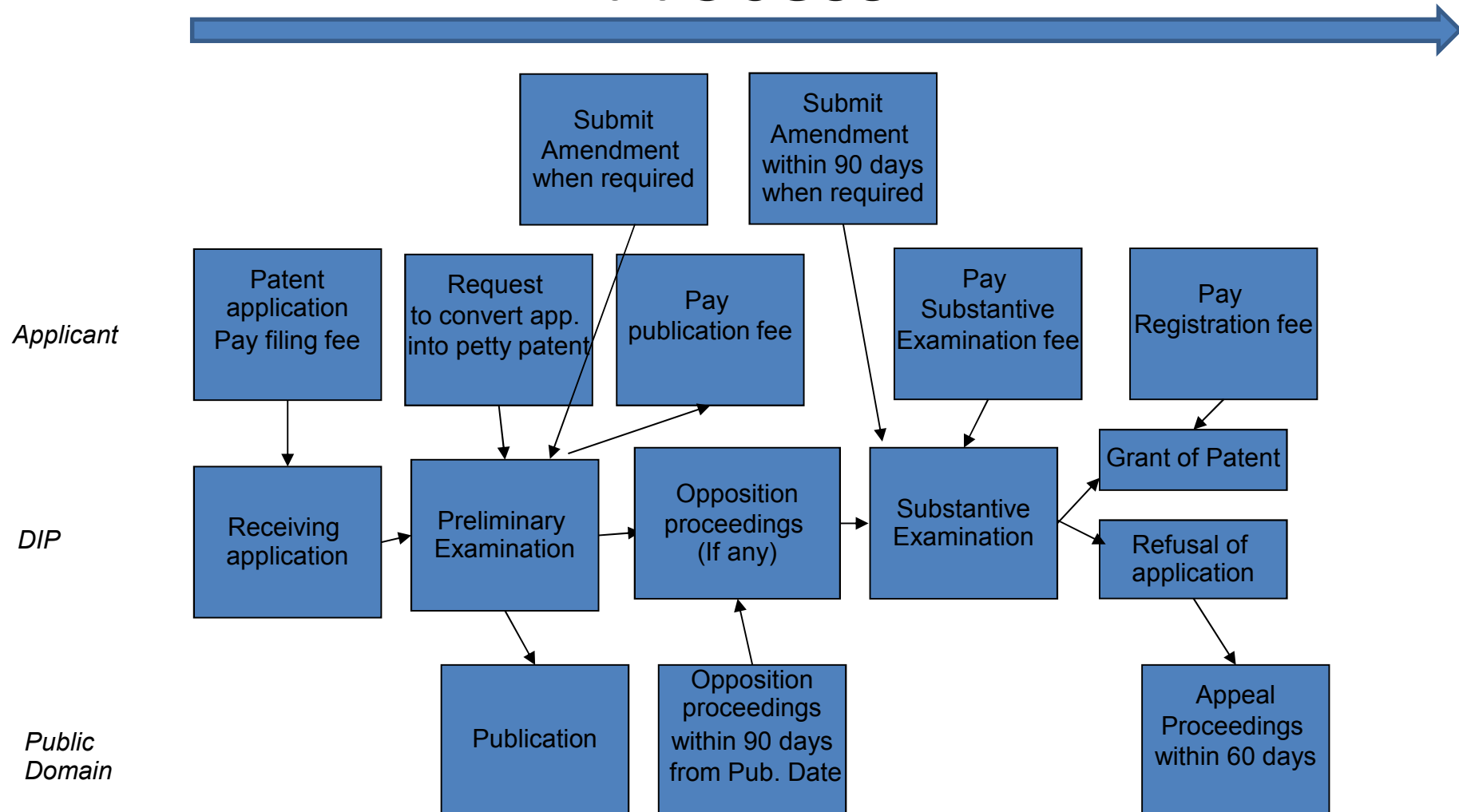
Year		Number				
		2008	2009	2010	2011	2012
Application	Thai	1,423	1,416	1,238	1,234	1,364
	Foreigner	92	51	90	108	122
	Total	1,515	1,467	1,328	1,342	1,486
Registration	Thai	638	451	634	860	812
	Foreigner	73	43	51	69	90
	Total	711	494	685	929	902



