



Novelty, Inventiveness and practical applicability

SIPO

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PART ONE

NOVELTY

The background of the slide is a light gray world map. In the bottom-right corner, there is a perspective view of a modern building facade with a grid of windows. A large version of the 'P' logo is mounted on the building's facade.



Outline

-  **I. Legal Basis and Basic Concept**
-  **II. Examination of Novelty**
-  **III. Several Situations in Assessment**
-  **IV. Identical Invention-creations**



Legal Basis

CPL Article 22.2

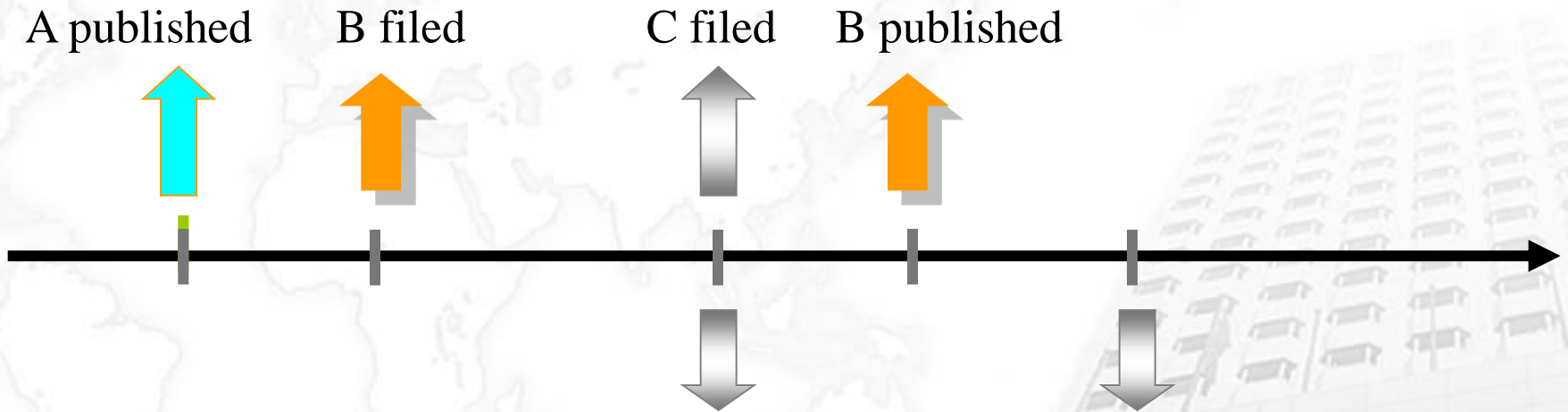
- ◆ The invention or utility model shall
 - ◆ neither belong to the **prior art**
 - ◆ nor had any person **filed before** the date of filing with the Patent Administrative Department Under the State Council an application which described the **identical** invention or utility model and was **published** in patent application document or announced in patent document **after** the date of filing.



Basic Concepts

Prior Art and Conflicting Application

A, B, C disclosed the identical technical contents



The examined application: Filing date

Publication date





A: the prior art

B: the conflicting application

C: the identical invention-creation



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Principles of Examination

The Principle of Separate Comparison:

