



REPUBLIC OF THE PHILIPPINES

Intellectual Property Office
of the Philippines



■ Topic 2: Filing a Patent Application – Rationales, and the International Patent System

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Roadmap

1. The Patent Bargain
2. Why do people file patent applications?
3. Why do people not file patent applications?
4. Budgeting for patents
5. Selection of territories
6. Filing routes
7. Parts of a patent application
8. The PCT patent application format

The Patent Bargain

- A patentee gives:
 - Full disclosure of a new invention with industrial application
- In return, society gives:
 - A 20 year market exclusivity
 - In a defined area around the invention
 - Allows a return on (and thus encourages) investment
 - Makes competitors design around and thus encourages diverse technology
- No rights given for inventions which are:
 - Already available to the public, or
 - Obvious from what is publicly available

Industrial Applicability

- Invention needs to be able to be used or made in any kind of industry, including agriculture, fishery etc.

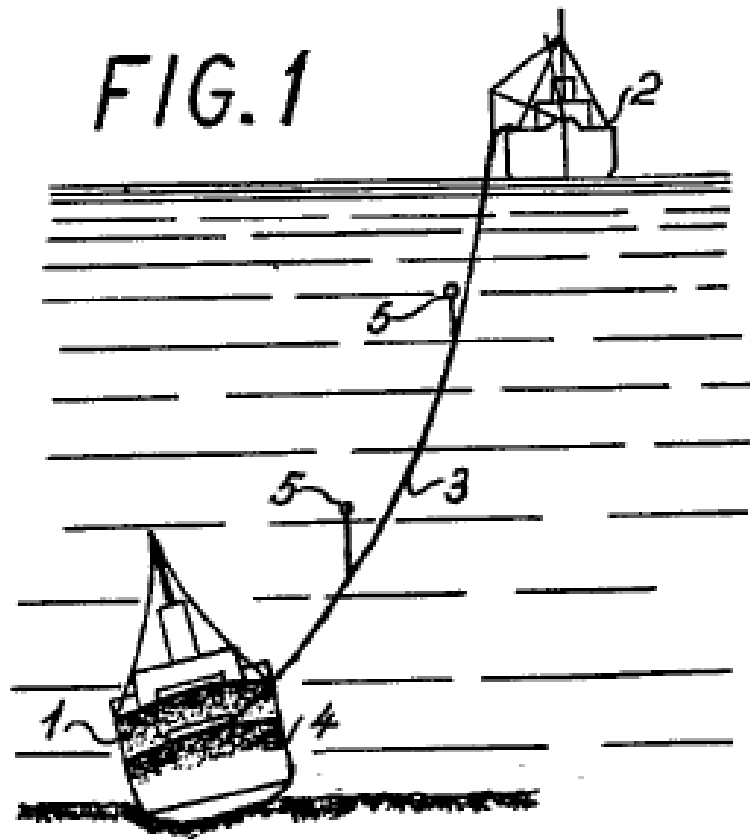
- No industrial application if:
 - only able to be used in private or personal sphere
 - contradict with well-established laws of nature
→ non-operable

- Invention does not need to be better than existing products or processes

Non-patentable subject matter

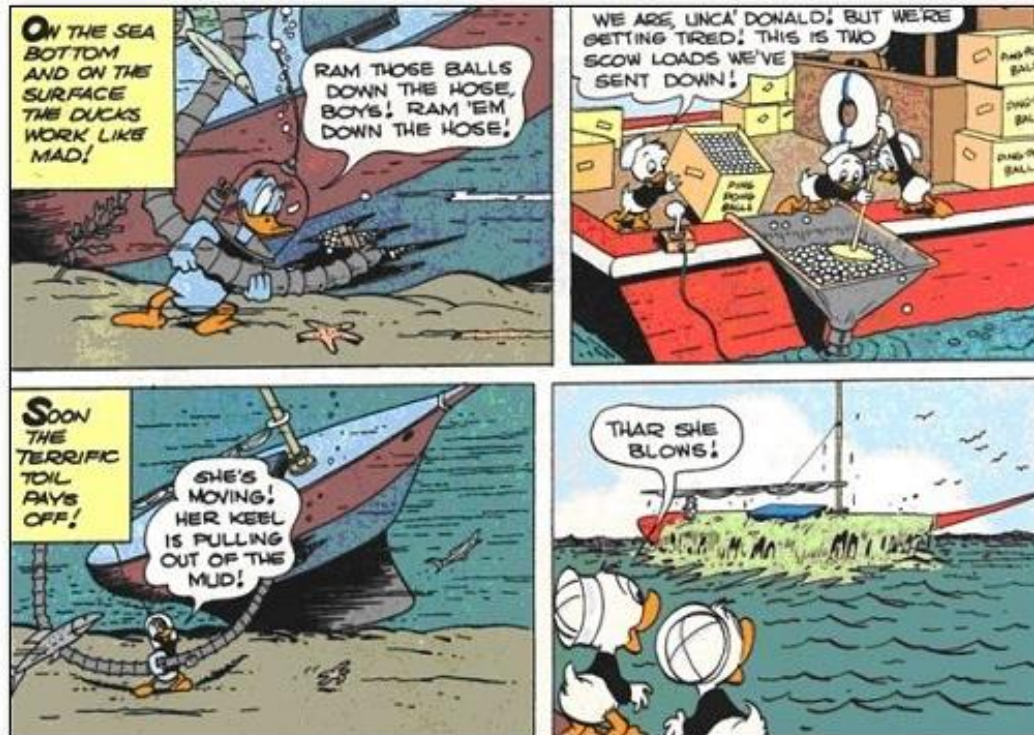
- **Depends on national or regional law!**
- Discovery; Scientific theories; Mathematical methods
- Rules or methods for performing mental acts or doing business
- Aesthetic creations
- Inventions commercial exploitation of which are contrary to morality or public order
- Therapeutic, diagnostic or surgical methods
- Plant or animal varieties
- Plants or animals (other than microorganisms) and **essentially biological processes (except microbiological processes)**
- Computer program as such

