

# ■ **Topic 2: Legal Requirements for Patentability and Typical Parts of a Patent Application**

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# Overview

- Why are there legal requirements for patentability?
  - Why we need to know about them?
  
- Main requirements
  - Novelty
  - Inventive Step
  - Industrial Applicability
  - Sufficiency of disclosure
  - Patentable subject matter
  
- Typical parts of a patent application

# Background



- Monopoly protection in exchange for teaching the public a new invention

- Territorial



# Novelty

An invention is not **new/novel** if

it was **known to the public** before the **filing date of the patent application** (or the filing date of the earlier application on which priority claim is based(priority date)).

Why the novelty requirement?

→ “Prior art” (already known art) should not get exclusive patent rights!

# Novelty

## ■ Prior art

Everything made available to the public anywhere in the world

■ by means of **written** or **oral** description, **by use**, or **in any other way**

## ■ Examples of prior art?

■ Presentation at a conference

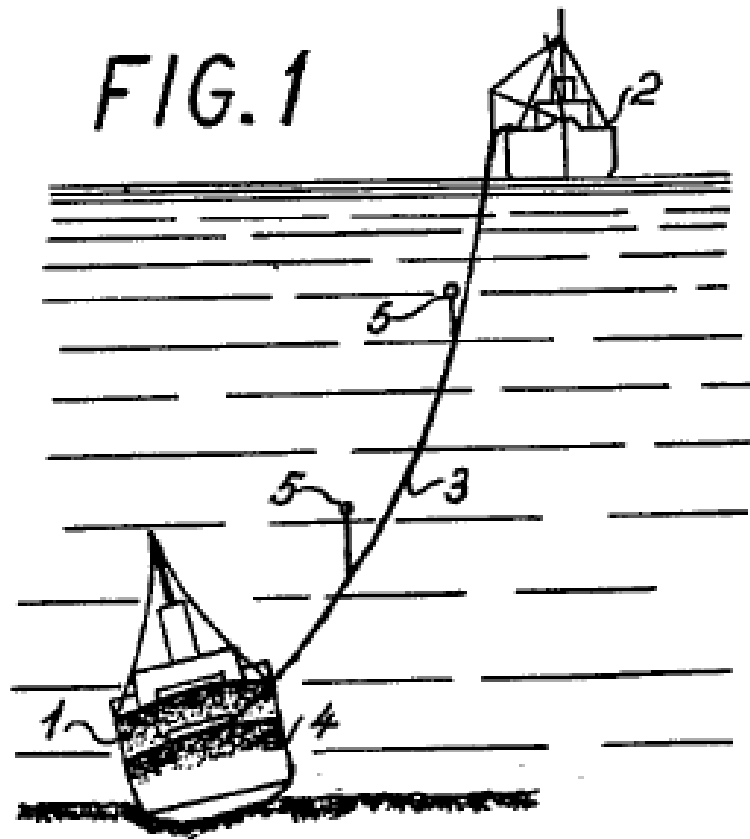
■ Publication in any kind of magazine

■ Making use of the invention in a public place

# Novelty

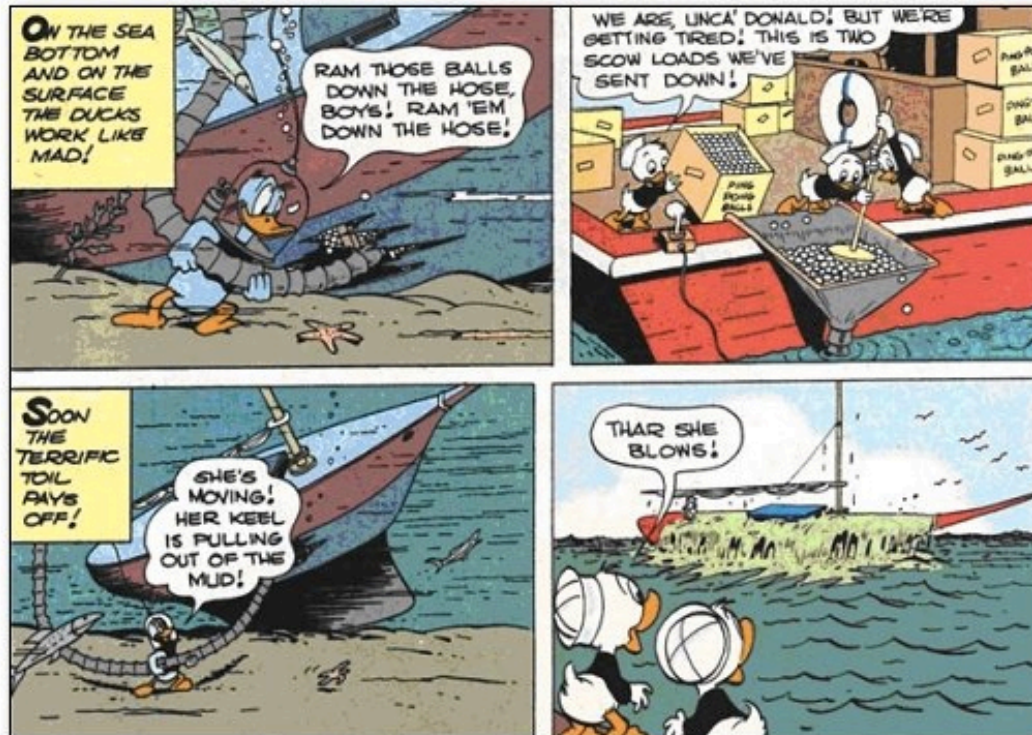
- The Donald Duck case:
  