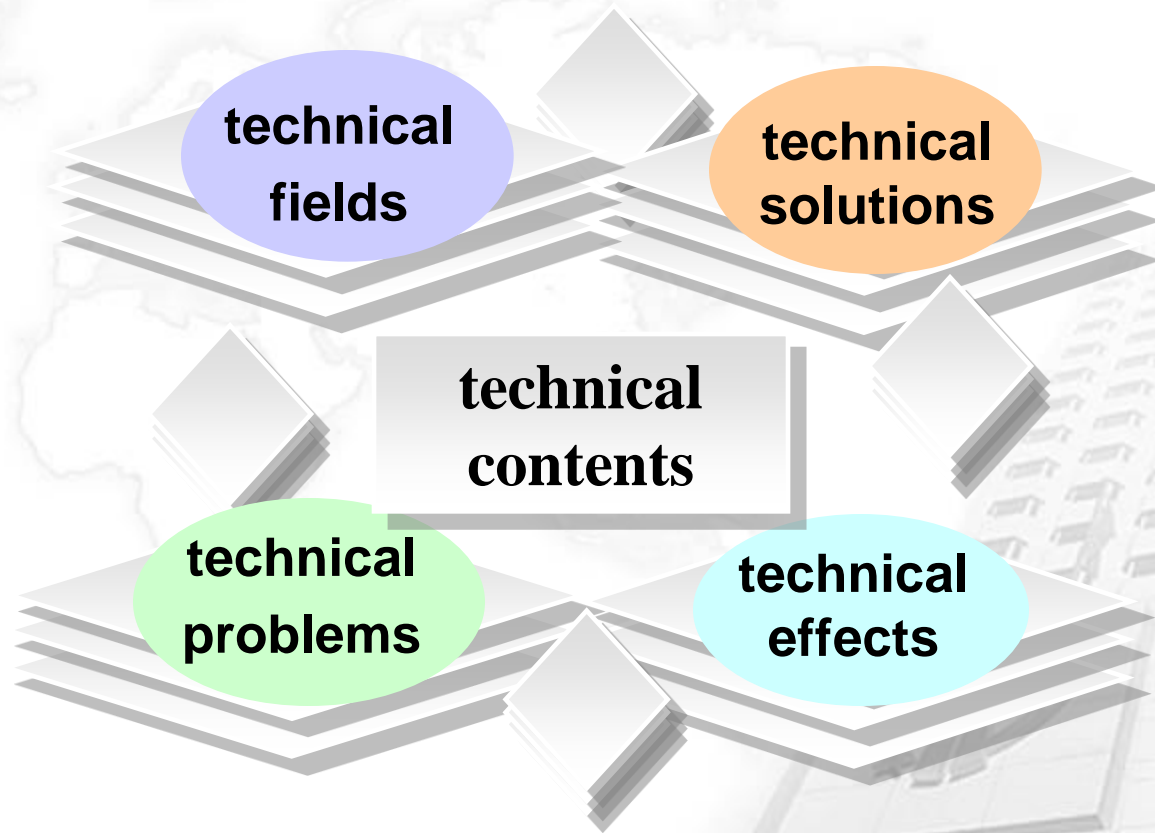
Each claim of
the application



each item of the
prior art, or
each previously
filed and later
published
invention or utility
model.



Contents of Examination





II. Examination of Novelty

Example:



	Claimed invention	Reference document
Technical field	table	chair
Technical problem	connection between body and legs spend too much time	connection between body and legs need too much time
Technical solution	a kind of bolt	same bolt
Technical effect	fast connection	fast connection

not novel



II. Examination of Novelty

Example:



	Claimed invention	Reference document
Technical field	table	watch
Technical problem	connection between body and legs spend too much time	connection between parts is difficult
Technical solution	a kind of bolt	same bolt
Technical effect	fast connection	easy connection

Novel



Outline



I. Legal Basis and Basic Concept



II. Examination of Novelty



III. Several Situations in Assessment



IV. Identical Invention-creations



Contents

1. Specific Disclosure and Generic Disclosure

2. Well-known Equivalents

3. Numerical Value and Numerical Range

4. Product Claims including Feature of Use



1. Specific Disclosure and Generic Disclosure

- A disclosure in the **specific** term **take away** the novelty of the invention or utility model defined in the **generic** term.

Example:

Claim: a product of metal

Prior art: same product of copper

Not novel



1. Specific Disclosure and Generic Disclosure

- A disclosure in **generic** term does **NOT take away** the novelty of an invention or utility model defined in **specific** term.

Example:

Claim: a product of copper

Prior art: same product of metal

Novel



2. Well-known Equivalents

Example:

Claim: a device using bolt fastening

Prior art: a device using screw fastening

Not novel

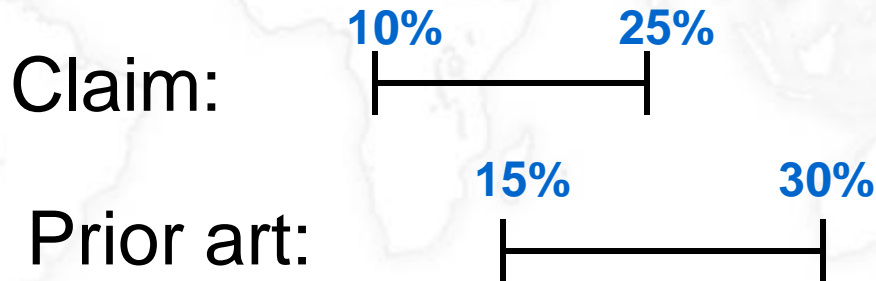


3. Numerical Value and Numerical Range

Example:

PRv and Cv partially overlap each other ---the claim is not novel

Example 3:



NOT novel.