Novelty



Novelty

- **1949:** Donald Duck comic published by Carl Barks
- Shows Donald and nephews raising a ship by filling it with ping pong balls shoved through a tube



Novelty

- One single prior art reference must contain all features of the invention



My table lamp

Ref.1



Ref.2



Ref.3



Exception to novelty – Grace period

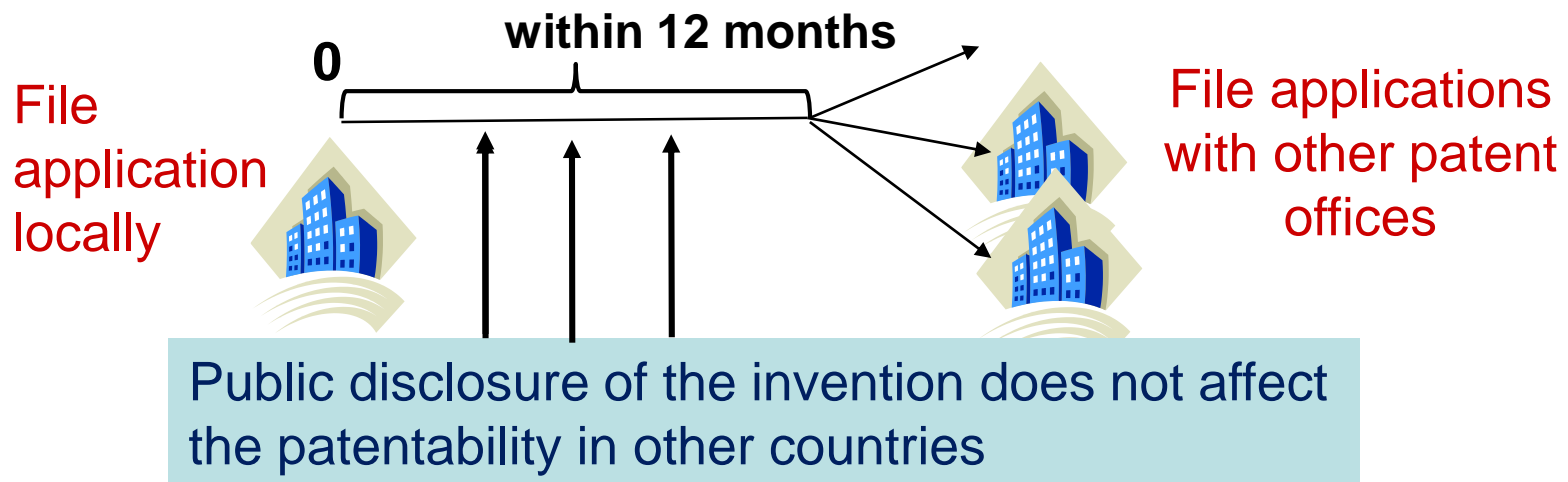
- **Certain public disclosure** made within a certain period before the filing date **does not destroy the novelty**.
- Difference among national laws
 - Types of disclosure covered
 - Evident abuse in relation to the applicant
 - Official international exhibition
 - Applicant's own disclosure
 - 12 months or 6 months



In general, no protection against publication by third party!
If possible, better not to rely on the grace period!

Novelty – Claiming priority

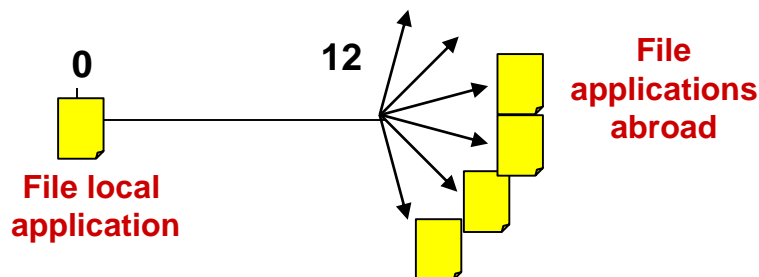
- Date of filing important for prior art
- Difficulties in filing patent applications abroad
→ Claiming priority of the first (local) application



- **No requirement to file subsequent applications within 12 months, but advantageous!**

Novelty

■ Priority example



- Filing date: December 1, 2016
- 12 months priority period ends on December 1, 2017
- For each filing within 12 months, the date for determining prior art = December 1, 2016

