



Topic 1: Recap

Recap of the Basic Principles of Patent
Drafting taught during the February 2017
National Patent Drafting Course

**Kuala Lumpur
February 2018**

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Patent Attorney

Welcome back!

- This week, we are going to help you:
 - **learn more** on patent drafting principles, and
 - help you to **further develop** your patent drafting skills
- But first ... a recap of the 2017 course!



2017 Programme

Face to face session

13-17 February 2017

Mixture of theory and exercises

Follow up session

February - April

Three drafting exercises by email

Mentoring services

Topics covered in 2017

- The Enabling IP Environment Project
- The who, when, where, what & why of patent filings

- Malaysian patent system
- Patent systems abroad

- Parts of a patent application
- Claim theory - protection of inventive concepts

- Claim formats - independent & dependent claims
- Unity of invention
- Claim drafting methodologies
- Drafting full specifications

- And many practical examples....

Topics covered in 2017

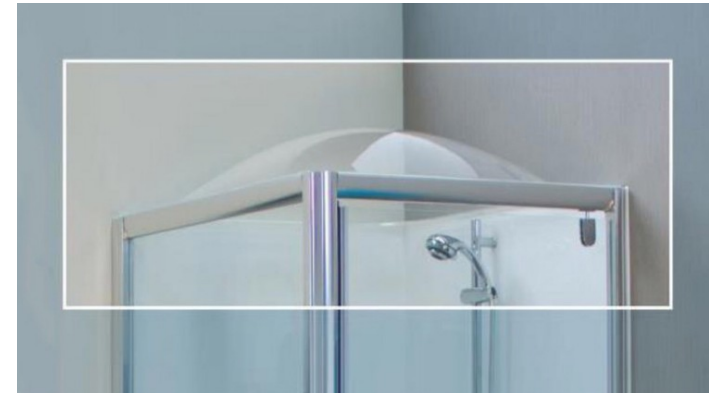
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A brief re-cap

Enabling IP Environment

Enabling IP Environment Project aims to increase the capacity of countries for technology development, management and successful IP commercialisation through establishment of a sustainable innovation system and creation of a strong network of all stakeholders.

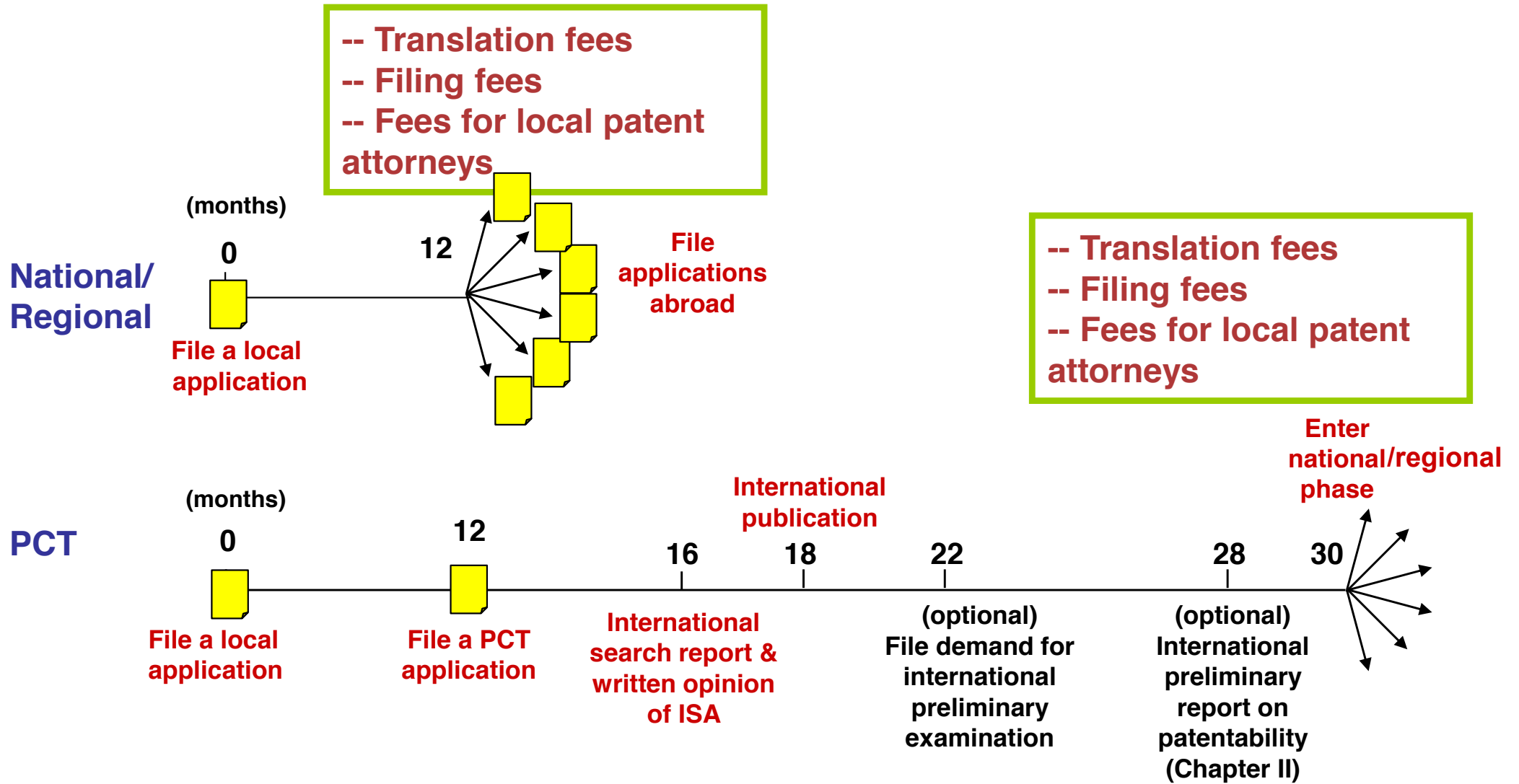


The Patent System

- The role of a patent
 - Why do we file patent applications?
 - What do patent applications protect?
 - Who can file a patent application?
 - When should you file a patent application?
 - Where should you file a patent application?



Patent timelines



The parts of a patent application

■ Form

■ Specification (description)



■ Claims

■ Drawings (if any)

■ Abstract

The parts of a patent application

- Form
- Specification (description)
 - Title
 - Field of the Invention
 - Background
 - Summary of the Invention
 - Description of the Drawings
 - Detailed Description
 - Examples
- Claims
- Drawings (if any)
- Abstract

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- **And many practical examples....**

Any questions?

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- Parts of a patent application
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- **Claim formats - independent & dependent claims**
- **Unity of invention**
- **Claim drafting methodologies**
- **Drafting full specifications**

- And many practical examples....

