

Drafting a Patent Specification

Unit-I

SCOPE

- What is a patent ?
- What is patentable?
- What is not patentable?
- Precautions to be taken before drafting a specification
- Contents of a specification
- Claims and their interpretation
- Examination practices
- PCT
- Budapest treaty

PATENTS : AN OVERVIEW

Patent : is a limited monopoly right conferred by the State in consideration of disclosure of the invention

Steers vs. Rogers :

“...what the letters patent confers is the right to exclude others from exploiting or using the particular invention

Solution/Invention

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graph TD; A[Solution/Invention] --> B[Application]; B --> C[Satisfaction of condition]; C --> D[PATENTABLE];
```

Application

Satisfaction of condition

PATENTABLE

INDIAN LAW & PRACTICE

First to file system



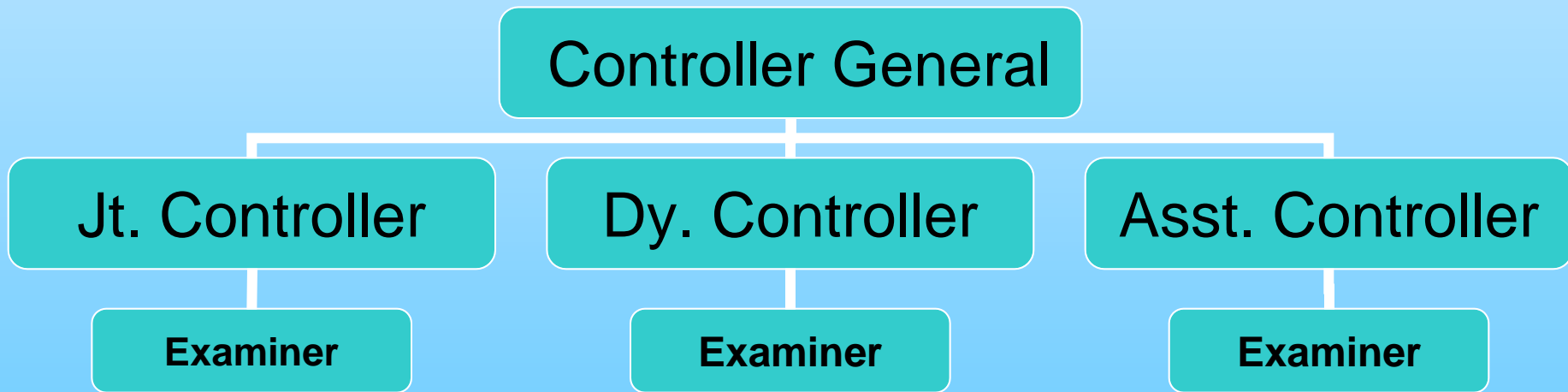
THE INDIAN PATENT OFFICE:

an overview



THE INDIAN PATENT OFFICE:

an overview



WHAT IS AN INVENTION?

Sec. 2(1)(j)

Old

‘Invention’ means any new and useful –

(i) art, process, method or manner of manufacture

(ii) Machine, apparatus or other article

(iii) Substance produced by manufacture

and includes any new and useful improvement of any of them, and an alleged invention – Dimminaco case

New

‘Invention’ means a new product or process involving an inventive step and capable of industrial application.

(with effect from 2003)

INVENTION

- Fundamental research
- Improvement on existing art
- Solving unsolved problems of art/unaddressed issues
- Different approach

BEFORE DRAFTING

- What is the invention ?
- Is invention patentable ?
- Is invention novel, inventive ?
- Prior art/prior disclosure ?
 - Oral disclosure ?
 - Prior printed publication available to the public ?
 - Prior public use ?

BEFORE DRAFTING:

VERIFY THE FOLLOWING:

- ✓ Conduct search
- ✓ Enlist problems in prior art
- ✓ What is the problem sought to be solved by the invention?
- ✓ What is the novelty?
- ✓ Is the solution obvious?
- ✓ Is it artificially excluded ?
- ✓ Has publication ensued?
- ✓ Ascertain the type of application -whether complete or provisional is to be filed
- ✓ Decide the area and nature of protection- Paris convention, PCT, ordinary application.

WHAT IS NOT PATENTABLE?

Inventions that cannot be patented are:

- Frivolous
- Contrary to well established natural laws
- Contrary to morality or injurious to public health (animals/plants) or to environment
- Scientific principle or abstract theory
- New property or use of a known substance
- Mere admixtures (as opposed in synergistic mixtures) and processes thereof
- Mere arrangement or rearrangement of known devices each functioning independently of one another in a known way
- Method of agriculture or horticulture
- Treatment of human being, animals including diagnostic methods
- Plants and animals in whole or any part thereof
- Essentially biological processes
- Mathematical or business methods, computer programme per se or algorithm
- Literary, dramatic, musical or artistic work
- Method of playing games
- Presentation of information

PUBLIC DOMAIN

- Public knowledge - known to persons in the art. A part of the mental equipment of those concerned in the art under consideration
- Common general knowledge: All available public knowledge and all that is published

PUBLICATION

Kinds of publications: documents

- papers or publications should provide unmistakable direction/disclosure of the invention
- even single disclosure is sufficient - extent of publication/ availability of publication-immaterial

PATENT SPECIFICATION

Read by:

- Patent Office
- Licensee/Assignee
- Court
- Technical peers/skilled persons
- Competitors
- Commercial players
- General public

KINDS OF SPECIFICATIONS



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graph TD; A[KINDS OF SPECIFICATIONS] --> B[PROVISIONAL]; A --> C[COMPLETE]
```