4. Product Claims Including Feature of Use

Example:

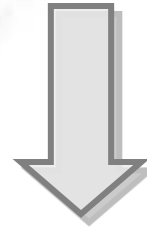
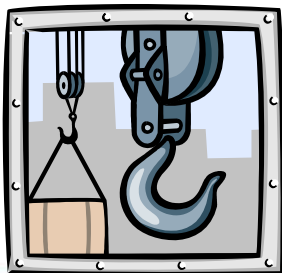
A hook for crane



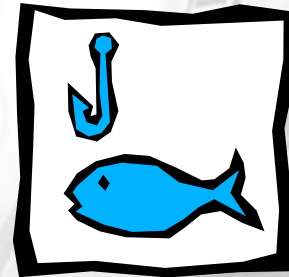
A hook for fishing with the same shape



A hook having the structure specifically suitable for a crane in size and strength







Different products!



Novel



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non-double
patenting
principle

1. Legal Basis

Article 9

For any identical invention-creation, only **one** patent right shall be granted.

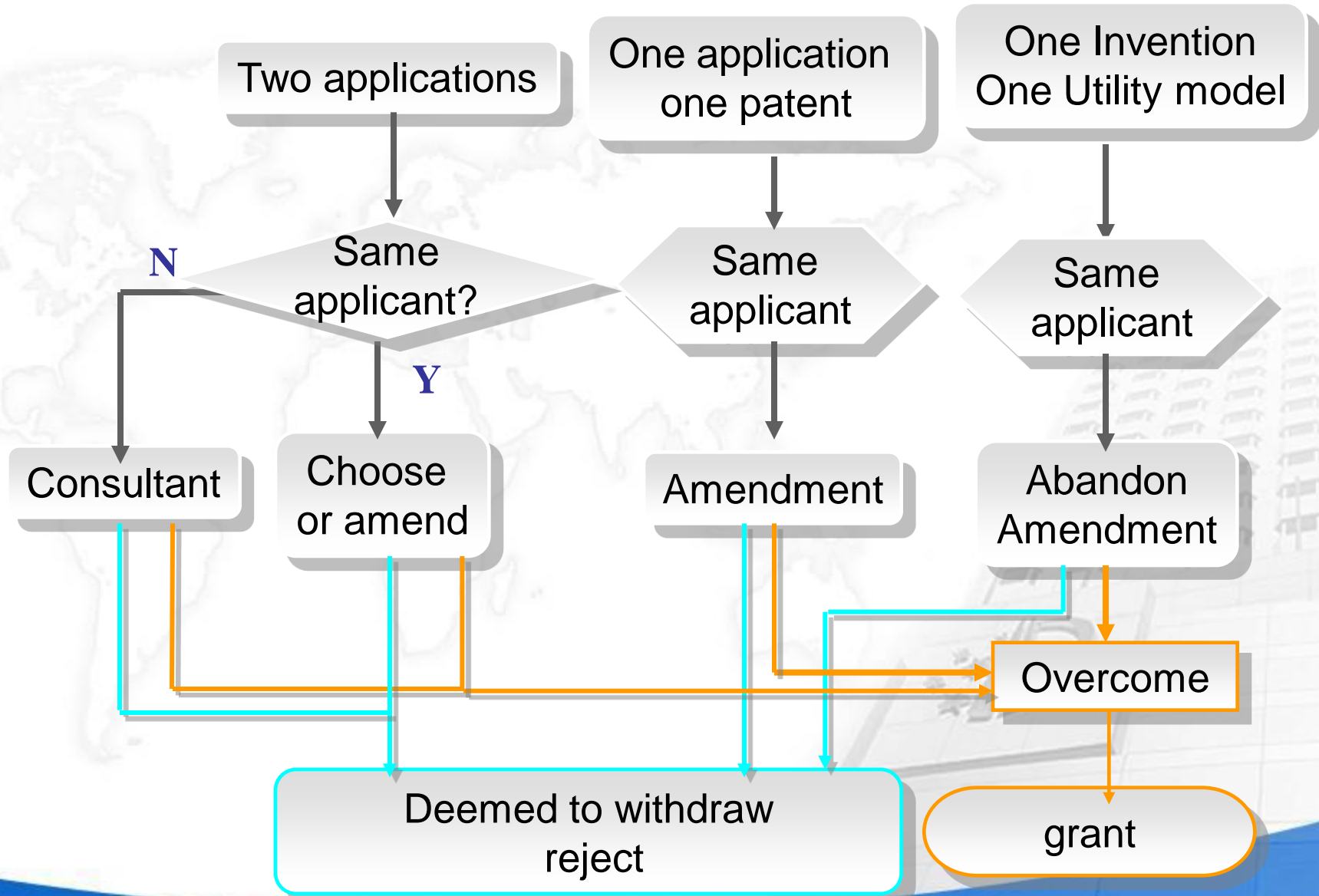
However, where **same applicant** (s) applied for both patent for utility model and patent for invention for the identical invention-creation **on the same day**, the previously granted patent for utility model has not expired, and the applicant (s) declares to abandon the patent for utility model, then a patent for invention may be granted.