Re-cap with a
bit more detail

Claims

- Define the scope of protection
- Therefore, governed by rules to ensure the protection is 'right' for the inventive concept

Patentability of claims

■ Novelty

■ Inventive Step

■ Industrial Applicability

Novelty

■ Novelty

■ Not part of (anticipated by) the prior art

■ = everything disclosed to the public

■ = anywhere in the world

■ = in any form (written, oral, used)

■ [intervening prior art applies in some jurisdictions]

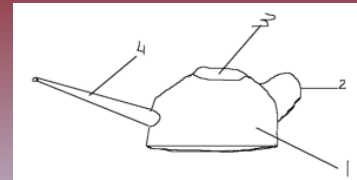
■ Grace periods in some jurisdictions

■ Malaysia: 1 year in specific situations




■ = by applicant or by abuse of applicant's rights

■ Be careful as not accepted everywhere!

Novelty: feature analysis



A device for watering plants having a water-containing portion (1), a handle (2), an opening with a lid (3) and a spout (4).

Prior arts				
	A device for watering plants having:			
1	A water containing portion			
2	A handle			
3	An opening with a lid			
4	A spout			



Inventive Step

■ Inventive Step

■ The inventive step over the prior art would not be considered obvious to a person skilled in the art

■ = ordinary skill in the art (but unimaginative)

■ consider if prior art documents can be combined

■ Considerations

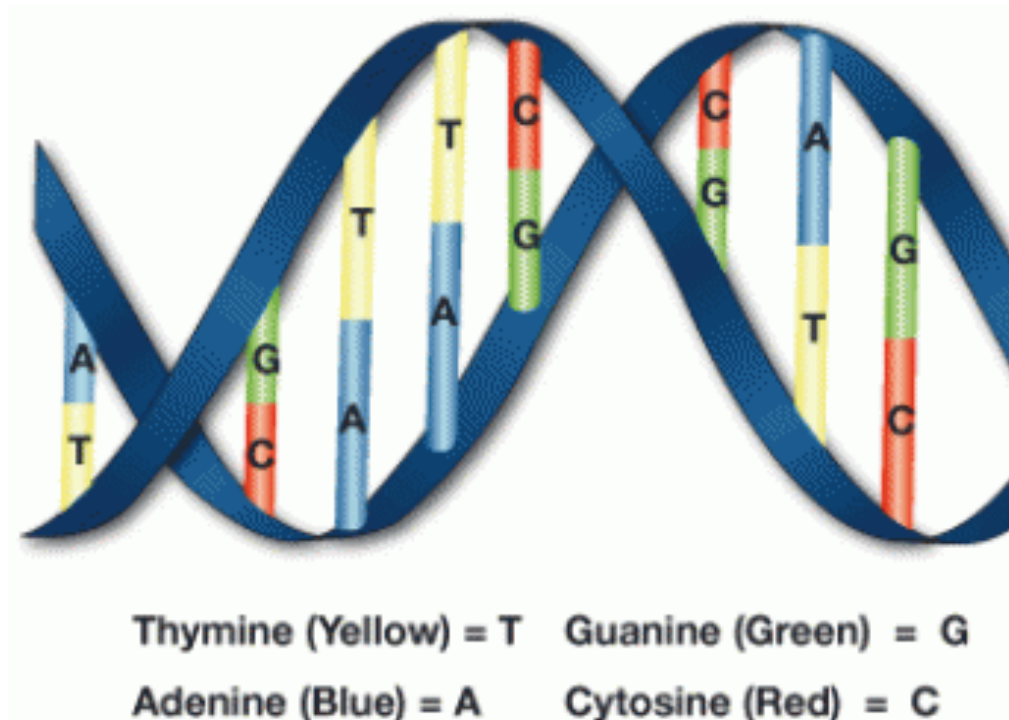
■ Solving a technical problem? Long felt need?

■ Goes against expectations or prejudices

Industrial Applicability

Industrial Applicability

Can the invention be made or used in any kind of industry?



Patentable subject matter

- Exclusions in some jurisdictions

- Discoveries, scientific theories, mathematical methods

- Business methods, mental acts

- Plant and animal varieties, essentially biological processes for producing them

- Methods of treatment of humans by surgery or therapy

- Diagnostic methods practices on the human body

- (Animals also - e.g. in Malaysia)

Three legal constructs

- **“Invention”** = mental construct inside the mind of the inventor, with no physical substance
- An **“embodiment”** of the invention is a physical form of the invention
- The **“claims”** protect at least one embodiment, but the best claims protect the invention (i.e., the inventor’s embodiment and all possible other embodiments of the invention)

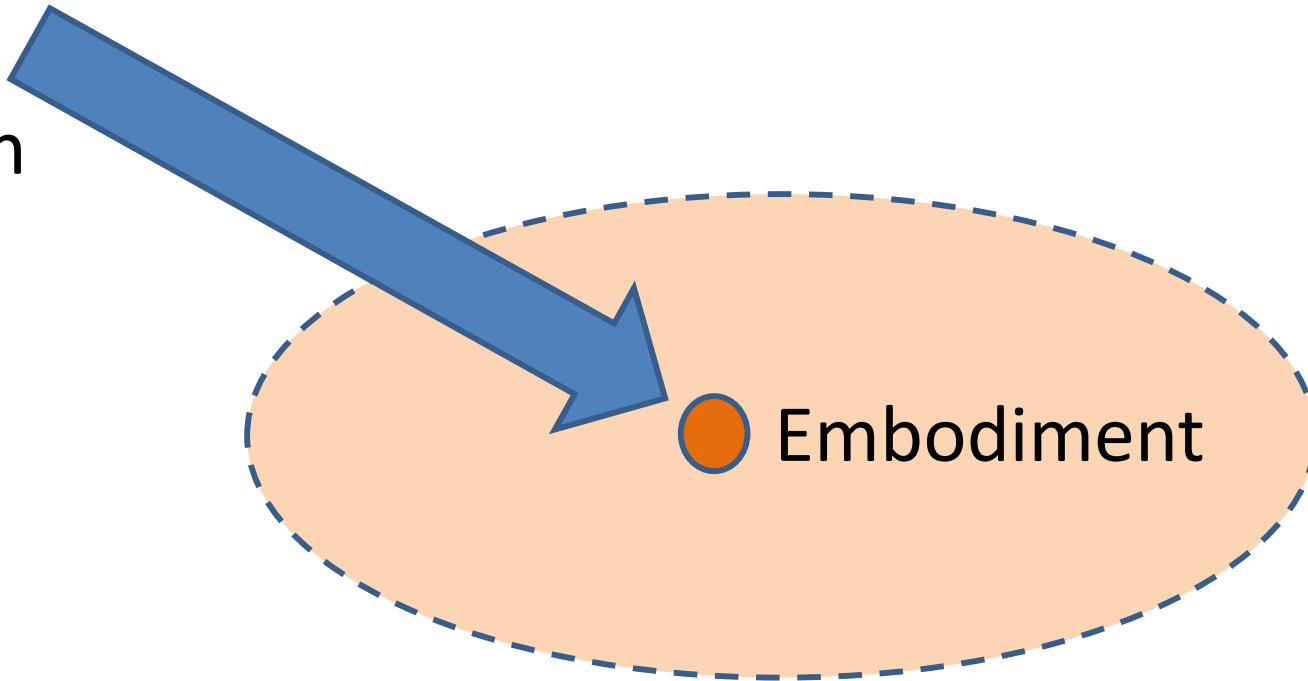
Three legal constructs

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Let’s illustrate...