PROVISIONAL

COMPLETE

Kinds of applications:

- Conventional (Paris/PCT), non-conventional
- Divisional
- Patent of addition

A PROVISIONAL SPECIFICATION

Pros & Cons

- when there is an Urgency
- commercial disclosure
- Submission of thesis
- Inventors/Seniors leaving the company
- Accidental disclosure
- Many competitors

A PROVISIONAL SPECIFICATION

- Is a document describing the invention and need not contain claims
- Disclose as much as possible
- Decides the date of the application
- **FORM 2** “The following specification describes the invention”

A PROVISIONAL SPECIFICATION

- Specification can be amended to add new information at the time of filing
- To be completed in 12 months
- If not- post dating to a maximum of 6 months

A COMPLETE SPECIFICATION

- Is a techno-legal document, describing and specifically claiming the invention
- **FORM 2** “ The following specification particularly describes and ascertains the nature of the invention and the manner in which it is to be performed.”

PATENT SPECIFICATION

```
graph TD; A[PATENT SPECIFICATION] --> B[Description]; A --> C[Claims];
```

Description

Claims

- **Description discusses the invention**
- **Claims define boundary of monopoly**

WHAT IS A COMPLETE SPECIFICATION

Section 10(4)

” ... *specification shall fully and particularly describe the invention and its operation or use and the method in which it is to be performed; discloses the best method of performing the invention which is known to the applicant and for which he is entitled to claim protection...* ”

DESCRIPTION

- Description must describe the invention comprehensively
- Should fully explain the problem to be solved with examples
- No ambiguity
- Should be adequate and sufficient so as to enable a person skilled in the art to perform and repeat the invention without inventor's further inputs

DESCRIPTION

- To reflect that invention is:
 - novel
 - inventive
 - industrially applicable
 - patentable under Indian Patent Law

CONTENTS OF THE DESCRIPTION

- Title
- Field of the Invention
- Background of Invention
- Prior Art details
- Objects of Invention
- Statement of Invention
- Detailed description of Invention

TITLE

- A concise statement providing the crux of the invention
- Care should be taken to incorporate all major aspects claimed
- Product-Process-Apparatus