Inventive Step

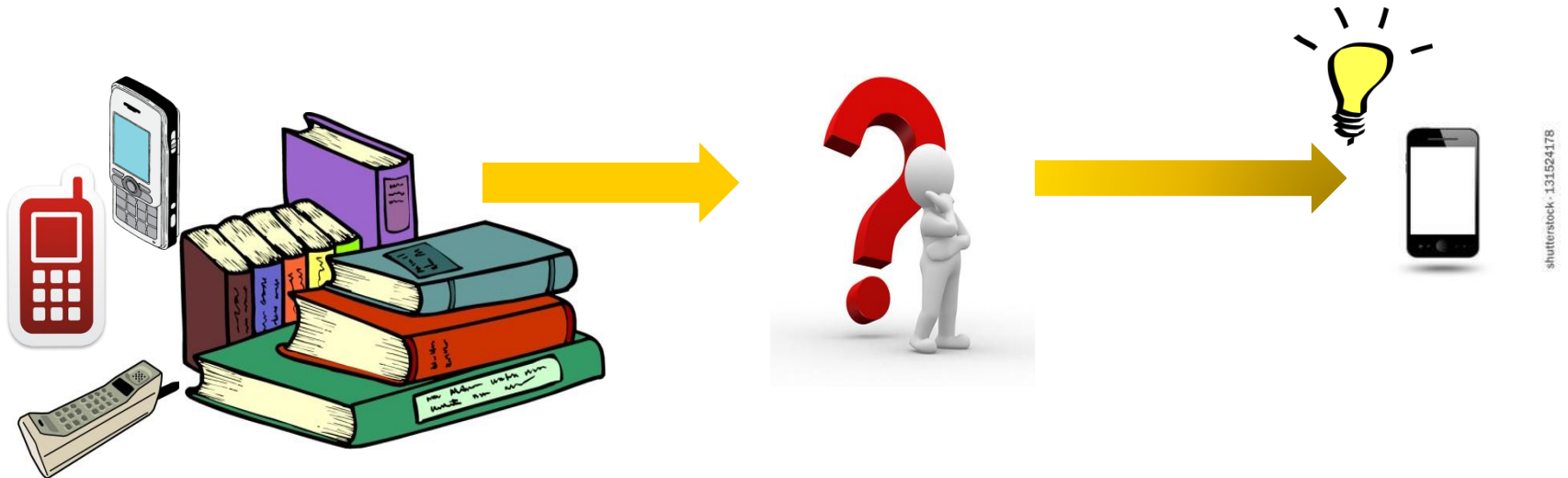
- Invention should **not** be **obvious** to a person skilled in the art.

- Person skilled in the art = A hypothetical person who has:
 - access to everything known in the relevant technical field
 - ordinary practical skill and common general knowledge
 - capacity to use the usual faculty of logic and rational reasons based on his knowledge
- But **no inventive imagination!**

Inventive Step

Why the inventive step requirement?

Patents on an invention that can be easily conceived by others prevent them from using something that is a mere obvious modification of the existing art.



Reasons for filing patent applications

- A. For control:
 - i. To protect investment in R&D (20 year monopoly)
 - ii. To get leverage against competitors
 - iii. To control suppliers
- B. For financial reasons:
 - i. To support a licensing-out program
 - ii. To maximise tax planning options
 - iii. To minimise licensing-in royalties
 - iv. To extract cash
 - v. To increase company “book value”, create tradable assets
- C. For prestige:
 - i. To gain reputation for innovation
 - ii. To motivate researchers

Reasons for not filing patents

- A. Nothing to protect:
 - i. Ideas not novel and inventive
 - ii. Ideas excluded by law
- B. Timescale:
 - i. Product lifecycle too short for patent system?
 - ii. Development too early – by more than 20 years?
- C. Secrecy:
 - i. Can the idea best be protected as a trade secret?
- D. Cost:
 - i. Initial drafting and preparation
 - ii. PCT/foreign filing, translations, drawings
 - iii. Prosecution and grant costs
 - iv. Renewal/annuity fees
- E. Inability to use:
 - i. No licensing experience
 - ii. Insufficient experience or funds for enforcement

Nothing to protect?

- Be aware of exclusions in major countries for:
 - Software/mathematics/abstract ideas
 - Medical/surgical/ethical exclusions
 - But it is often possible to get some protection
- Consider pre-filing prior art searches:
 - Prior patent literature
 - Non-patent literature (inventors may assist)
 - But it is a cost tradeoff – may cost more than filing!
- Look at ownership – do you own the invention?
 - Consultants, subcontractors, academics, students ...

Timescale?

- Often takes several years from filing to get patents
 - *But can sometimes be accelerated – PPH etc*
 - *What is the lead time over competitors?*
- Invention may not yet be market-ready
 - *Patent must disclose fully – are you ready?*
 - *Will developments be made in the near future?*
- Lifetime of 20 years may be insufficient
 - *Can you defer filing? Or is there a risk?*
 - *Use “priority” system to get an extra year*
 - *Extensions may be available for pharma, agro etc*

Secrecy?

- Strong trade secret protection systems in EU, US
- Process inventions can often be kept secret
- But not most product inventions – most things can be reverse-engineered, it is disclosed. *Exceptions might sometimes be:*
 - *Recipes – combination of ingredients and cooking*
 - *Alloys – ditto*
- There is a tendency to leak over time - dangers include:
 - Potential investors/customers/collaborators/regulators
 - Ex-employees
 - Industrial espionage

Cost?