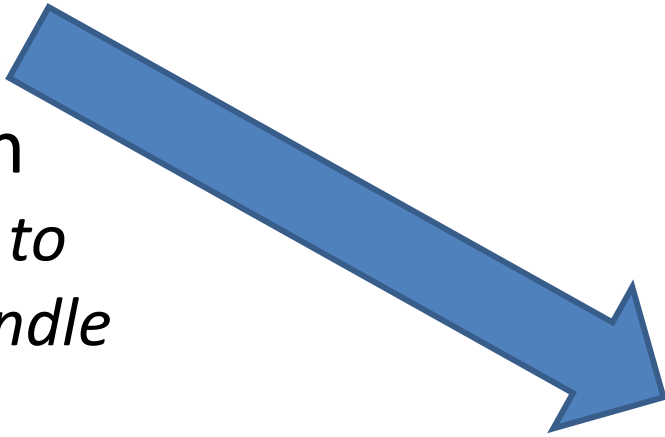
Invention



Claim scope



Invention
*= first cup to
have a handle*

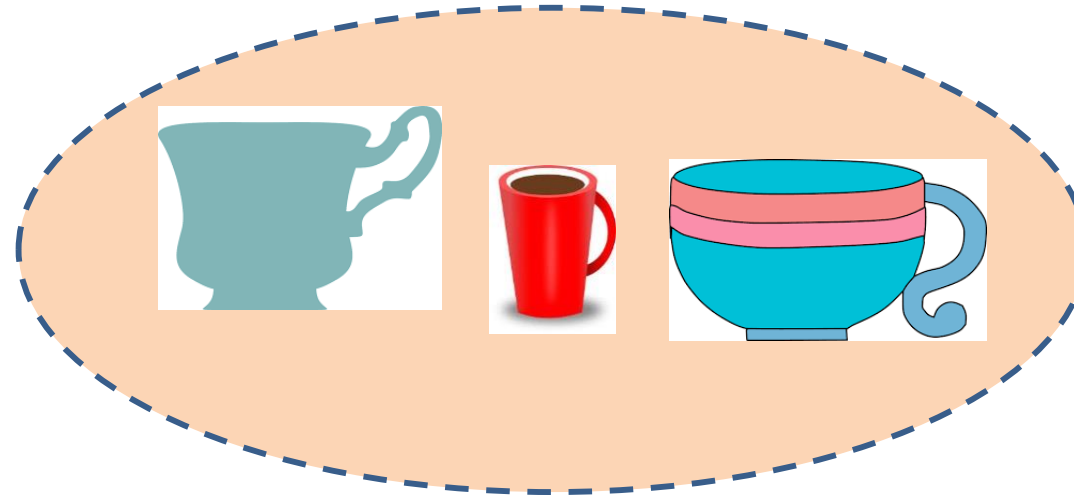


Embodiment
= red clay cup with handle



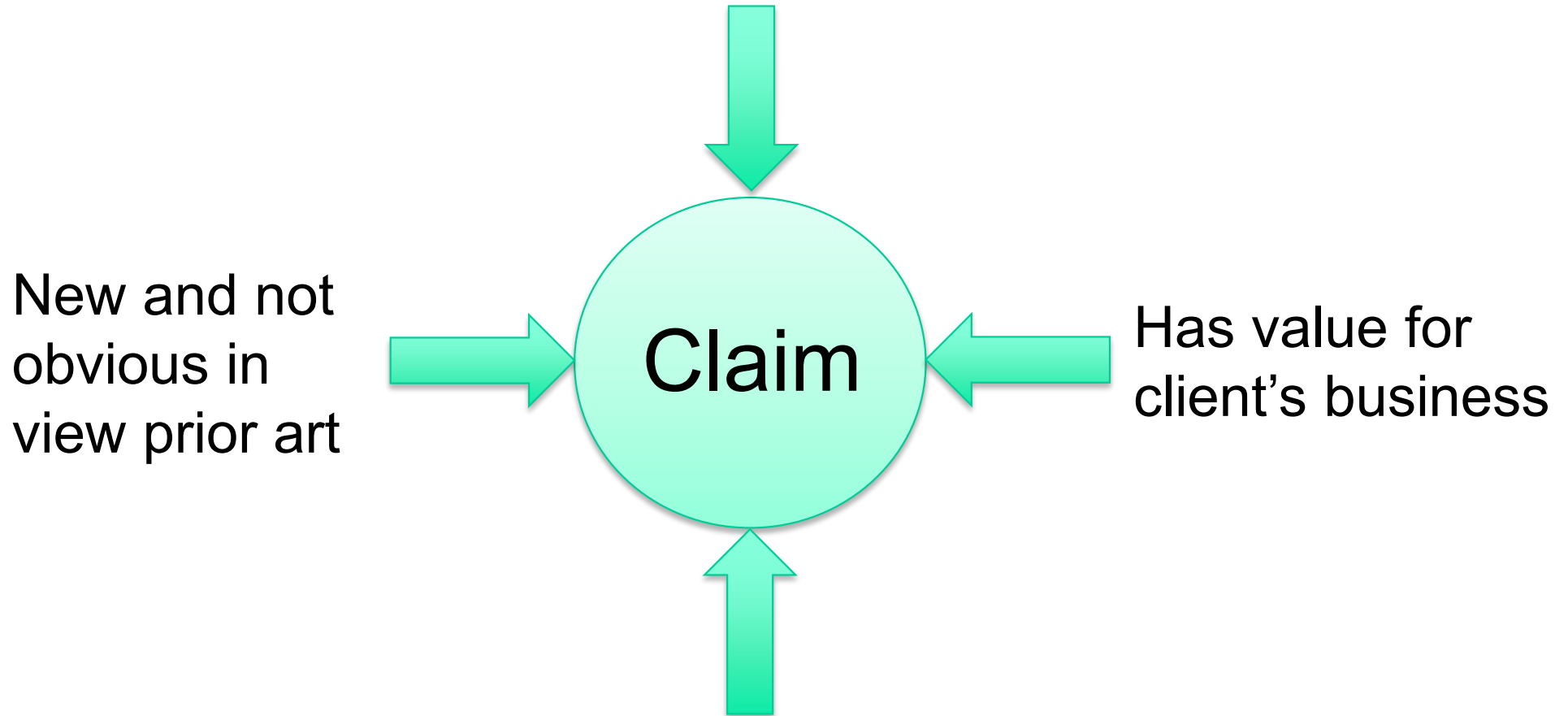
Invention

= *first cup to
have a handle*



Claim 1. A cup comprising a handle.