EXAMPLE

- Brush Vs. Cleaning Article
- Pen Vs. Writing Instrument

OPENING DESCRIPTION / FIELD OF THE INVENTION

- More details than the title
- Provides utility
- Sometimes used as a tool for search in the absence of abstract

BACKGROUND

Provides the technical background of the
invention

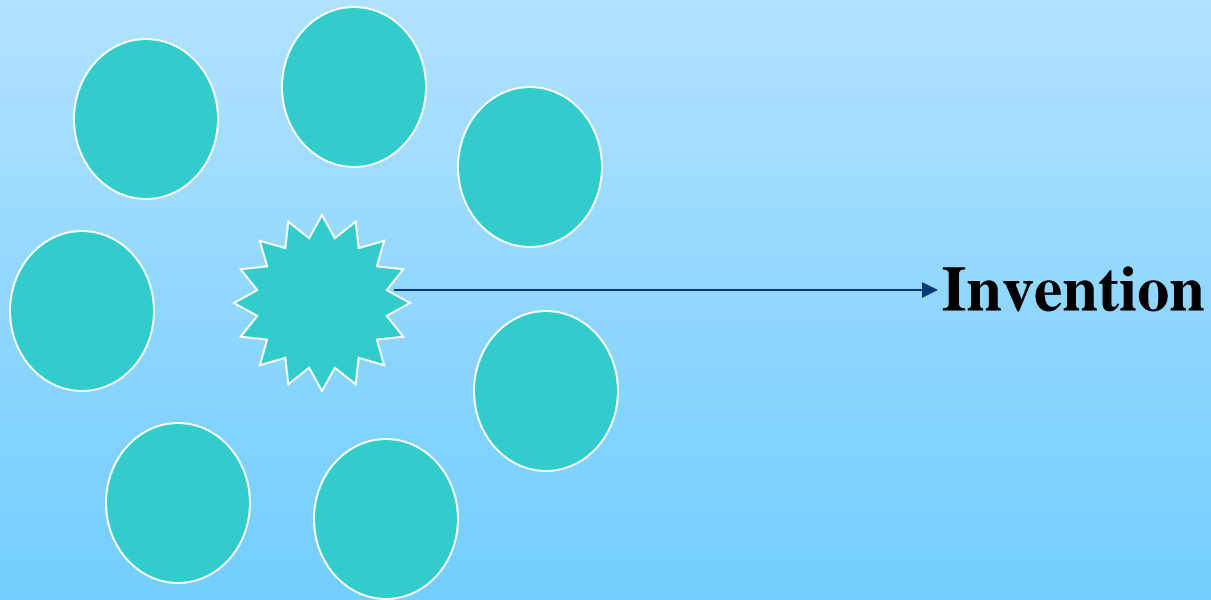
PRIOR ART

- Is a brief write-up of what is known before the invention; sets out the problems associated with each of the known art; and describes the problem proposed to be solved by the invention
- In India, this is not mandatory



PRIOR ART

Different approach



PRIOR ART

- Un-solved problems
- Prior art solution not working
- Describe new solution adequately

OBJECTS OF THE INVENTION

- Provides purpose of the invention
- Main object(s) and Ancillary object(s)
- Essential aspects and preferred/optional aspects.

STATEMENT OF THE INVENTION

- Statement forms the main claim or claims in verbal agreement
- It is essential only when there is an omnibus claim(s).

DETAILED DESCRIPTION OF INVENTION

- Sets out best mode of performing the invention
- Describes the invention in greater detail with examples/illustration/tables/graphs/diagrams, etc
- Description sufficient to enable a skilled person to put the invention into practice

CLAIMS

The main claim defines the essential features and the sub-claims define the preferred / optional / additional features

CLAIMS

The important, main properties need not be merged into the other claim.

A separate claim has to be formed for the important feature(s).