- Mr Karl Kroyer: invention of a method to raise a sunken ship by filling it with buoyant bodies fed through a tube
  
- 1964: He lifted a sunken ship in Kuwait's harbor by filling the ship with 27 million plastic balls.
  
- Patent granted in the UK.
- NL patent application rejected.

# 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





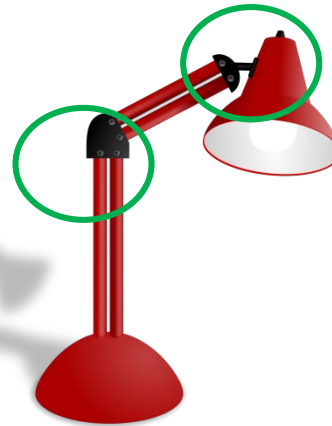
# Novelty

- 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

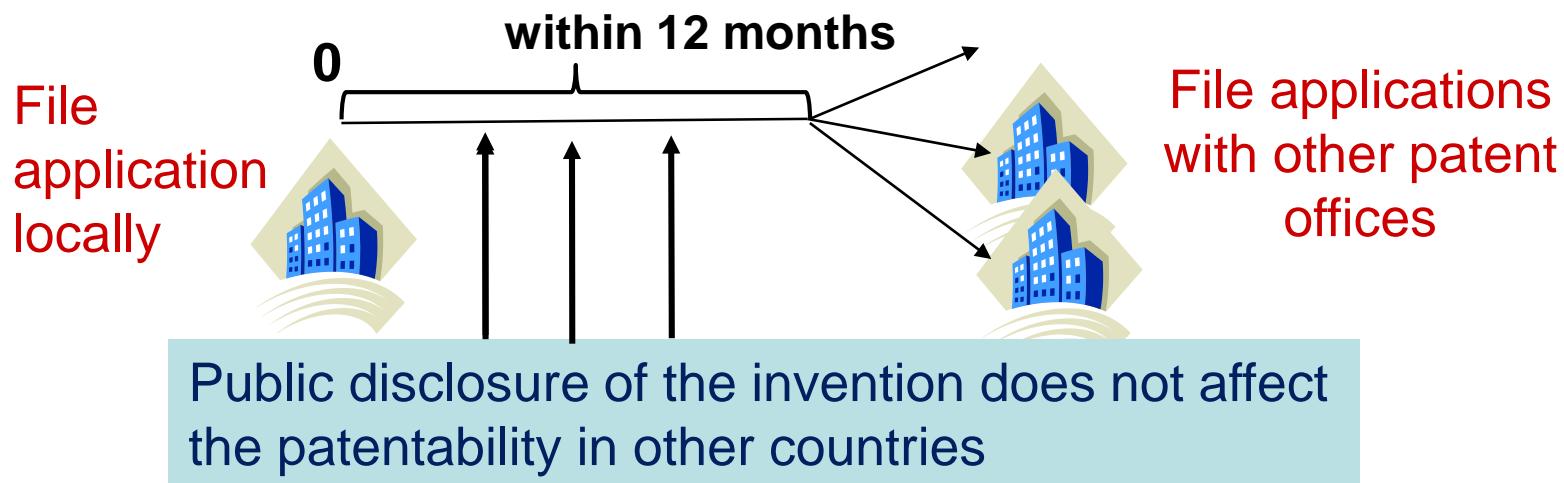
- **Certain public disclosure** made within a certain period before the filing date **does not destroy the novelty**.
- Difference among national laws
  - Types of disclosure covered
    - Evident abuse in relation to the applicant
    - Official international exhibition
    - Applicant's own disclosure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