Take into account legal and linguistic rules

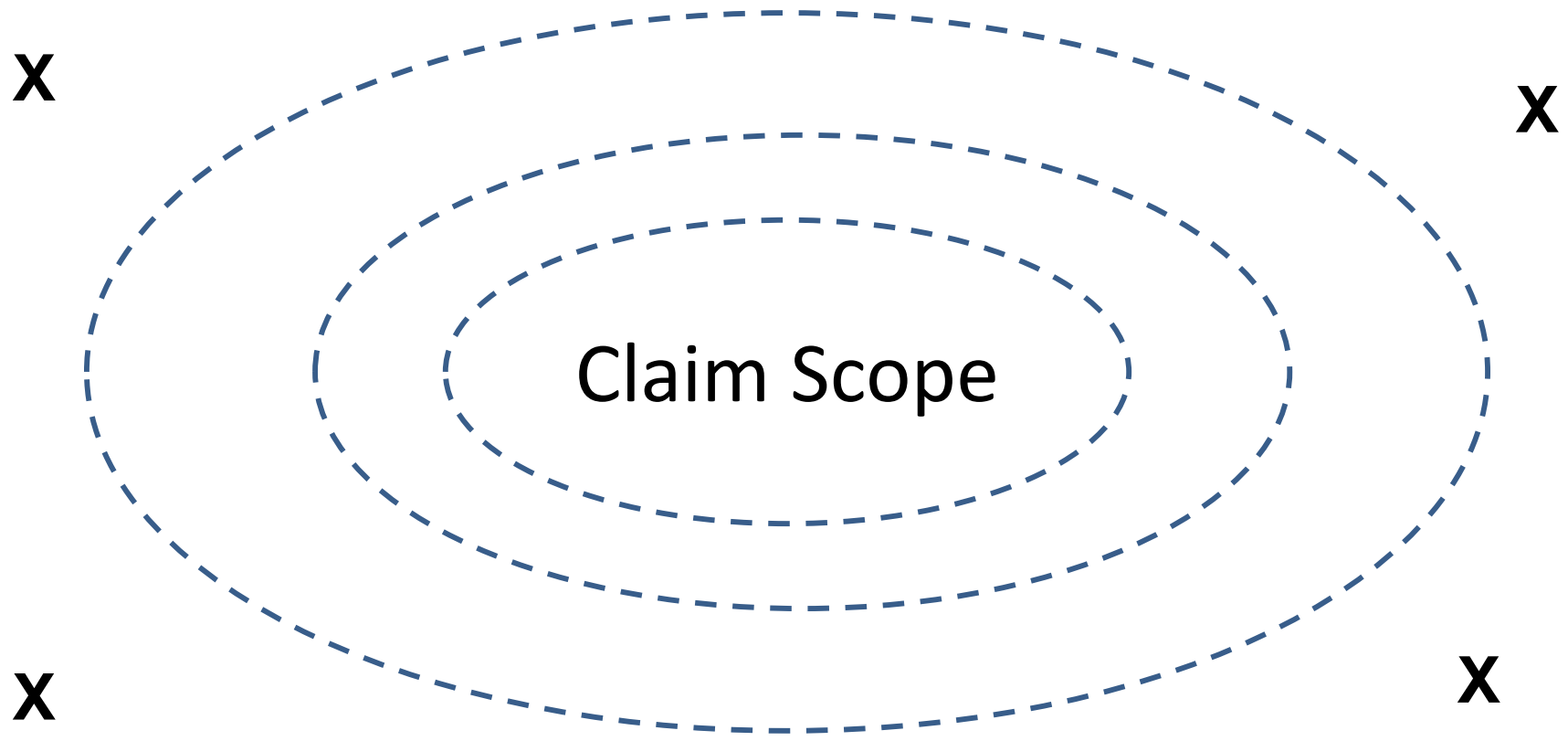


Needs to cover all embodiments / inventive concept

Narrowest scope
= validity

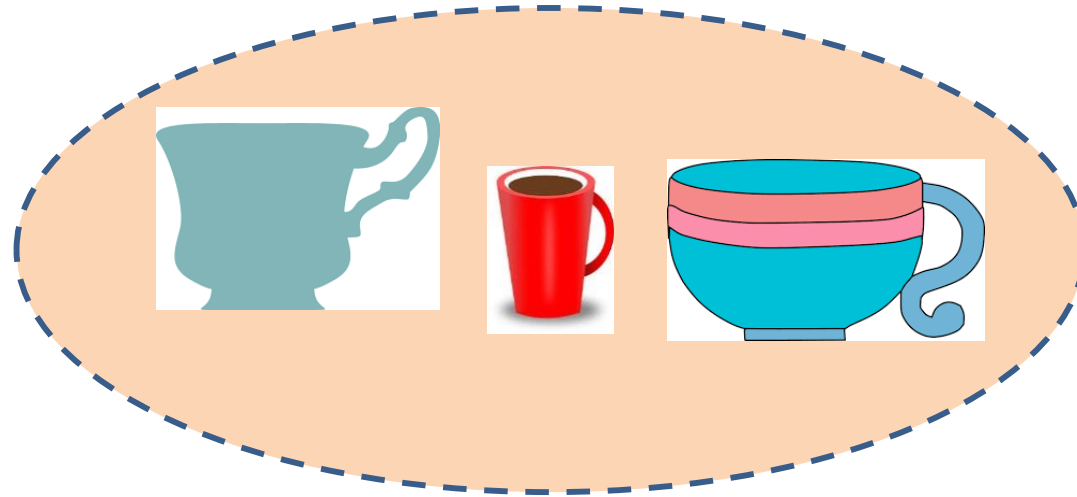


Broadest scope
= commercially
useful protection



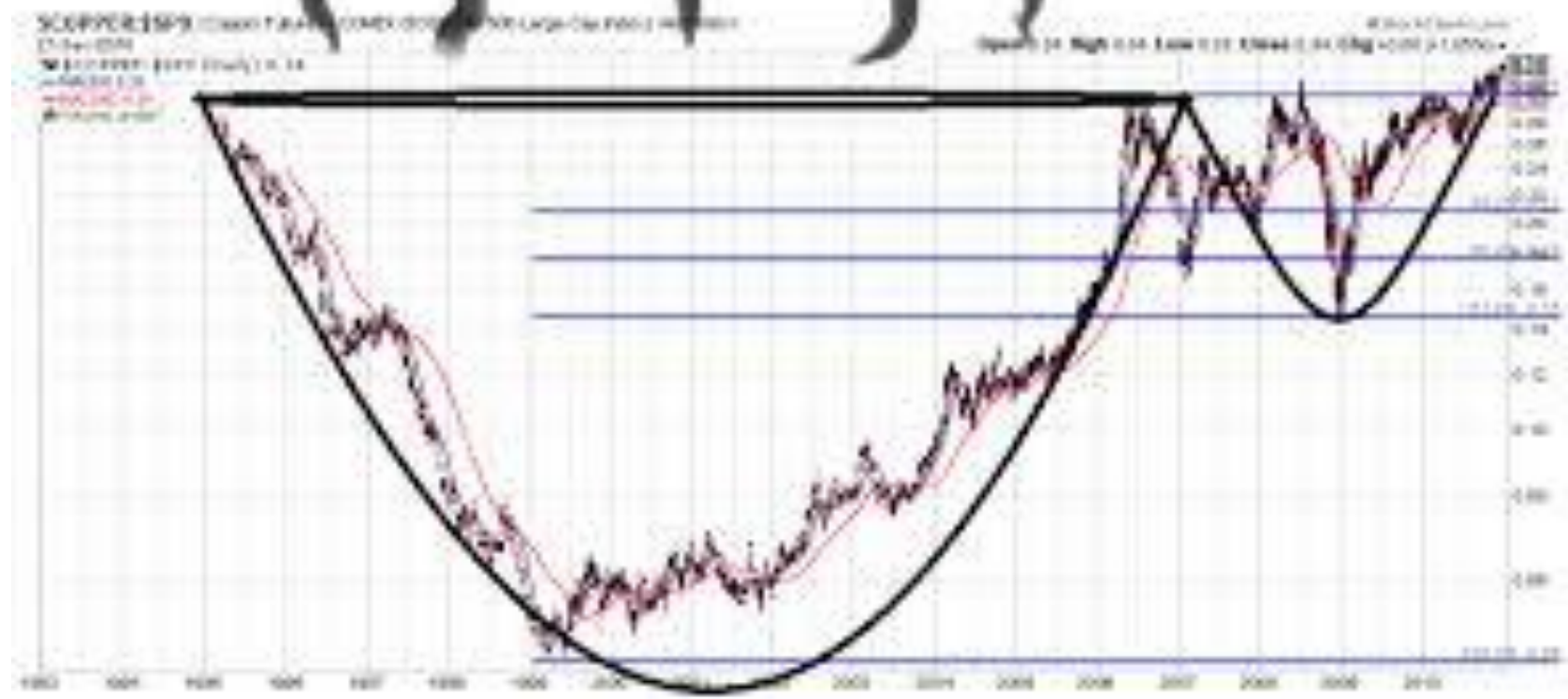
Prior art

X



Claim 1. A cup comprising a handle.





Claim format

- Single sentence
- With punctuation

- Claim parts:

Preamble, transitional phrase: body

Claim format

- Single sentence
- With punctuation

- Claim parts:

Preamble, transitional phrase: body

Identifies the **category**
of the claim

Claim format

- Single sentence
- With punctuation

- Claim parts:

Preamble, transitional phase: body

Open-ended - comprising (including, characterised in that...)

Mid-way - consisting essentially of

Closed - consisting of

Claim format

- Single sentence
- With punctuation

- Claim parts:

Preamble, transitional phase: body

The elements

Their **interrelationship** (the “glue words”)

Preamble? Transitional Phrase? Body?

1. An apparatus, comprising:

a pencil;

an eraser attached to one end of the pencil; and

a light attached to the centre of the pencil.

Preamble? Transitional Phrase? Body?

1. An apparatus, comprising:
 - a pencil;
 - an eraser attached to one end of the pencil; and
 - a light attached to the centre of the pencil.
-

Punctuation and Antecedent Basis

Claim sets

- Each claim set must have **at least one independent claim**
 - with the minimum set of features that is necessary to define the invention over the prior art
 - Multiple independent claims are ok provided unity of invention is met