CLAIMS

- Is the operative part of the specification
- Defines the monopoly to be conferred by the patent
- Define the metes and bounds of the invention: at the time of infringement proceedings, only claims will be interpreted
- If you do not claim, you disclaim

Do's and Don'ts

- Generic expressions should be substantiated /supported properly.
- The names/terms used should be familiar to the person skilled in the art.
- Any newly coined terms/named should be clearly described

Do's and Don'ts

- Specification must describe the invention concisely
- should explain the problem solved fully with examples
- no ambiguity
- should be adequate and sufficient so as to enable in the art to perform the invention

Do's and Don'ts

Chemical Invention

- Substance per se -broad coverage
- Substance can be defined in terms of nomenclature, general formula, structural formula, constituents, properties, constructional or structural features, use, etc

Do's and Don'ts

- Product per se
 - Composition/synergy
 - 2nd generation product enhanced efficacy
 - Describe essential ingredients of product/composition
 - Ratio/percentage of the ingredients
 - Their effective amounts
 - Any optional/additional ingredients

Do's and Don'ts

Chemical Invention

- Process
- a) Starting materials
 - b) Steps of the process
 - c) Various parameters involved in each step, and
 - d) End product.

Do's and Don'ts

CHEMICAL PATENTS

Proportions: Provide a broad workable range
unless an exact amount is crucial and essential
to the success of the invention

Do's and Don'ts

CHEMICAL PATENTS

Specify the class and specific chemicals used

Ex: All the oxidants that would enable the invention, all alkali/acids that would help to work the invention

DRAFTING

Fundamental research:

■ PCR technique

- Specification to describe general art
- Approach adopted
- Detailed enabling process
- Best mode

DRAFTING

Avoid negative examples

Example;

- Vast difference in the IC 50 values of anticancer drugs with two different hosts.
- An anticancer drug effective against a subject may not be providing the similar result with a subject of another genus.

INDEPENDENTLY-WORDED CLAIMS

- Easy to understand the invention
- Easy to search
- Easy to license
- Easy to establish infringement

CHARACTERIZATION IN CLAIMS

- Characterization not possible in many cases
- Need not be characterized
- Even if characterized, sub-claims need not be restricted to characterized part

CHECK-LIST

VERIFY THE FOLLOWING:

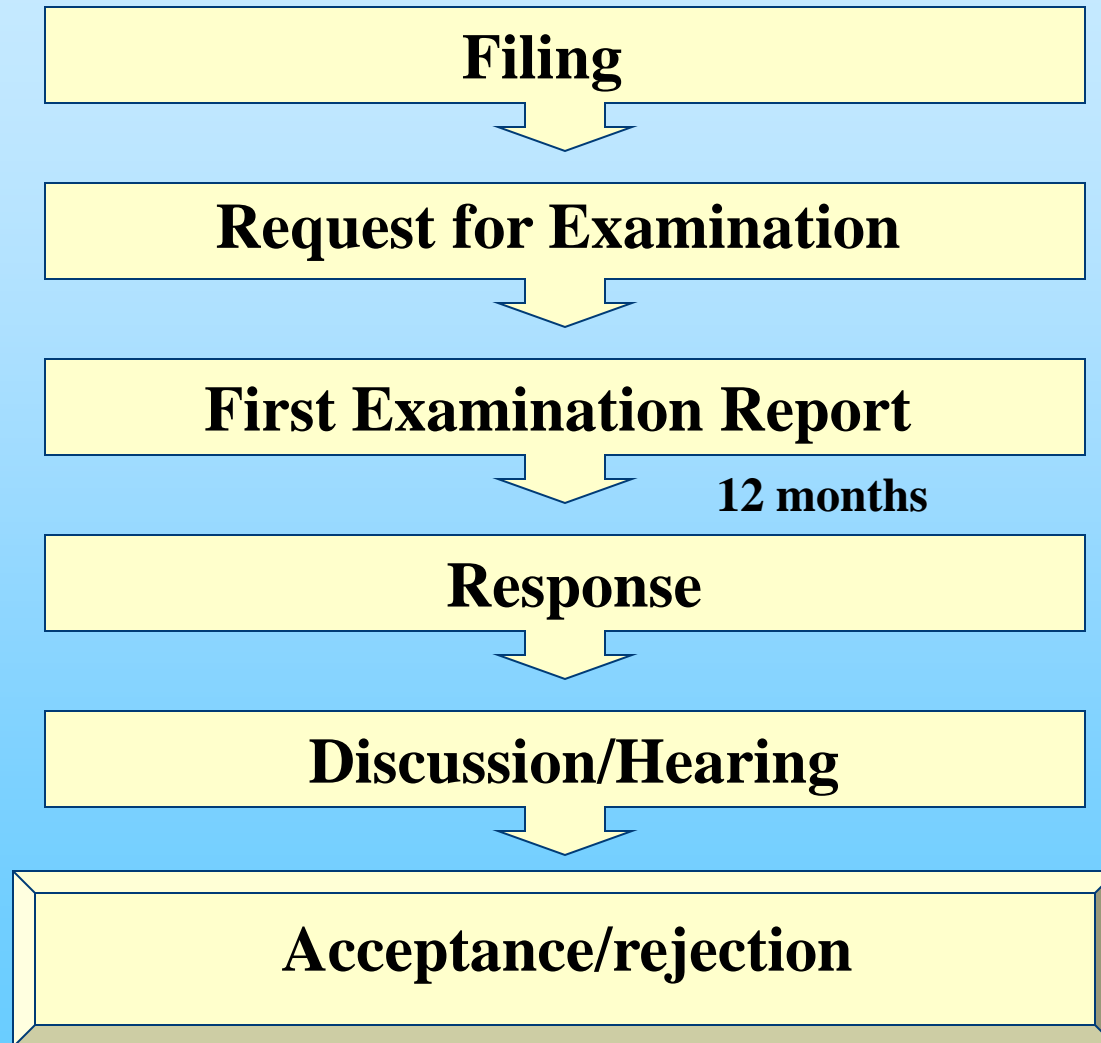
- Conduct search
- Is the invention patentable?
- Has it been published?
- Ascertain whether complete or provisional is to be filed
- Enlist problems in prior art
- What is the problem sought to be solved by the invention?
- Is the solution obvious?
- Non-patentable items

CHECK-LIST

- Specific Indian requirements, such as
 - Deposition, Source and origin etc.
- Collect all details, such as
 - Experimental data/examples/tables/graphs
- Draft the text

DECODING EXAMINATION REPORT

OVERALL EXAMINATION PROCEDURE



FIRST PAGE OF THE EXAMINATION REPORT



PATENTS / DESIGNS / TRADE MARKS
GEOGRAPHICAL INDICATIONS

GOVERNMENT OF INDIA
PATENT OFFICE BRANCH
BAUDHIK Sampada Bhawan
Plot No.32, Sector-14, Dwarka
NEW DELHI - 110075.

Tel No. (091)(011) 28081922-26, 28081933-47
Fax No. 28081920, 28081940
E-mail : delhipatent@vsnl.com

Dated the:

No : 1471/DELNP/2005 / 4528
To

K & S Partners,
84-C, C-6 Lane,
Off Central Avenue,
Sainik Farms,
New Delhi-110062.

19 SEP 2006

SUB : FIRST EXAMINATION REPORT

REF : - PATENT APPLICATION NO. 1471/DELNP/2005

NAME OF APPLICANT: WILLFRED -RAMIX, INC., USA

With reference to request no 2816 made on 07.09.2005 by you for examination the above quoted application as been examined under section 12 of the Patents Act, 1970 as amended and the First Examination Report containing a statement of objections is forwarded herewith for compliance thereof.

The documents enclosed shall be resubmitted within 12 (Twelve) months from the date of issue of the said report together with your observation if any, in connection with the compliance of the requirements of this first Examination report.