## Statistics of Petty Patent Application and Granted



# Publication and Registration Process



# Preliminary Examination

1. Preliminary Examination to be done by Assistant Examiner.
2. Once the application is filed and the formal requirements have been fulfilled, the application will proceed to the preliminary examination stage which usually takes 1 to 1.5 years to complete.
3. The Assistant Examiner conducts the preliminary examination
  - to check the validity of the formal documents and determines the patentability of the invention as described in the specification, claims, drawings, and abstract
  - to allocate classification to patent applications.

## Searching/Substantive Examinations Results Admissible

### Domestic Application

- **Searching Report by Examiner.**
- **Searching results from university or IP australia (Applicant have to pay extra search fee)**
- **External Examination Results . (in the case the application also have filed in oversea )**

### Foreign Application

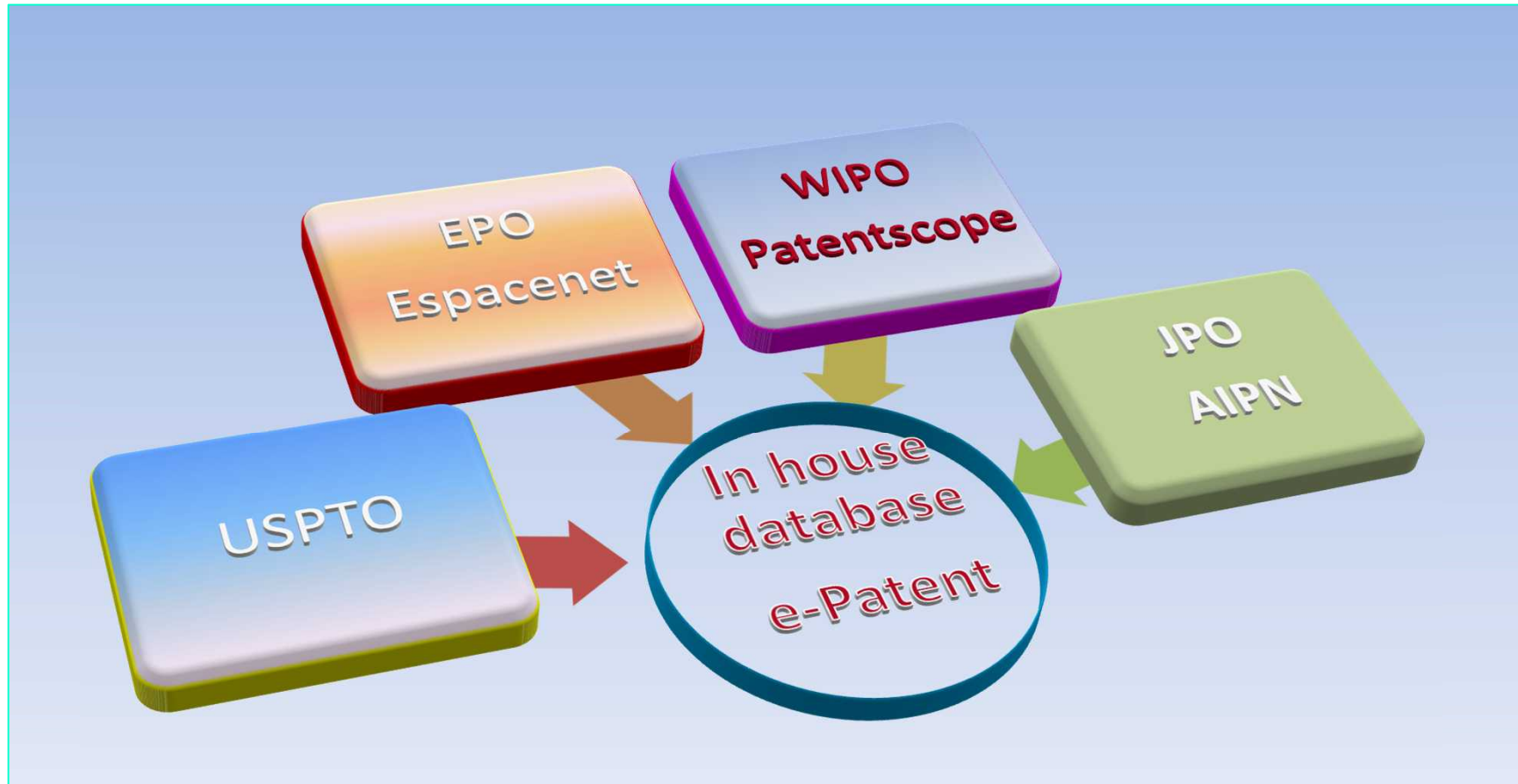
- **Searching results from university or IP australia (Applicant have to pay extra search fee).**
- **External Examination Results .**