- **Dependent claims** include all the features of the claim(s) from which they depend and require something further
 - Narrower in scope than the claim they depend from

INDEPENDENT CLAIMS	DEPENDENT CLAIMS
Capable of standing alone	Refers to an earlier claim (independent or dependent)
Starting claim for its group	Follows (depends from) another claim
Broadest claim of its group	“Fall-back” protection
Specifies all essential features of the invention	Not necessary as this is done in the independent claim

1. An apparatus, comprising:
 - a pencil;
 - an eraser attached to one end of the pencil.

2. The apparatus of claim 1, further comprising a light attached to the centre of the pencil.

How do you re-write claim 2 as an independent claim?

1. An apparatus, comprising:
a pencil;
an eraser attached to one end of the pencil.
2. The apparatus of claim 1, further comprising a light attached to the centre of the pencil.

How do you re-write claim 2 as an independent claim?

1. An [~~The~~] apparatus [~~of claim 1~~], [~~further~~] comprising:
a pencil;
an eraser attached to one end of the pencil; and
a light attached to the centre of the pencil.



Unity of invention

- One patent application can only claim
 - **one invention**, or
 - **a group of closely related inventions**

- The rules are different in jurisdictions

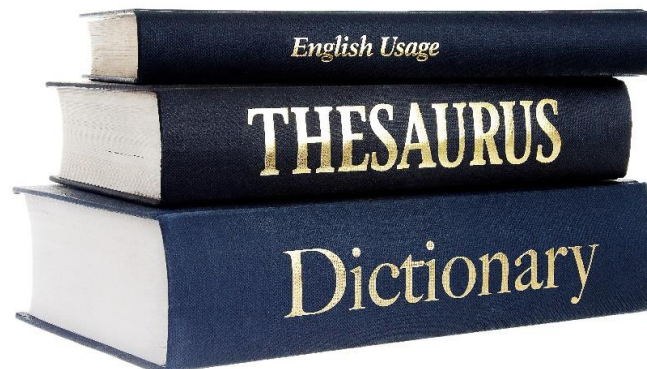
- How to address a lack of unity objection
 - Argue for unity
 - Amend to unify the claims
 - Delete claims
 - Optionally file a divisional application

Claim drafting methodologies

Terminology

- Use words you understand
- Use words your audience will understand
 - (Remember the application may be translated)
- Use a dictionary
- Brainstorm
- Read patents in the field