- Initial preparation costs are largely based on time.
 - Internal time of engineers, scientists, managers
 - External time of advisors (who may charge per hour)
- Foreign filing, prosecution, grant costs are made up of:
 - Translations – where can you work in English?
 - Official filing fees
 - Local attorney fees
 - You need to allow several \$K per major country
- Annuity/Renewal costs are made up of:
 - Official fees (which often rise over time)
 - Local attorney fees

Inability to Use?

- May be overcome before it is necessary to use patents
- May be possible to partner with strong ally
- Can always be covered by external experts, at a cost
- If patent is valuable, can be sold to “NPE” (aka “troll”)

Where to file first?

- Under the Paris Convention/TRIPS, a “first filing” anywhere is respected everywhere within a period of 12 months
- Some countries have security laws – inventions made locally must be filed locally unless permission is obtained
 - E.g. US, FR, GB
- Usually easiest to file closest to you
 - Minimise risks of loss of application
 - Use local language
- But consider filing where fees are low, or zero

Where to file subsequently?

- Choice of countries is a key element in cost and value. Based on:
- How many sales/consumers for the product now? over the next 21 years?
- Cost. See above.
 - Is a translation needed?
- Success rate.
 - Is the application examined?
- Enforceability. Is the patent of practical value?
 - Are the courts and customs fast and effective?
 - Are they pro (foreign) patentee?
- Geography.
 - Does local working exist? is it even possible?
 - Is there through-shipping (e.g. HK)?

Filing Routes

A. National

- i. Complete within 12 months if claiming priority
- ii. Otherwise, by 18 months to avoid self-publication
- iii. Substantial cost at an early stage

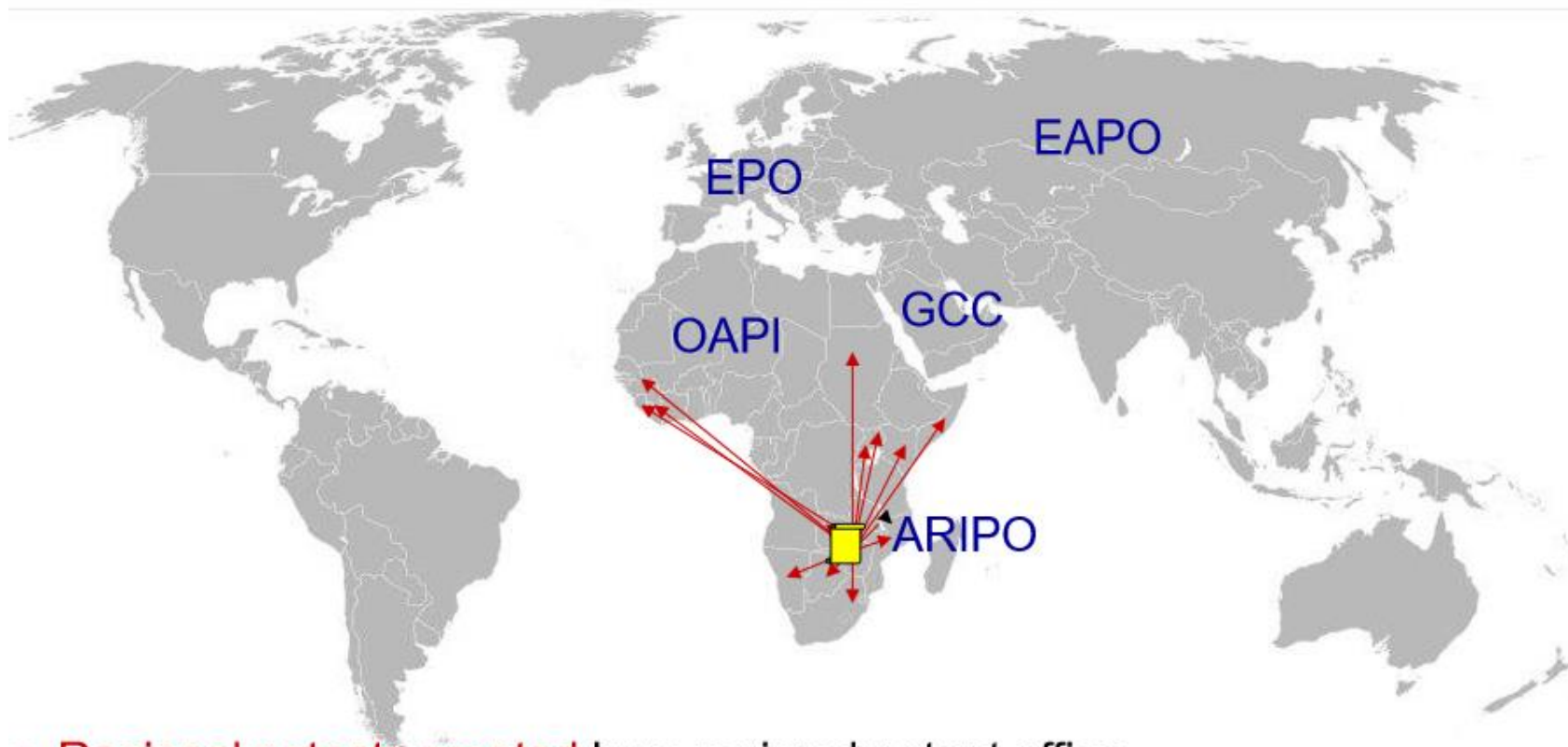
B. Regional

- i. E.g. Europe, Eurasia, Africa
- ii. Some costs deferred until the grant stage