# Substantive examination

1. Patent Examiner will only searching state of the art and substantive examination for domestic patent application.
2. For foreign patent application , the Examiner will issue an Office Action instructing the applicant to amend the specification and claims of the Thai application to conform to the corresponding patent, and file the amendment as a response of the Office Action and also search report and examination report e.g. USPTO, EPO , JPO, and, etc.

**The** examination of the Thai application will be based on the patent and Office Action(s), as the Examiner will verify whether the specification and claims of the Thai case conform to those of the documents.

# Databases of patent searches



## Selecting / Finding IPC place for classifying patent applications

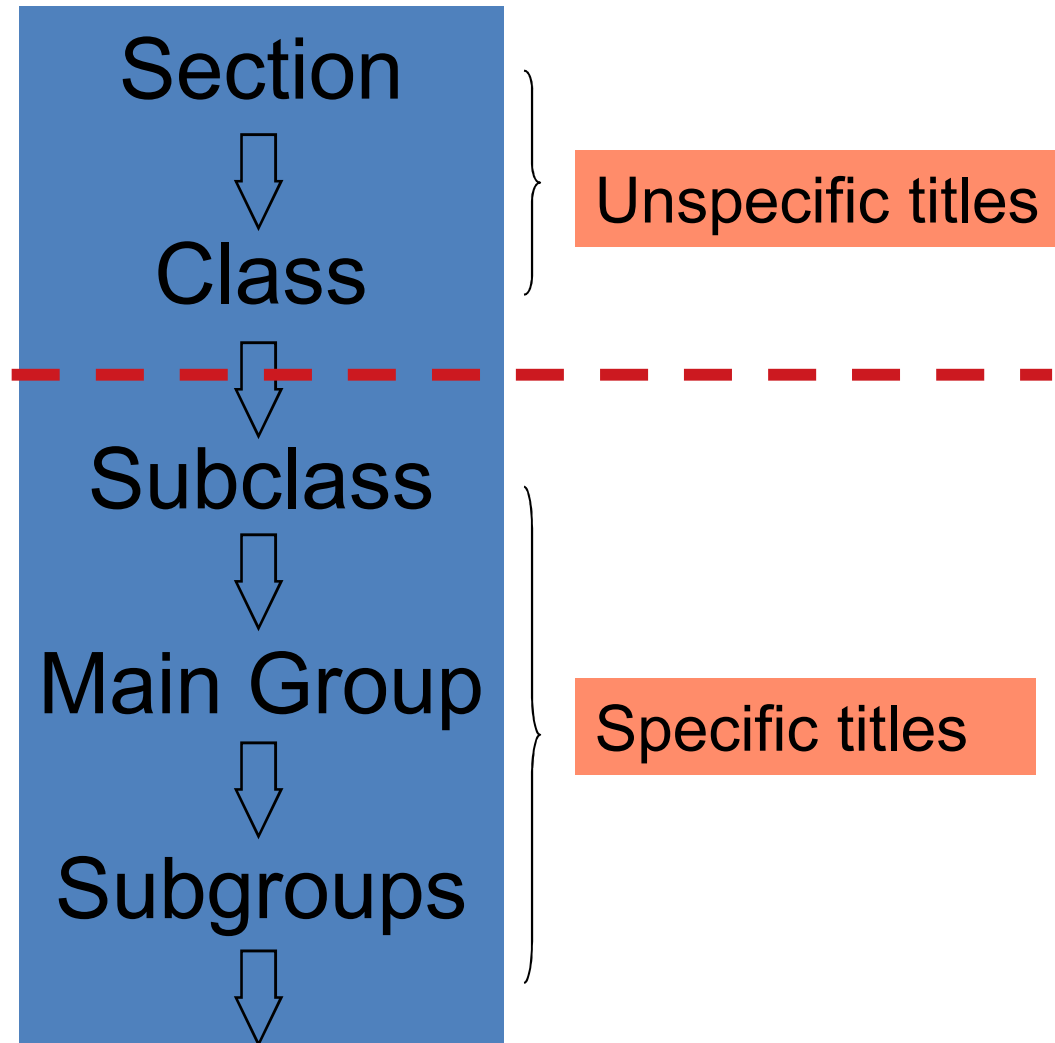
### 1. resources by WIPO

- Browsing the IPC scheme (resources by WIPO)
- Using the Catchword Index
- Text searching of the IPC scheme (“Terms”)
- Using patent database : Patentscope database

2. resources by other IPOs for searching patents by keywords in order to identify IPC codes : Espacenet (EPO) , IPDL (JPO) and USPTO

# Browsing the IPC scheme

- ▶ **Browsing the IPC**