The application referred to will be deemed to have been abandoned under section 21(1) unless all the requirements imposed by the said Act and the rules there under are complied with within the above said prescribed period.

The pages of the complete specification should be freshly typed wherever corrections or interpolation are made. The typed pages in duplicate should be on white pages in order that clear photocopies of the specification can be prepared. The original pages in that case should be returned to this office duly cancelled.

It is in the interest of the applicant to comply with the requirements at the earliest.

Ushadao
(DR. USHA RAO)

Examiner of Patents & Designs
For Controller of Patents & Designs

Encl. :-

1. APPLICATION FORM + SUPERSEDED APPLICATION FORM (12.04.05)
2. COMPLETE SPECIFICATION
3. DRAWING SHEETS -NIL

NOTE : All Communications to be sent to the Controller of Patents at the above address.

OBJECTIONS OF THE EXAMINATION REPORT

Serial Number	Objections
1	Claims are lacking in novelty and inventive step in view of cited documents US6138154 and US6772201,therefor are not allowable u/s 2(1)(j) of the Act.
2	Claims fall u/s 3(k) of the Patents Act,therefore are not allowable.
3	Claims 1 and 20 do not clearly define the invention in respect of the portion marked therein.
4	Proof of right should be filed with necessary petitions.
5	The Drawings referred to in the specification should be prepared in accordance with the instructions contained in the Rule 15 of the Patent Rules, 2003(as amended in 2006).
6	Details regarding application for Patents which may be filed outside India from time to time for the same or substantially the same invention should be furnished within Six months from the date of filing of the said application under clause(b) of sub section(1) of section 8 and rule 12(1) of Indian Patent Act.
7	Details regarding the search and/or examination report including claims of the application allowed, as referred to in Rule 12(3) of the Patent Rule, 2003, in respect of same or substantially the same invention filed in all the major Patent offices such as USPTO,EPO and JPO etc., along with appropriate translation where applicable, should be submitted within a period of Six months from the date of receipt of this communication as provided under section 8(2) of the Indian Patents Act.

We Claim:

1. A method of outputting a user interface (UI) event of a 3rd party device in a home network comprising a server, a client and a control point, wherein the server and the client are joined in a UI session using a remote protocol, and the control point controls the server and the client, the method comprising:

(a) receiving a UI event message from the 3rd party device not joined in the UI session, wherein the UI event message represents a change in a state of the 3rd party device;

(b) selecting a target client for processing a UI event;

(c) transmitting an Out-of-session connect action message (OOSConnect Action) requesting connection setup with the 3rd party device to the selected target client; and

(d) transmitting a permission message for the OOSConnect Action to the control point, thereby setting an Out-of-session connection (OOSConnect) with the 3rd party device and processing the UI event.

2. The method of claim 1, wherein (a) comprises:

(a1) transmitting a UI event subscription request to the server within the home network, and receiving both a response message and an initial event message for the transmitted request;

Claims
fall
o/s
of the
Act.

Not
clear
or
clearly
described
the
invention

HOW TO OVERCOME THE OBJECTIONS



STRATEGIES AND TIPS

- Practice of retaining objections of **I**nternational **S**earch **R**eport (ISR) & **I**nternational **P**reliminary **E**xamination **R**eport (IPER)
- Unity of inventions/formalities – leave to the Attorneys
- File detailed response as early as possible
- Interview with the Examiner
- Submitting expert evidence in support of Applicant's view
- Citing precedents – Indian cases/ Foreign cases of Particular relevance
- Grant of corresponding foreign applications, such as US/EP/JP

STRATEGIES AND TIPS

- Seeking hearing **ten** days before the final date
- Keeping options open to file patent of addition and/or divisional application for rectifying *drafting and/or prosecution* lapses or to prolong the prosecution
- Appeal- IPAB (Intellectual Property Appellate Board) or High Court