Remember to **always be consistent** with terms



Terminology

■ Body parts can be useful

■ Head

■ Neck

■ Shoulder

■ Arm

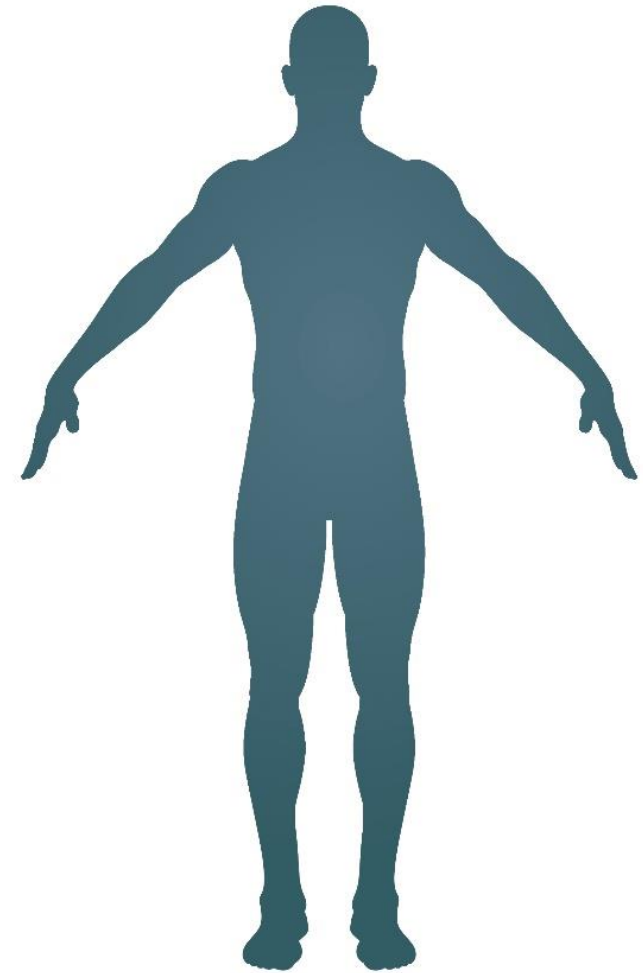
■ Elbow

■ Finger

■ Leg

■ Ear

■ Eye ...



Claim types

- Think about including different claim types to give full protection
 - Product (including kit of parts)
 - Composition
 - Methods
 - Methods of making, doing, treating, ...
 - Product-by-process
 - Method of using (and use claims)
- Think about infringement
 - “This claim I am drafting will be infringed when ...”

Claim drafting methodologies

Problem solution approach

Table of features

Start with a picture claim

1) Problem-Solution approach

- What is the problem being solved by the inventor's idea?
- What features of the idea solve this problem,?

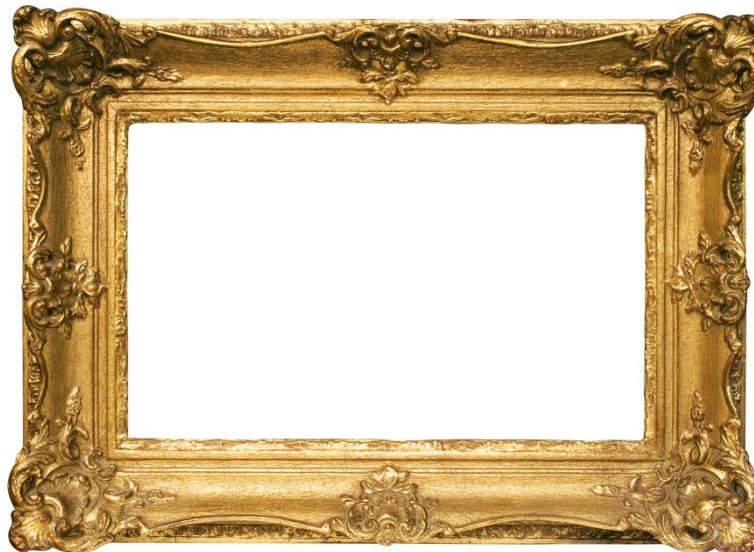


2) Table of features

Invention	Prior Art 1	Prior Art 2	Prior Art 3

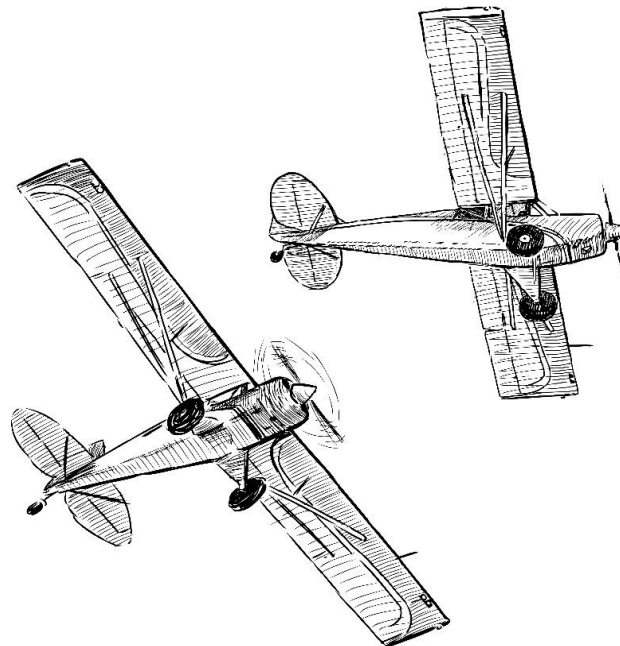
3) Picture claim

- Write a claim that
 - Lists all the features of the invention
 - Glues them together
- Go back through the claim and remove any features that are too narrow



Steps

- Start with a first draft of your claim
- Then read back through the claim and try to sketch it
 - What does your sketch look like?
 - Do you have parts floating? (no glue words)



While drafting...

- Think about variations or modifications to the invention
- Imagine yourself as a competitor who wants to get around the claims
- Think about alternatives that can perform the same function
- Be careful with relative terms
 - Top, higher, right, front, shorter

While drafting...

- Positive recitation of features
 - Very rare to require the absence of a feature
- Limit explanations
 - Claims by result are possible, but better to avoid
- Do not state advantages in the claims (these belong in the description)
- Try to take time to walk away and come back
- Or ask a colleague to review

Remember...



- A patent claim must meet a few needs
 - protect the invention
 - give useful protection to the applicant (be capable of being infringed by a third party you would want to stop or make pay)
 - be valid



Patent Owner's
Product

Essential features?



Patent Owner's
Product

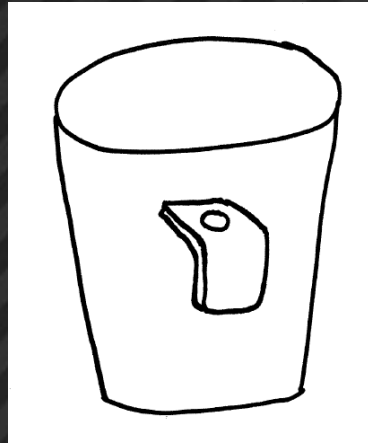
Essential features?