C. International

- i. Most costs delayed for 30 months
- ii. International Search in advance, to predict success

Using Regional Systems

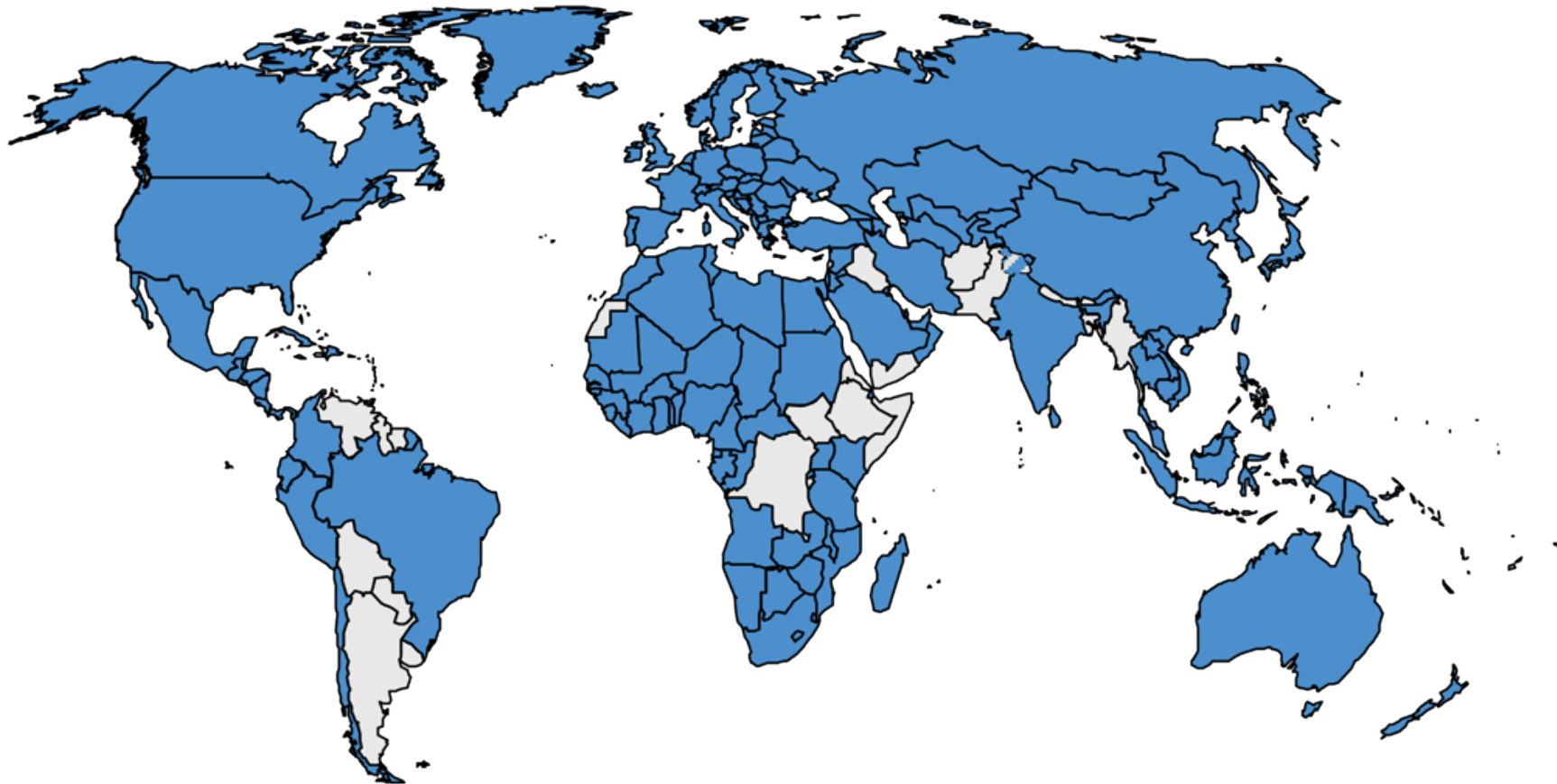


- **Regional patents granted** by a regional patent office
 - A regional patent having effect in all member states; or
 - A bundle of national patents (having effect in designated Member States)