STRATEGIES AND TIPS

PROSECUTION IS A NEGOTIATION

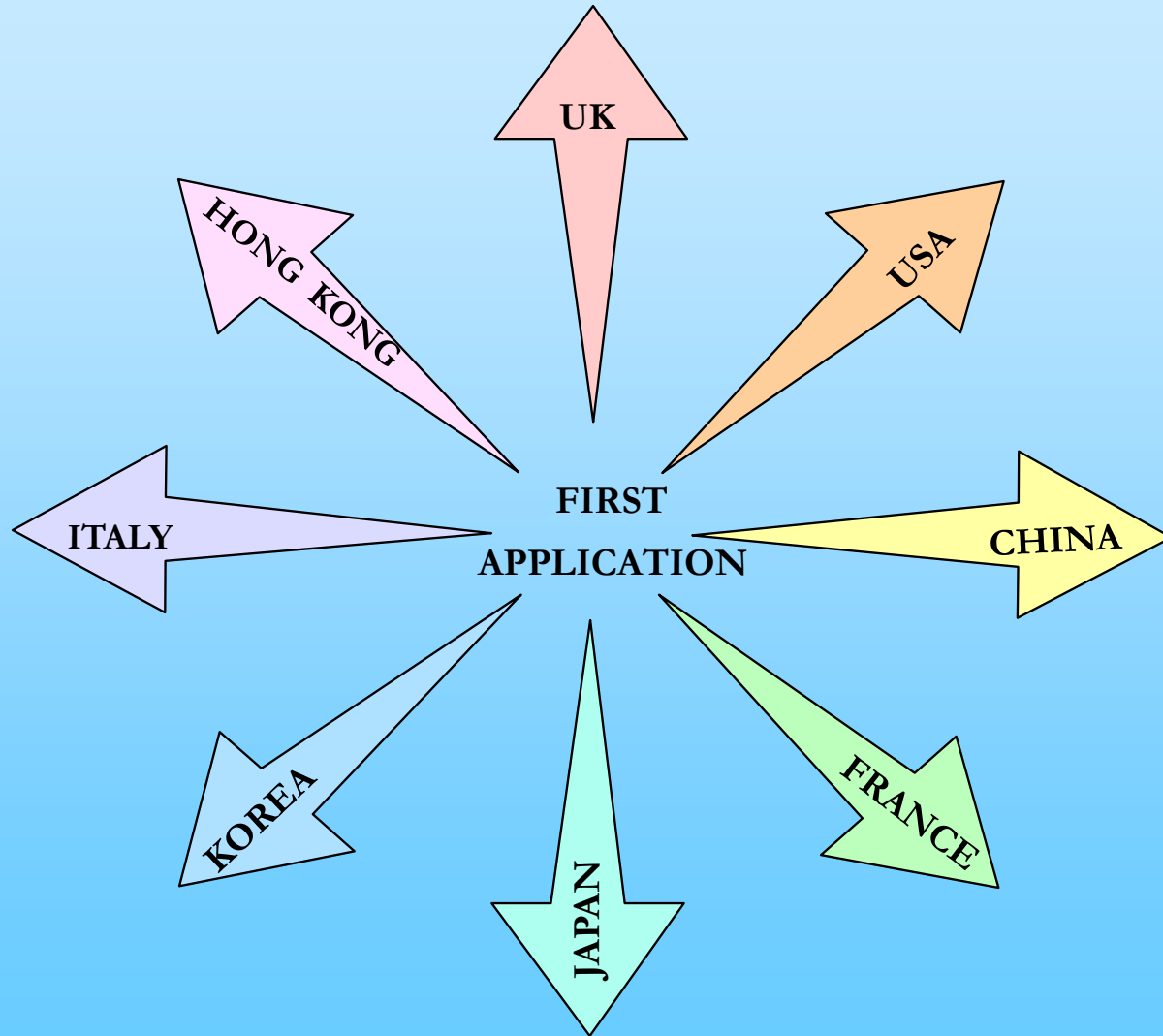
- all the grounds of negotiation are applicable to the prosecution

THE PCT SYSTEM

PCT (PATENT COOPERATION TREATY)

- **Signed by India, effective December 7, 1998**
- **About 130 countries are members.**

COMMON APPROACH



WHY PCT ?