# Using Catchword Index

**WIPO** IP SERVICES International Patent Classification (IPC) Official Publication

Contact us | Acc

WORLD INTELLECTUAL PROPERTY ORGANIZATION

IPC Home Page - Help

Version: 2012.01

Current word:  Go

Language:  English  French

Previous Next Index

Search:  Terms  Cross-references

Last modified: 2012.02.01

Prepared with IPCPUBPREP v 2.12

Scheme RCL Compilation **Catchwords**

A		M	
ABACUSES	- ADHESION	MACADAMISED,	- MARBLE(S)
ADHESIVE(S)	- ALKALI METALS	MACADAMIZED	
ALKALINE EARTH METALS	- ANEMOMETERS	MARCHING	- MEDICINE(S)
ANEROID	- ANTI-TOXINS	MEERSCHAUM	- MICROPHONES
ANVILS	- ASPIRATOR	MICROPROCESSORS	- MONOLINE
ASSEMBLIES	- AWNS	MONO-RAILS(S)	- MUSCLES
AXES	- AZOXY	MUSEUMS	- MYOGRAPHS
B		N	
BABIES	- BARIUM	NACELLES	- NIPPERS
BARK	- BEAUTY	NIPPLES	- NUTMEG
BECKMANN	- BISMUTH		
BISULFITES	- BOLT(S)	O	
BOMBS	- BRASSIERES	OAKUM	- ORNITHOPTERS
BRAZIER(S)	- BUILDING(S)	ORRERIES	- OXYGEN
BULBS	- BUZZERS	OXYKETONE	- OZOTYPY
C		P	
CABINET(S)	- CANDIES	PACKAGES	- PARCHMENT
CANDLE(S)	- CARCASES, CARCASES	PARING	- PEELING
CARCINOGENS	- CATARACT(S)	PEENING	- PEWTER
CATATHERMOMETERS	- CHALK	PFBC [= pressurised fluidised bed combustion]	- PICKLING
CHALKERS	- CHIPS	PICK-UP(S)	- PLACARDS
CHIROMANTIC	- CIRCUMCISION	PLACKETS	- POACHING