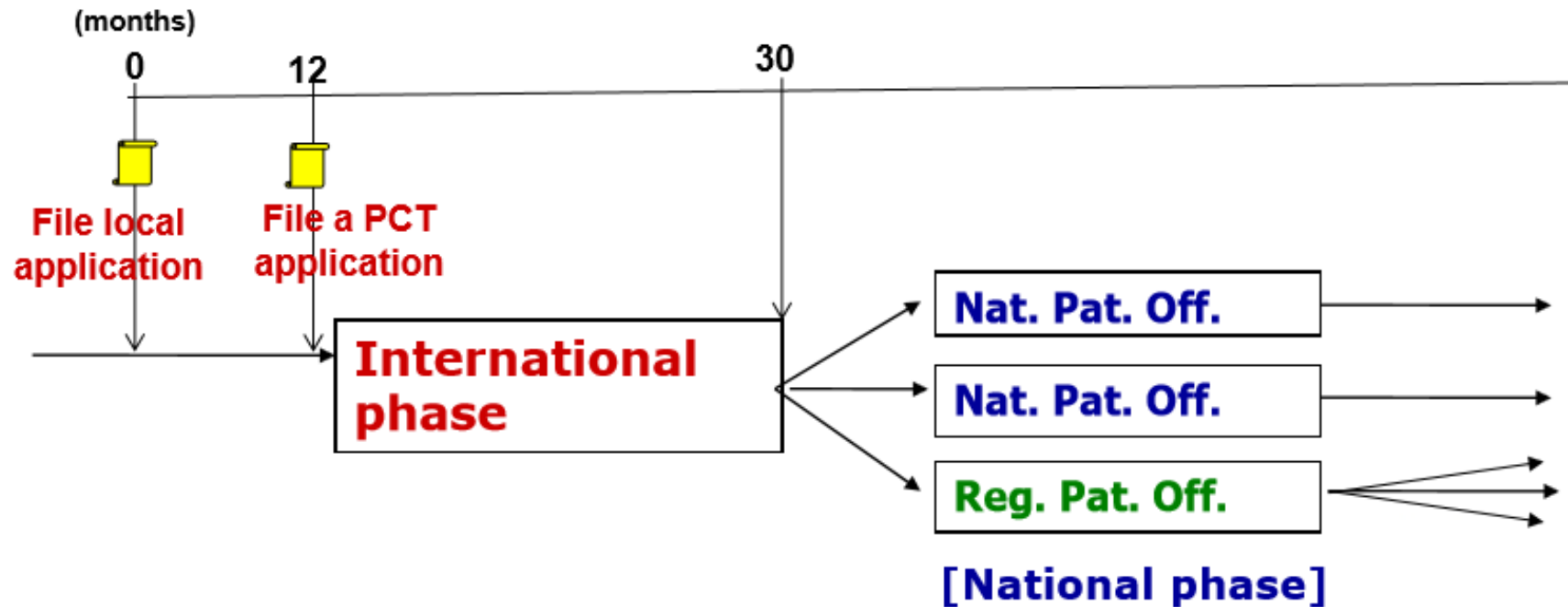
The PCT International System

- Filing one “international” patent **application** has the same effect as filing national applications in 152 PCT Contracting States.
- In general, an applicant may file a PCT application with its national office or WIPO.
- Possibility of 90% reductions of certain fees for LDC applicants and for a natural person from developing countries.
- Proposal by Brazil: at least 50% reduction for universities and public research institutions from developing countries