- For protection in Multiple countries
- If patent has inherent merits

PCT IS THE ANSWER

***PCT IS NOT AN INTERNATIONAL
PATENT!!!!***

WHAT IS PCT ?

- **PCT is a window through which an applicant can file a single patent application and secure priority in the designated states - procedure**
- **Search Report: evaluates invention**
- **Examination Report (optional)**

HOW TO FILE A PCT APPLICATION ?

An applicant may file a PCT application in the



**Designated National
Patent Office**

**PCT HQ
(Geneva)**



THE PROCEDURE

	Months
Filing of priority -founding application	
Filing of International application	12
Search report	6
Amendment in response	16
Publication of application	18

THE PROCEDURE

**THEN THE NATIONAL LAW OF THE
CONCERNED STATES TAKES OVER
AND EVENTUALLY PATENT IS
GRANTED**

Budapest Treaty

India signed this treaty on 17th December 2001

Budapest Treaty

- Deposition of the Microorganism for the purpose of Patent.
- Made available to public after grant

Budapest Treaty

- International recognized depository
- IMTECH- Chandigarh

Where to Search?

Any evidence – published, unpublished, currently used, d

Internet is the best place

Patents

- Google Patents

Patent Office Websites:

- IPO Patent Search
- Espacenet Patent Search
- USPTO

Non-Patent Literature

- Google Scholar

Definition

What is prior art?

Prior art is **any** evidence that your invention is already known.

Prior art does not need to exist physically or be commercially available. It is enough that someone, somewhere, sometime previously has described or shown or made something that contains a use of technology that is very similar to your invention.

A prehistoric cave painting can be prior art. A piece of technology that is centuries old can be prior art. A previously described idea that cannot possibly work can be prior art. **Anything** can be prior art.

Things to Note:

Prior art search is important to determine whether the invention is entitled to a patent, i.e., whether the **invention is patentable**

WIPO

WORLD INTELLECTUAL PROPERTY ORGANIZATION

[Home](#) [References](#) [International Classifications](#) [International Patent Classification](#) [IPC Publication](#)

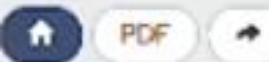
An IPC Symbol or terms



Results

2013.01 Version

None

☒ English version☐ French version☐ English/French☐ Path view☒ Full view☐ Hierarchic view☐ Main group view☐ Tree view☒ CPC ☐ FI

Scheme

RCL

Compilation

Catchwords



A

HUMAN NECESSITIES



B

PERFORMING OPERATIONS; TRANSPORTING



C

CHEMISTRY; METALLURGY



D

TEXTILES; PAPER



E

FIXED CONSTRUCTIONS



F

MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING



G

PHYSICS



H

ELECTRICITY

The following are not inventions (Section 3&4)

- 3(a) Contrary to natural laws
- 3(b) Contrary to public order or morality
- 3(c) Scientific principle / abstract theory
- 3(d) New forms / properties of known substance

The following are not inventions (Section 3&4)

3(e) Admixture of substance

3(f) Re-arrangement of known devices



The following are not inventions (Section 3&4)

- 3(i) Method of treatment
- 3(j) Plant or animal parts (microorganisms excluded)
- 3(k) Business method or computer program per se
- 3(l) Copyrightable products (literary, dramatic work)



The following are not inventions (Section 3&4)

- 3(m) Method of playing a game
- 3(n) Presentation of information
- 3(o) Topography of integrated circuits
- 3(p) Traditional knowledge



Thank You!