first-to-file
principle

where two or more applicants have separately filed a patent application for an identical invention-creation, the patent right shall be **granted** to the applicant whose application was filed the **earliest**.



2. Approach of Handling










PART TWO

INVENTIVENESS





Outline

-  **I. Legal Basis and Basic Concepts**
-  **II. Principles of Examination**
-  **III. Method of Assessment**
-  **IV. Secondary Considerations**
-  **V. Several Types of Inventions**



Legal Basis

Article 22.3

- **“as compared with the existing technology before the date of filing, the invention has prominent substantive features and represents notable progress ” (for inventions)**
- **substantive features + progress (for utility mode)**



Basic Concepts

1. Prominent Substantive Features

- **Regarding to the prior art, it is non-obvious to a person skilled in the art.**








Basic Concepts

2. Notable progress

- **Be able to produce advantageous technical effect as compared with the prior art.**



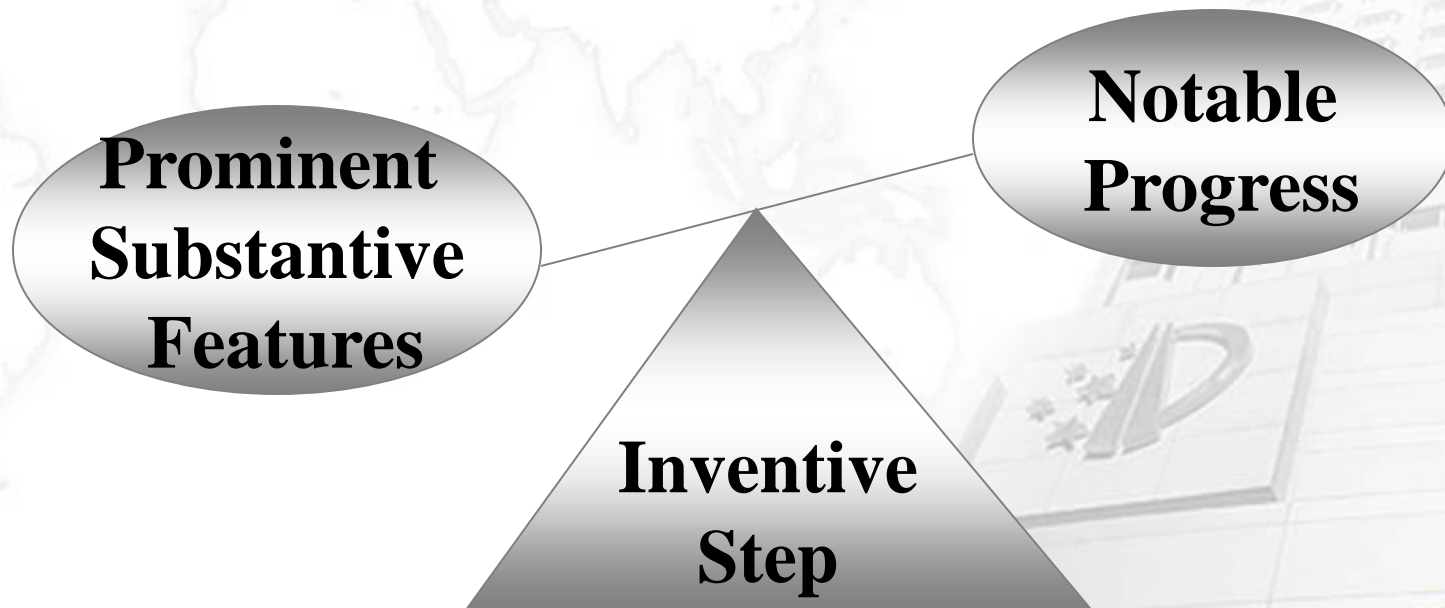
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1. Sequence of examination