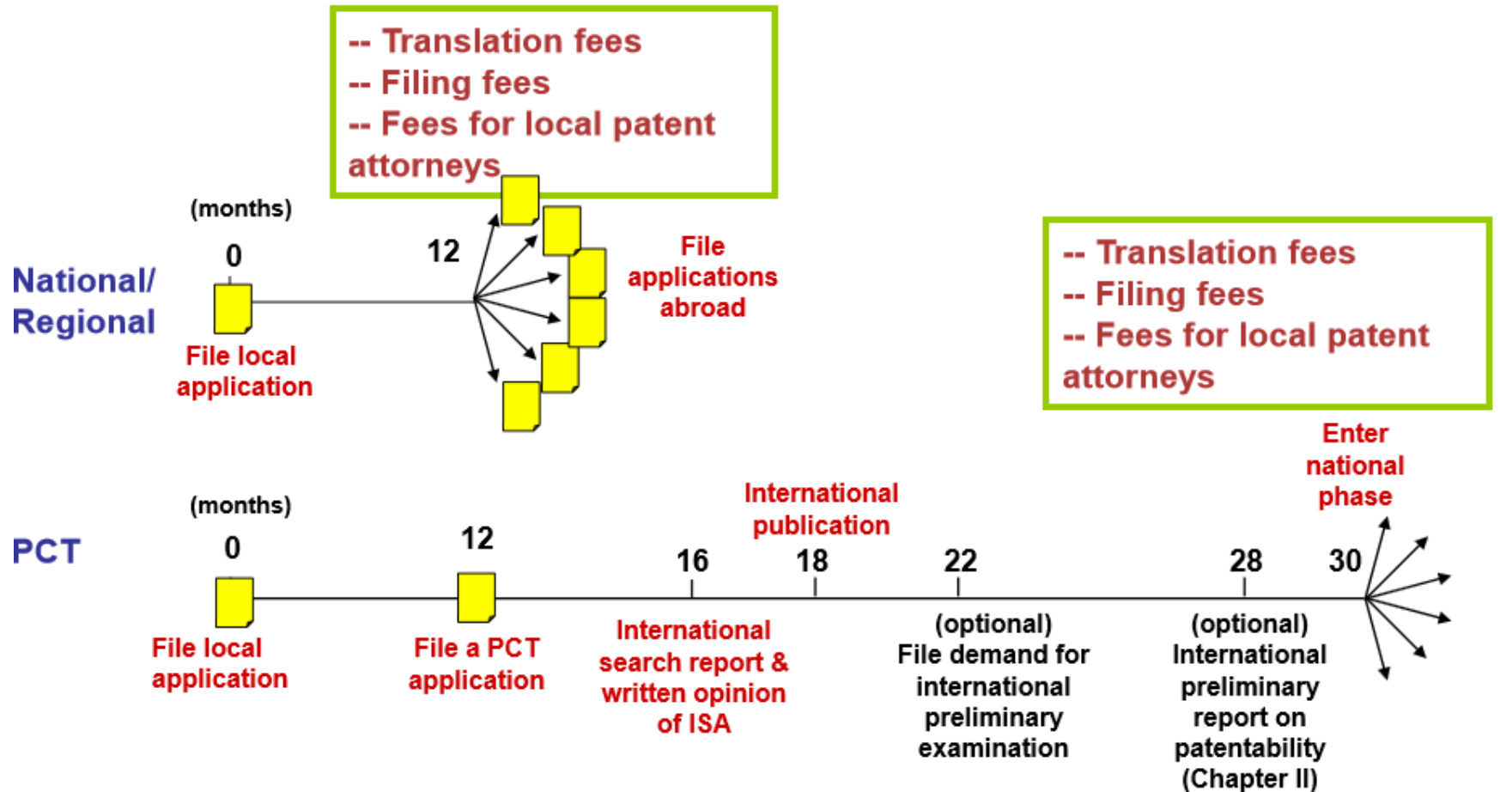
The PCT System Coverage



Using the PCT System



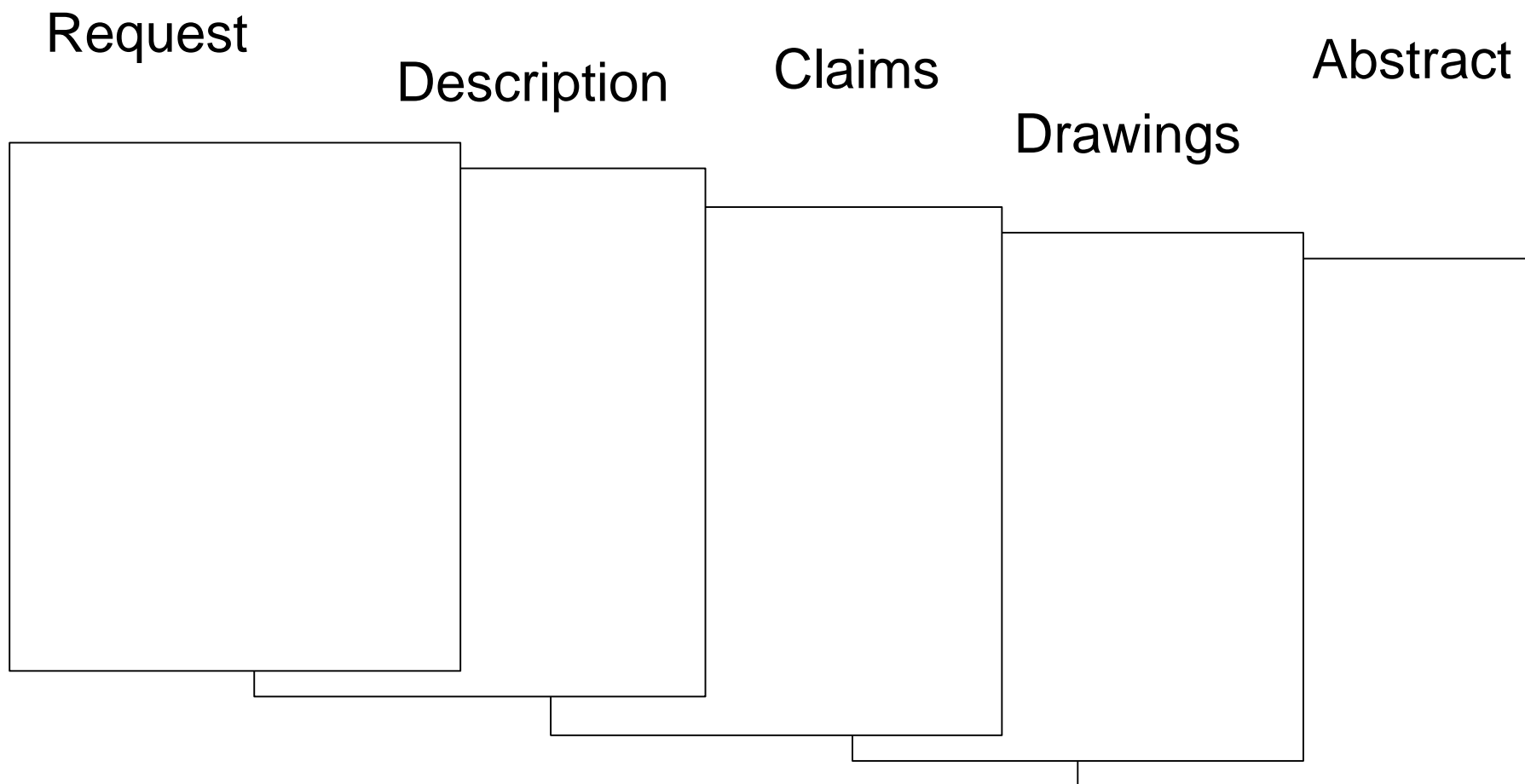
National/Regional vs PCT



Advantages of the PCT system

- Additional time to make a filing decision in various countries.
 - Postpone the major costs associated with seeking patents abroad
 - Better business prospect and geographic coverage
 - Better alignment of a patent application with the business needs (ex. reduce national claim fees)
- One international application – simpler formality
- Basis for patenting decisions provided
 - International search report and written opinion
 - International preliminary report on patentability (Chapter II)
- Global publicity – signaling licensing possibilities

Main parts of a patent application



Request

Request for established by each patent office.