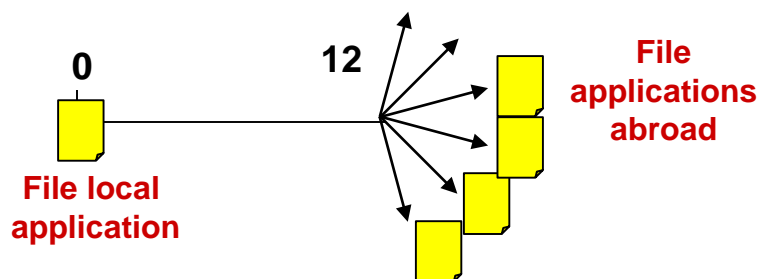
- Date of filing important for prior art
- Difficulties in filing patent applications abroad  
→ Claiming priority of the first (local) application



- **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

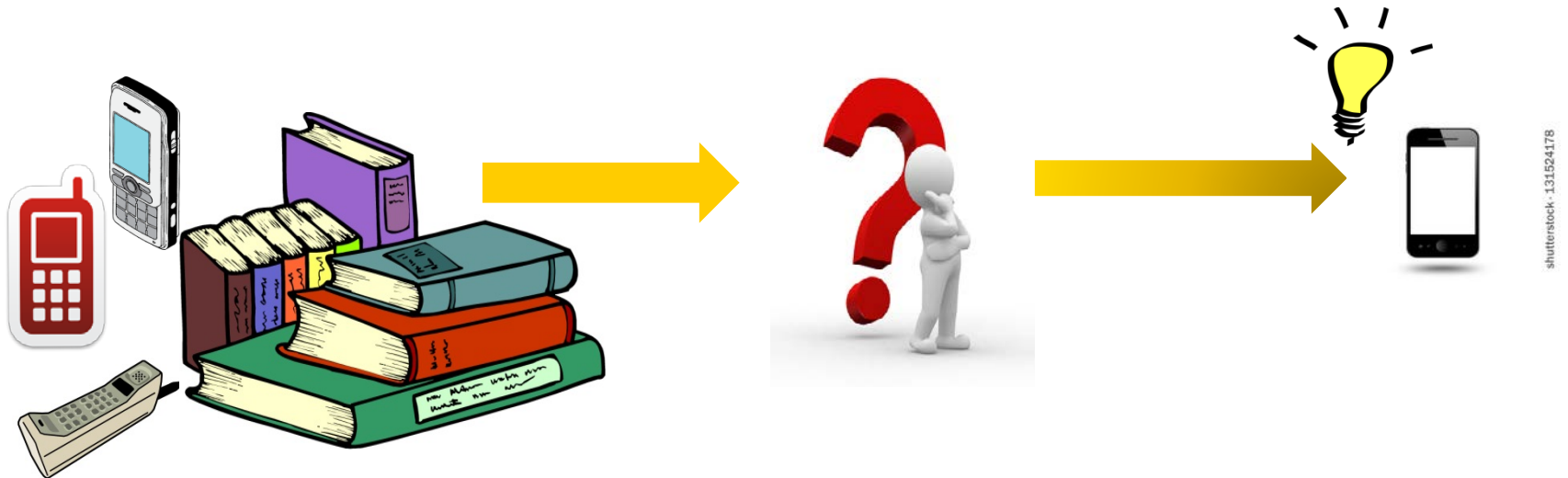
# Inventive Step

- 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.



# Inventive step - example

## ■ Claimed invention

- A new machine for producing sausages, comprising a mincing device and a filling device disposed end to end.

## ■ Prior art

- Document 1: The same type of machine for mincing meat.
- Document 2: The same type of filling machine for sausages.
- There has not been a machine combining the two before the filing date of the patent application.

*The claimed invention merely combines known devices functioning in their known normal way. It does not produce any non-obvious working relationship.*

# Inventive Step

- Obvious?
  
- Any invention which does not go beyond the normal progress of technology so that a person skilled in the art would derive with the invention by looking at the prior art
  
- Invention Step = different interpretations of national laws!
  - Consultation of the national case law necessary!