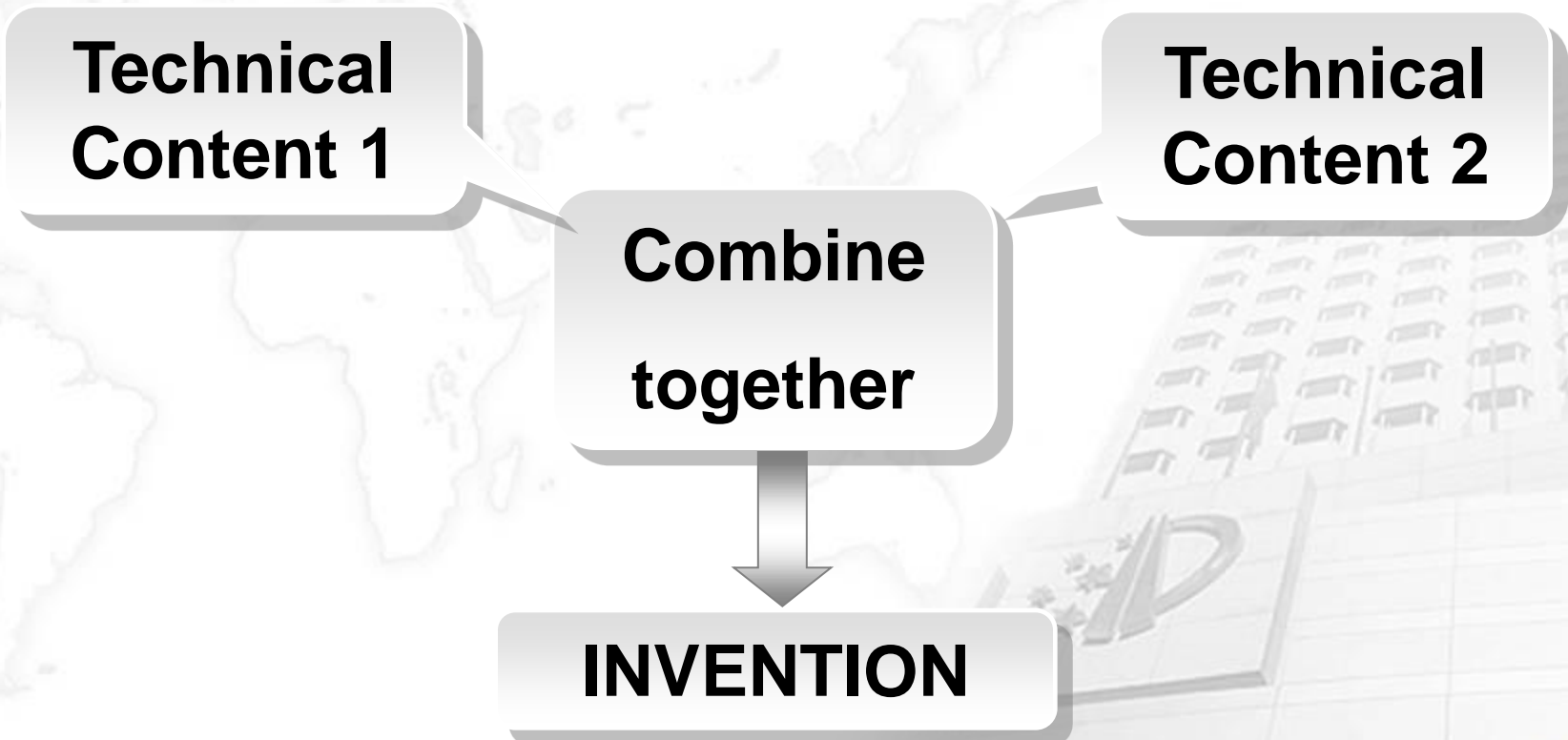
- **Sequence for the two aspects of the inventive step:
whether it has prominent substantive features, and
whether it represents notable progress**










2. Permissible to combine

- **Different from “separate comparison” for novelty**





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1. Assessment of Prominent Substantive Features