Cup

- with handle
- handle having two holes for receiving spoon



Patent Owner's
Product



Infringement 1

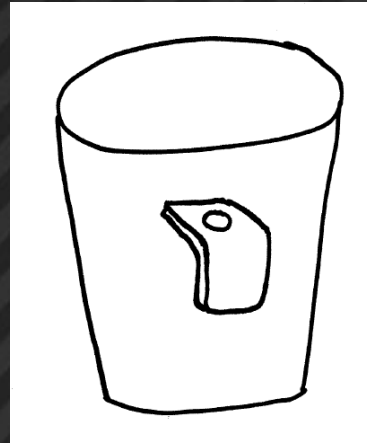
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Patent Owner's
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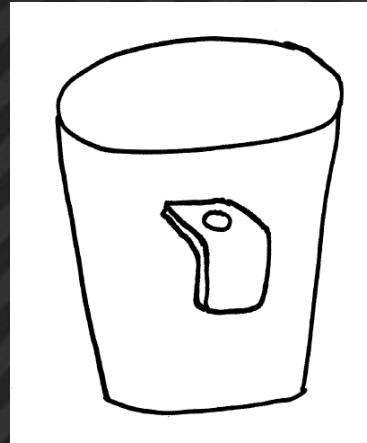
Essential features?

Cup

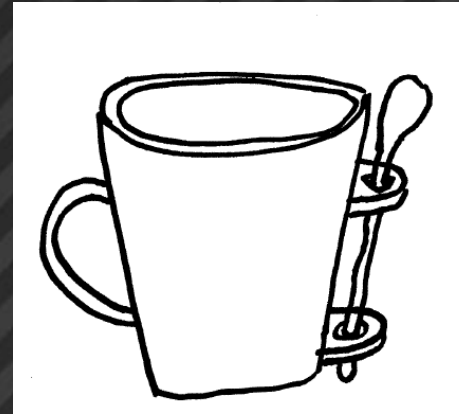
- with handle
- handle ~~having two holes~~ adapted for receiving spoon



Patent Owner's
Product



Infringement 1



Infringement 2

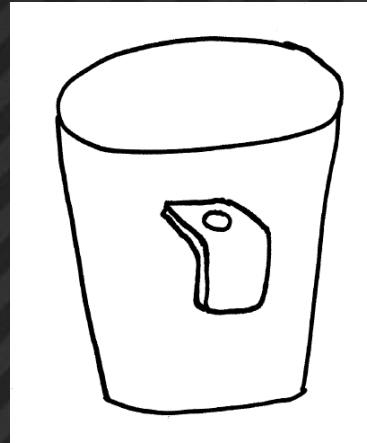
Essential
features?

Cup

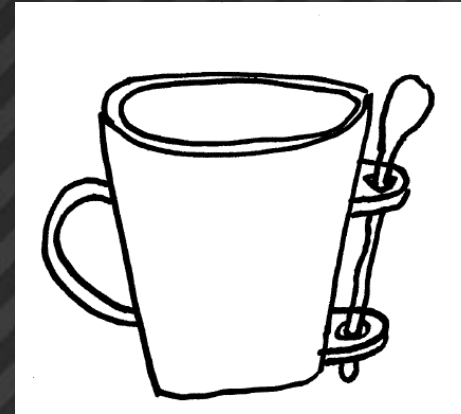
- with handle
- handle adapted for receiving spoon



Patent Owner's
Product



Infringement 1



Infringement 2

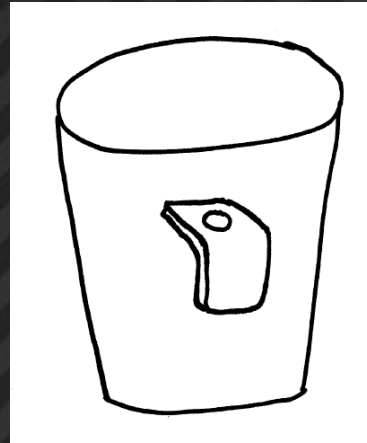
Essential
features?

Cup

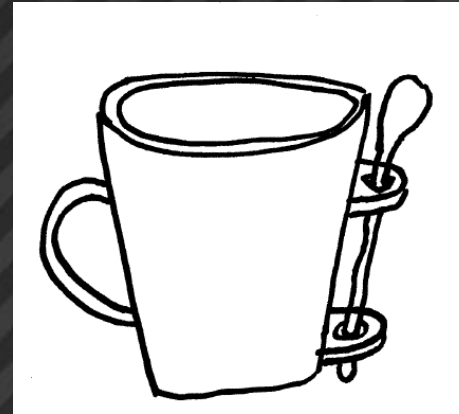
- with handle
- **handle** with member adapted for receiving spoon



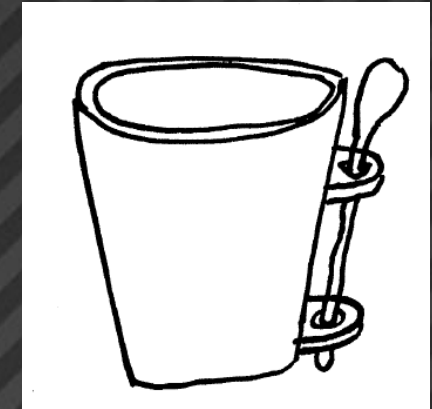
Patent Owner's
Product



Infringement 1



Infringement 2



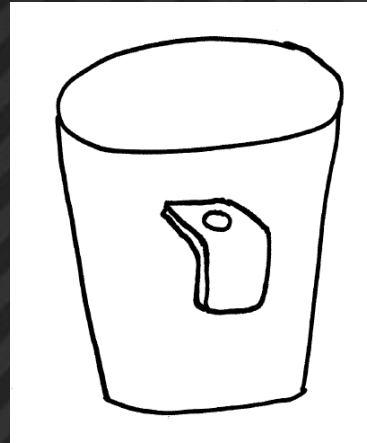
Infringement 3

Cup

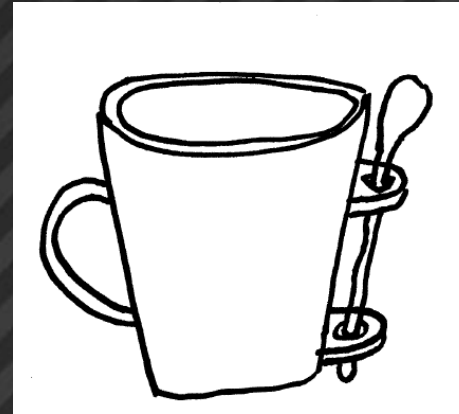
- with handle
- with member adapted for receiving spoon