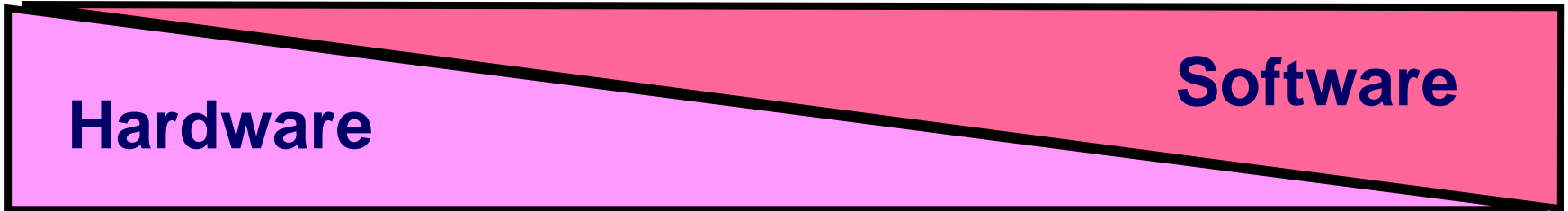
# Industrial Applicability

- 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
  - therapeutic, diagnostic or surgical methods (SA, JP)
  
- 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

# Hardware or Software?



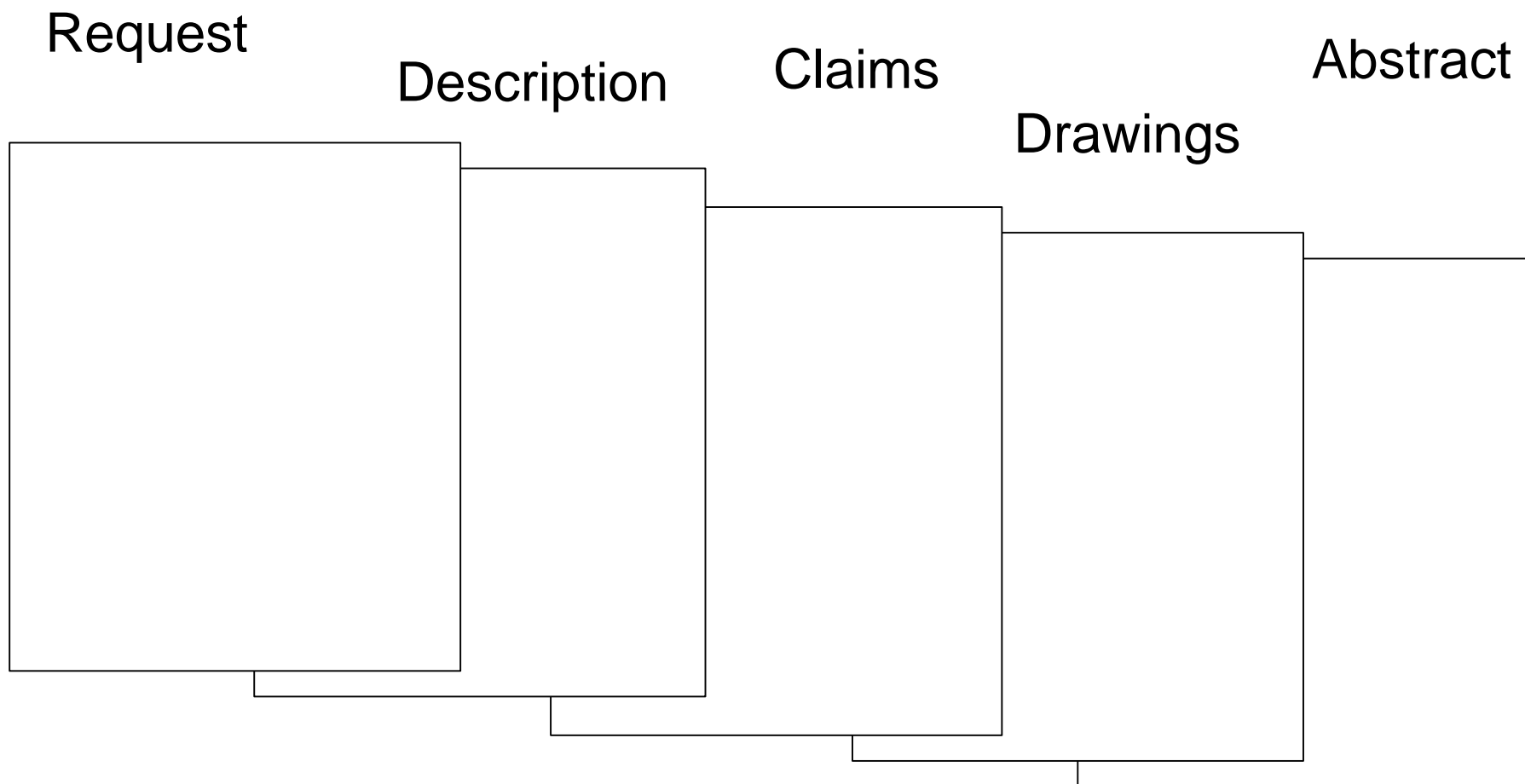
← What is contributing to the innovation? →