The Three Steps Method

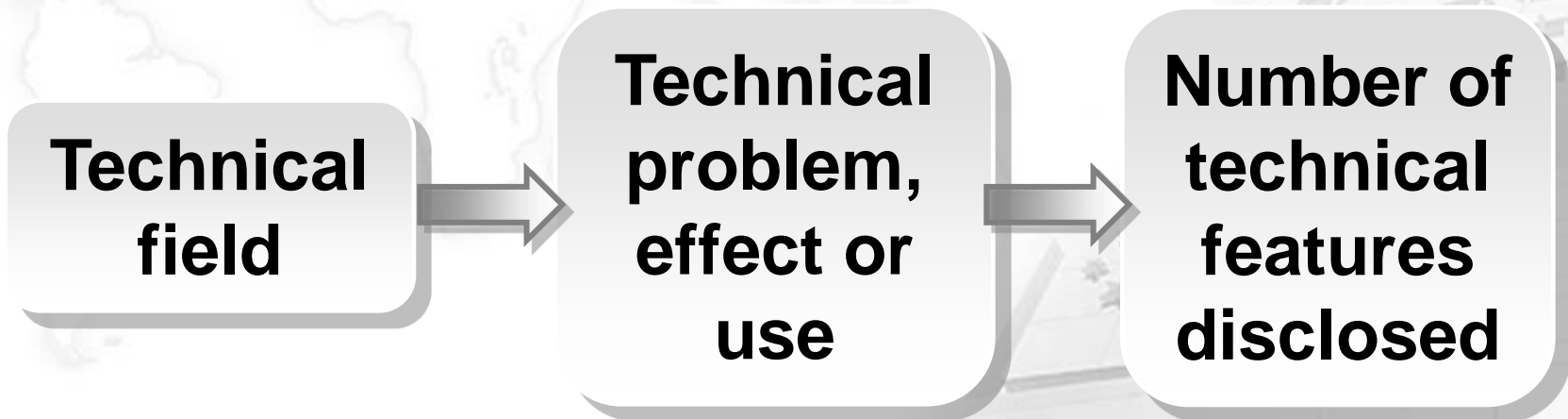
Similar to the problem-solution method widely adopted in other offices



1. Assessment of Prominent Substantive Features

(1) Determining the closest prior art

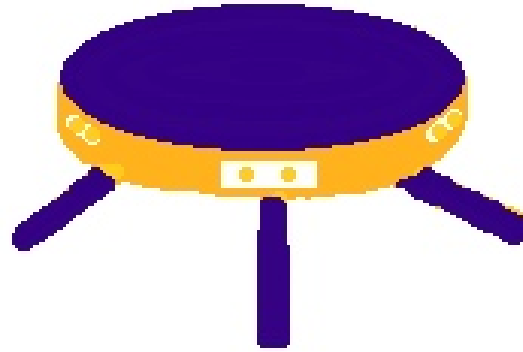
- a technical solution in the prior art which is the most closely related to the claimed invention





III. Method of Assessment

Example



Invention:
wooden
table with
three legs
and a skirt

Which one is the closest ?



D1: bench for milkers



D2: table with a skirt



1. Assessment of Prominent Substantive Features

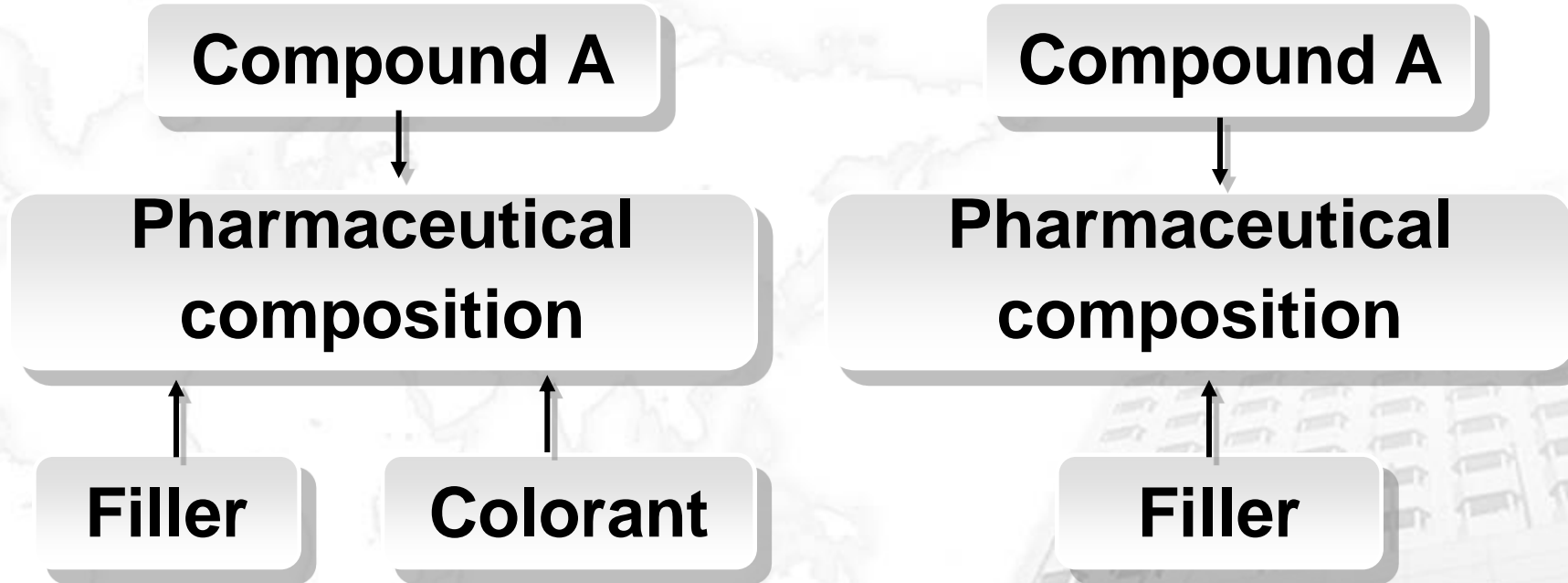
(2) Determining the distinguishing features and establishing the technical problem actually solved