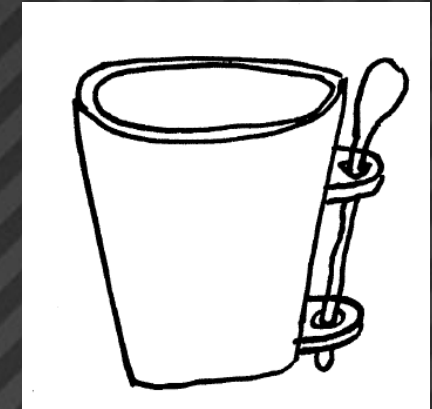
Patent Owner's
Product



Infringement 1



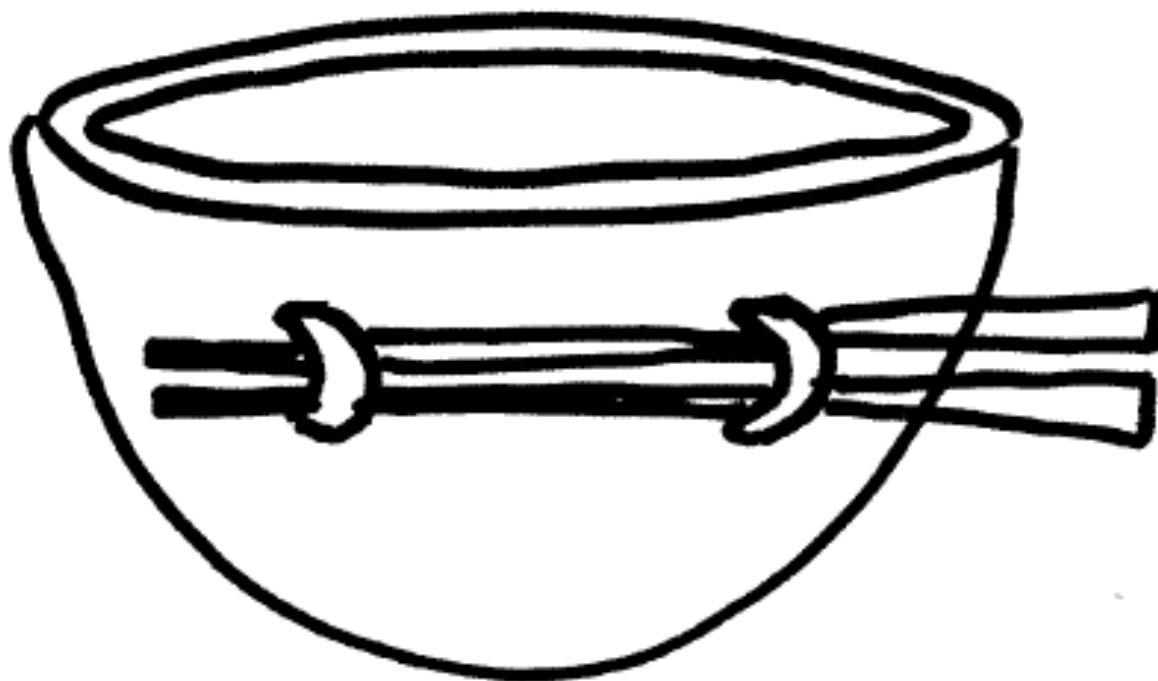
Infringement 2



Infringement 3

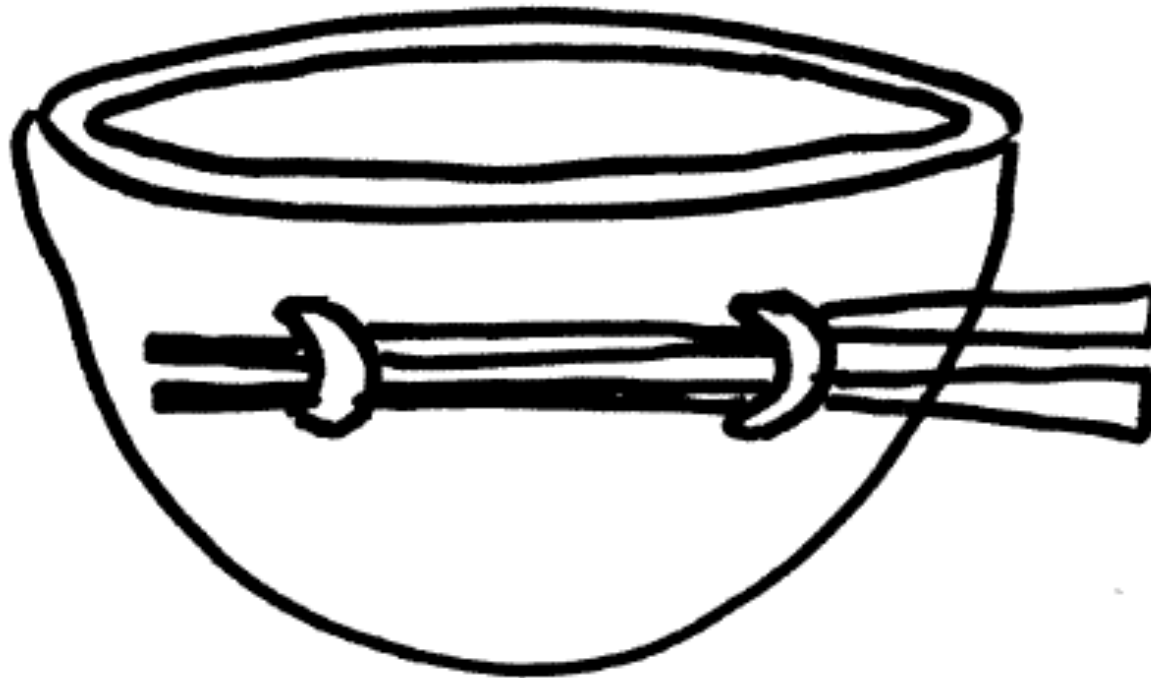
Cup

- ~~with handle~~
- with member adapted for receiving spoon



Cup

- with member adapted for receiving spoon



???

Test the claim

- Does it cover the inventor's product?
- Does it avoid the prior art?
- Does it have any unnecessary limitations?
- Do the elements relate to each other?
- Is the claim sufficiently clear and concise?



Drafting the full specification

Claims

Clear

Concise

Fully supported by
the description

No contradiction

Description

Support the claims

Meets the enablement
requirement

(Also provides support for
fallbacks)

New matter

- No new matter can be added after the filing date
- Therefore the description of the invention must be of a **sufficient depth** when the patent application is filed
 - Facilitates amendment of the claims after filing
 - Include variations and possibilities
- Good practice
 - Define terms
 - Avoid extreme words (best, fastest...)
 - Use the present tense (except for examples)
 - Be **consistent**



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Must meet the applicant's
side of the bargain



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Must meet the applicant's side of the bargain



= clarity and conciseness

= enablement

= support / written description requirements

TERIMA KASIH!

THANK YOU!