← How it can be sold in the market? →

Software-implemented invention?

- software in an apparatus?
- software on CD-ROM, USB...?
- software delivered online?

# Main parts of a patent application



# Request

Request established by each patent office.

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

# Description

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



## Claim

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



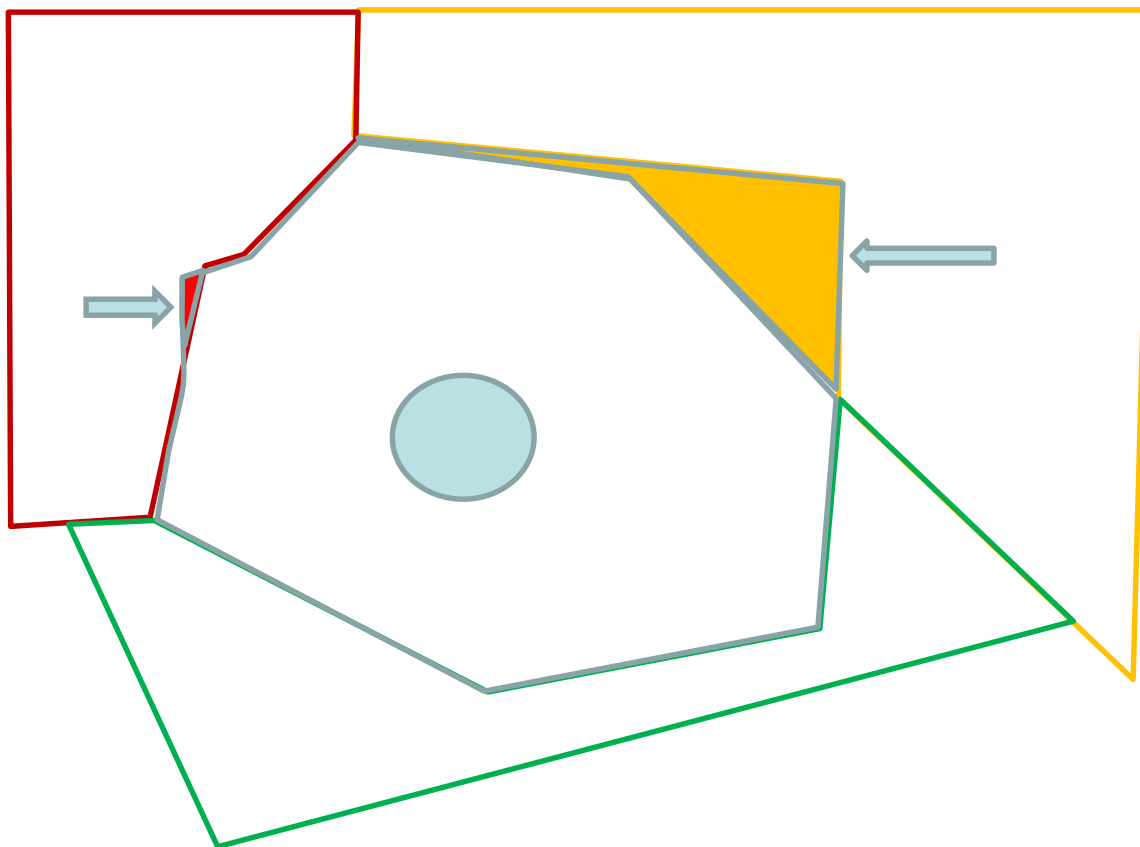
a lamp fixed on a wall?  
a garden lamp?