- The technical problem actually solved by the invention
 - may be **different from** that asserted by the **applicant**



III. Method of Assessment

Example **Invention** both for treating **D1** cancers



The distinguishing features ?
The actual problem to be solved ?



1. Assessment of Prominent Substantive Features

- (3) Determining **obvious or not** to find a technical motivation in the prior art
- The distinguishing feature is **a common general knowledge**
 - a **customary means** in the art to solve the technical problem, or
 - a technical means disclosed in a **textbook** or **reference manual** to solve the technical problem.



1. Assessment of Prominent Substantive Features

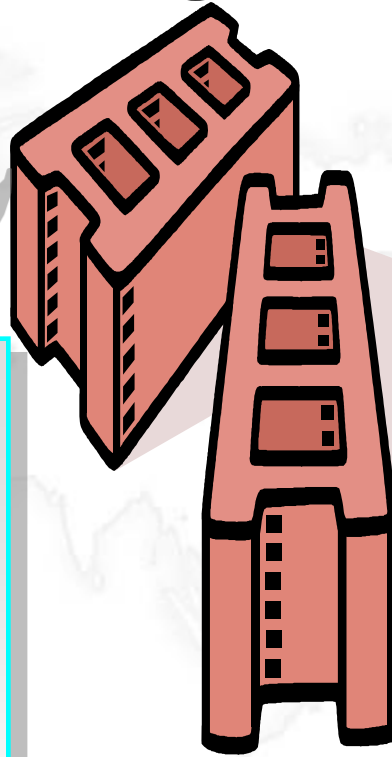
(3) Determining obvious or not

- The distinguishing feature is **a technical means related to the closest prior art**
- disclosed in **different parts** of the same reference document for different technical solutions/**another** reference document, and
- with the **same function**



Example

A building component



Document

a building component of the same structure and made of lightweight metal material but does not mention the use of aluminum

Invention

a building component made of aluminum (Al), and the problem to be solved is to reduce the weight of the building component

A technical motivation?








2. Assessment of Notable Progress

- primarily consider whether or not the invention produces **advantageous technical effects**, for example, to produce
 - (1) a **better** technical **effect**
 - (2) a **different** technical **solution**
 - (3) a **new trend** of technical development
 - (4) **outstanding** positive technical **effects** in some aspects



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1. Solving a Long-Felt but Unsolved Technical Problem

Example

- **Problem:** permanently marking farm animals without causing pain to the animals or damage to the hide, since farming began
- **Invention:** freeze-branding on the basis of the discovery that the hide can be permanently pigmented by freezing

Who
am I?





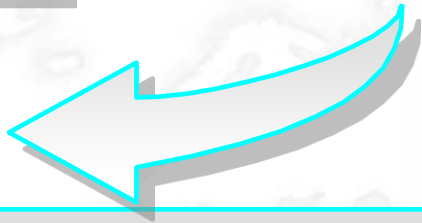
2. Producing Unexpected Technical Effect

- Producing an unexpected technical effect
- notable progress, and
- non-obvious
- **Involve IS**



2. Producing Unexpected Technical Effect

Example



Document

a rubber tyre:

**addition of carbon
black 3 – 10 wt% as
colorants**



Invention

a rubber tyre :

**addition of carbon
black more than 30
wt%, with an
excellent resistance
to abrasion**



3. Achieving Commercial Success

Example

- The commercial success of minicars
- decreased consumption of oil because of *the new design of its motor*



A drop of
oil for
one mile !