# Text search of the IPC scheme

The screenshot displays the WIPO IP SERVICES website interface for the IPC scheme. The page header includes the WIPO logo and the text "IP SERVICES". A green notice states: "This site is the IPC internet publication as from IPC version 2011.01. The official site for the internet publication of IPC-2010.01 and earlier versions remains http://www.wipo.int/classifications/ipc/ipc8 See main changes". Below the header, there are navigation tabs for "Scheme", "RCL", "Compilation", "Catchwords", and "Corrigendum". The "Scheme" tab is active, showing a list of IPC classes. On the left side, there are several filters: "Version" (set to 2010.01), "Current symbol" (G06T), "Language" (English selected), "View mode" (full selected), and checkboxes for "Standardized sequence", "Deleted entries", "Subclass indexes", "Guidance Headings", and "Notes". A "Search" section at the bottom left contains a "Terms" button, which is circled in red. The main content area shows a list of IPC classes with their descriptions and subclass references.

Class	Description
<b>G06T</b>	<b>IMAGE DATA PROCESSING OR GENERATION, IN GENERAL</b> (specially adapted for particular applications, <u>see</u> the relevant subclasses, e.g. <b>G01C</b> , <b>G06K</b> , <b>G09G</b> , <b>H04N</b> ) [8]
<b>G06T 1/00</b>	<b>General purpose image data processing</b> [6]
G06T 1/20	• Processor architectures; Processor configuration, e.g. pipelining (architectures of general purpose stored programme computers <b>G06F 15/76</b> ) [6]
G06T 1/40	• • Neural networks [6]
G06T 1/60	• Memory management [6]
<b>G06T 3/00</b>	<b>Geometric image transformation in the plane of the image, e.g. from bit-mapped to bit-mapped creating a different image</b> [6]
G06T 3/20	• Linear translation of a whole image or part thereof, e.g. panning [6]
G06T 3/40	• Scaling of a whole image or part thereof [6]
G06T 3/60	• Rotation of a whole image or part thereof [6]
<b>G06T 5/00</b>	<b>Image enhancement or restoration, e.g. from bit-mapped to bit-mapped creating a similar image</b> [6]
G06T 5/10	• by non-spatial domain filtering [6]
G06T 5/20	• by the <b>use</b> of local operators [6]
G06T 5/30	• • Erosion or dilatation, e.g. thinning [6]
G06T 5/40	• by the <b>use</b> of histogram techniques [6]
G06T 5/50	• by the <b>use</b> of more than one image, e.g. averaging, subtraction [6]
<b>G06T 7/00</b>	<b>Image analysis, e.g. from bit-mapped to non bit-mapped</b> [6]

## Using patent database

-Search documents with keywords characterizing the subject matter to be classified / searched; check their classifications

-Reviewing similar documents

> e.g. state of the art as cited by applicant or by examiner (ISR)

# Searching Patent Information

## Text searching:

- Databases containing abstracts
- Full-text databases

## Classification-based searching:

- IPC
- Other classifications

Combination of classification-based and text searching gives best results

# Checklist for classification

- ➔ Determine subject matter to be classified, i.e. things claimed to be inventive
  - Process , product , apparatus ,or several such type
  - Identify set of keywords
- ➔ Use keywords to identify IPC symbols by using
  - IPC scheme and Catchword Index @ online IPC
  - ECLA search @ Espacenet
- ➔ Check for disclosed state of the art
- ➔ Search databases with keywords to find similar documents
- ➔ Browse neighboring places on same , lower or higher level in order to identify other IPC

# Challenges regarding patent classification

1

- To harmonize the search and examination environment of each office and to standardize the information-sharing process

2

- Reorganisation of classification schemes
  - \* The best classification scheme will be created
  - \* Japanese classification system could be integrated into the cooperative patent classification (CPC)



Thank you for your kind attention!