# Claims

- Define the monopoly sought
- Must encapsulate legal requirements of novelty, inventive step and industrial applicability
- Single sentences – clear, concise and self-contained
- May be a few words to many pages long



# Claims



# Drawings

- Drawings , flow charts, diagrams
- Black and white photographs

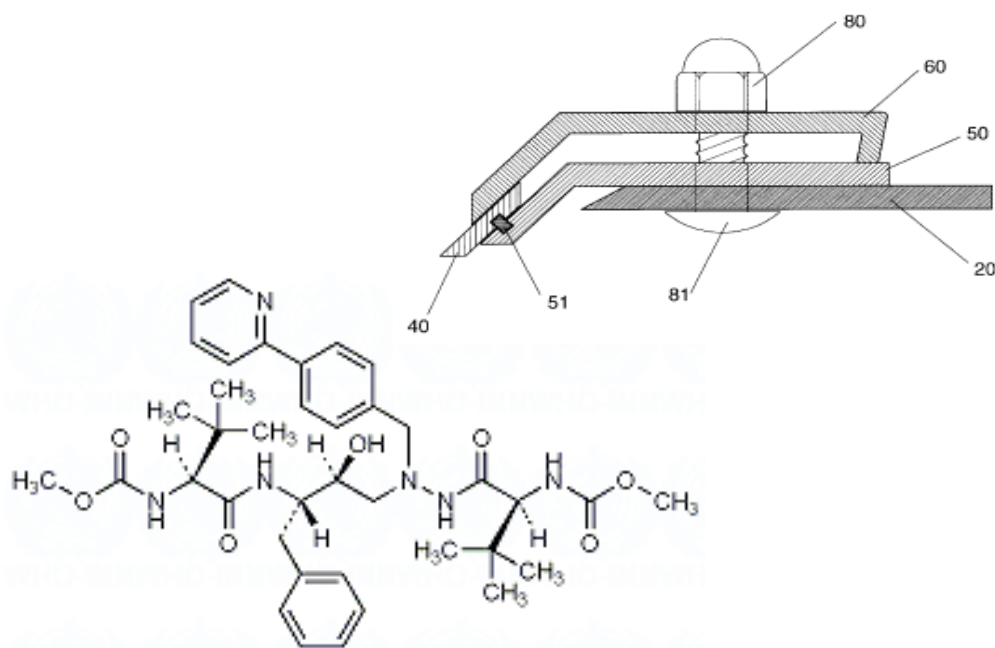
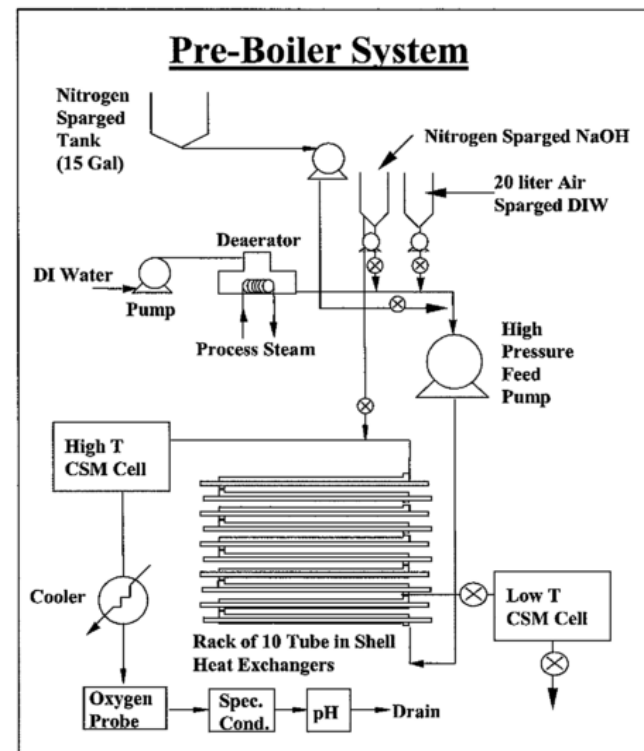


FIG. 2



# Abstract

- **Concise summary** of the disclosure of the invention contained in the description, claims and drawings
- Abstract **merely provides technical information**
- Originally intended to facilitate searching

# Legal requirements – recap

- Novelty (is it “new”)
- Inventive step (is it “inventive”?)
- Industrial applicability (does it do something?)
- Sufficiency/enablement (have you described it sufficiently?)

# Typical Parts of an Application – recap

■ Request / Bibliographic data (front page)

■ Description

■ Figures

■ Claims

• Primarily for sufficiency/enablement

• Define something new, inventive and industrially applicable

• Defines the monopoly (scope of protection sought)

**Thank you very much!**