3. Achieving Commercial Success

Example

- **A food, packed in a special designed case, welcomed by young people with commercial success**





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- ❄️ IV. Secondary Considerations
- ❄️ V. Several Types of Inventions



1. Invention by Combination

- A new technical solution made by **combining** certain **known** technical solutions



1. Invention by Combination

(1) Obvious combination

- **Example1:**
- **A ball-point pen with electronic watch**
- **to fix a known electronic watch on a known ball point pen.**
- **just a mere aggregation**
- **Obvious**





1. Invention by Combination

(2) Non-obvious combination

- **Example:**
- **D1: pain-killer Y**
- **D2: tranquilizer Z**
- **Invention: a pharmaceutical composition comprising a pain-killer Y and a tranquilizer Z**
- **The combination of Y and Z increases the effect of pain relieving remarkably**
- **Involve IS**





2. Invention by Changing Elements

Inventions

- (1) by *changing* relations between elements
- (2) by *replacing* elements, and
- (3) by *omitting* elements

Following factors need to be taken into account:

- whether there exists technical motivation for such changes, and
- whether the technical effect can be expected



2. Invention by Changing Elements

Example1:

Invention: a measuring instrument but having a fixed hand and a rotatable dial.

Prior art: a similar measuring instrument having a rotatable hand and a fixed dial

Obvious





2. Invention by Changing Elements

Example2:

Invention: a grass mower, with a specific oblique angle of blade, enabling the blade to be sharpened automatically.

Prior art: mower with a different oblique angle of blade

Involve IS








PART THREE

PRACTICAL APPLICABILITY





Outline

-  **I. Legal Basis and Basic Concepts**
-  **II. Principles of Examination**
-  **III. Typical Situations**



Legal Basis

Article 22.4

- **The subject matter of a patent application for invention or utility model must be one which can be **made or used in an industry** and can produce **positive effects**.**



Basic Concepts

(1) Can be Made or Used in Industry

- **A technical solution that can be made or used in an industry:**
 - ◆ **conforms with the laws of nature**
 - ◆ **has technical features**
 - ◆ **can be implemented**
- **Industry = almost all**



Basic Concepts

(2) Positive Effects

- **On the date of filing**
 - ◆ **The economic, technical or social effects can be expected by a person skilled in the art, and**
 - ◆ **These effects shall be positive and advantageous**



I. Legal Basis and Basic Concepts

Basic Concepts

(2) Positive Effects




Example

- Manual washing machine (No power supply)
- Computer controlling washing machine





Outline

-  I. Legal Basis and Basic Concepts
-  II. Principles of Examination
-  III. Typical Situations



1. Sequence of examination








2. Relationship with Creation or Implementation

- No relation with how the invention was created or whether it has been implemented
 - ◆ “can be made or used” \neq have been made and used ?
 - ◆ created easily \neq not practically applicable ?



Outline

-  I. Legal Basis and Basic Concepts
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Contents

1. Non-Reproducibility

2. Utilizing Unique Natural Conditions

3. Methods for Measuring Physiological Parameters under Extreme Conditions



1. Non-Reproducibility

- ◆ **Dishes and cooking methods**
 - **Example:**
 - A dish which cannot be made industrially and implemented repeatedly
 - No practical applicability





1. Non-Reproducibility

- **Some dishes can be made industrially and implemented repeatedly**
- **Example:**
- **Roast duck**





2. Utilizing Unique Natural Conditions

- An invention shall not be a unique product confined by natural conditions.**



2. Utilizing Unique Natural Conditions

By using of unmovable natural conditions

- **Example:**
- A method of raising fish in the section of Yangtse river from ... to ...





2. Utilizing Unique Natural Conditions

- **Example:**
- A bridge over Yangzhi River (no)
- A supporting assembly of the bridge





3. Methods for Measuring Physiological Parameters of Human or Animal Body under Extreme Conditions

- **Raising a threat to the life of the human being or animal**
- **The endurable extreme conditions changed among different human beings or animals**
- **Determined by an experienced professional**



3. Methods for Measuring Physiological Parameters of Human or Animal Body under Extreme Conditions

Example

- A method of measuring the ability of cold resistance of a human by gradually decreasing the body temperature of the human.





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Thank you!