- Title of the invention
- Indication concerning the applicant and its representative
- Indication concerning the inventor
- Priority claim
-
-
- Signature

Description

- This is the part of the “bargain” given by the patentee
- Published after 18 months
 - Title
 - Technical field to which the invention relates
 - Background art
 - Brief description of the invention
 - Description of figures
 - Detailed description of the invention
 - Detailed explanation of examples, using references to the drawings

Claims

- Define the **scope of patent protection granted**
 - Detailed explanation in the Description part is to justify the scope of protection claimed by the applicant.



Claim

1. A table lamp comprising [...].



a lamp fixed on a wall?
a garden lamp?

Drawings

- Drawings, flow charts, diagrams
- Black and white photographs
- Help reader understand

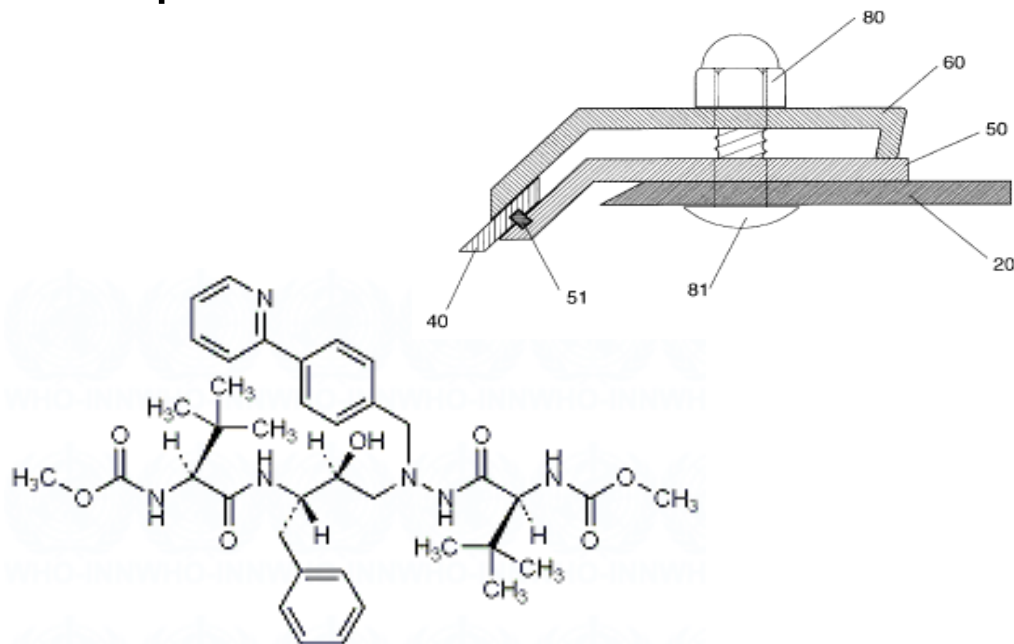
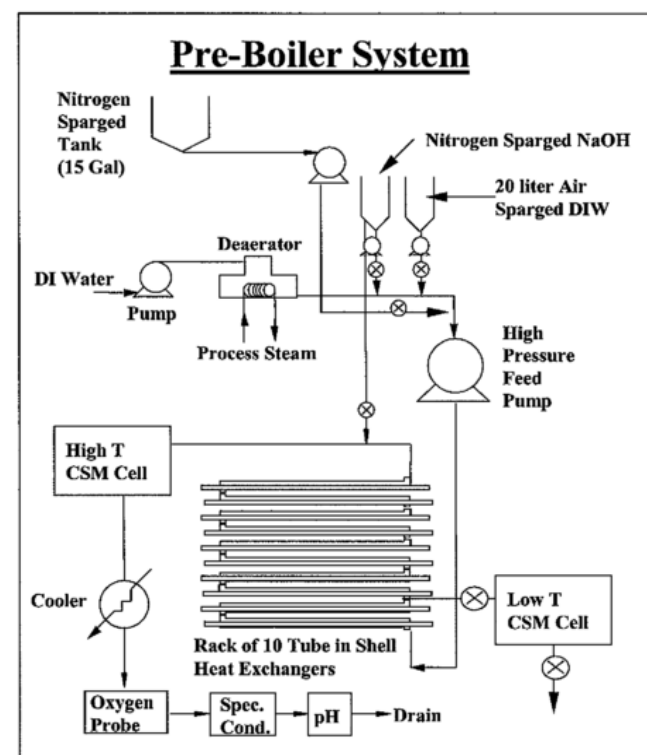


FIG. 2



Abstract

- **Concise summary** of the disclosure of the invention contained in the description, claims and drawings
- Abstract **merely serves for technical information.**

The PCT application format

- Defined in the PCT, the Rules and the Administrative Instructions
- If PCT formal requirements are met, national patent offices should not require any additional formalities
- Particular issues:
 - Subheadings
 - Claim dependencies
 - Drawings – “FIG.”

Further assistance on PCT

■ PCT

- Further information: <http://www.wipo.int/pct/>
 - PCT Distance Learning Course (4h) - Learn the PCT Video Series
 - Guide: <http://www.wipo.int/pct/en/appguide/index.jsp>
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- General questions: pct.infoline@wipo.int

Thank you very much!

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