



WIPO National Patent Drafting Course

organized by the World Intellectual Property Organization (WIPO)
in cooperation with

the Department of Intellectual Property (DIP), Ministry of Commerce of Thailand
and with the assistance of the Japan Patent Office (JPO)

Bangkok, August 22 to 26, 2016 (face-to-face session)
August 29 to October 30, 2016 (follow-up session)

Claim Drafting Techniques

Karl Rackette

RACKETTE
Patentanwalte PartG mbB

The 10 steps involved in patent drafting

1 Spotting the invention

2 Generalizing the invention (concept)

3 Drawing one or more figures showing the invention

4 Arranging the figures of the drawing in a sequence

5 Deciding on the terminology to describe the invention

6 Drafting the claims

7 Drafting the detailed description (reference numerals)

8 Inserting the reference numerals in the claims

9 Writing the introductory part of the description

10 Writing the abstract and review

Step 1: Spotting the invention

- Before taking the steps necessary to protect a particular invention, you need to find out **what the invention really is**.
- What the inventor brings to you is only an example (**embodiment**) of his/her invention.
- The inventor generally does not really know what the invention is – usually the inventor thinks the prototype/embodiment is the invention, but it is not!
- If you are to protect his/her invention, you need first to **identify** what that invention is about.
- It is not uncommon for there to be more than one invention within a single prototype/embodiment .

Step 1: What is the invention?

- What is the closest prior art (known by the inventor)?
- What are the **differences** between the closest prior art and the invention that you can spot?
(or catch, detect, determine, discern, discover, distinguish, find, isolate, identify, notice, make out, locate, perceive, pick out, recognize, single out etc.)
- What are the **technical effects** of the differences identified (functional analysis)?
- Which specific difference has the technical effect that seems to be the most **important** one?
(most valuable for commercialization of a patent, most significant, most substantial, most meritorious, most promising or most unexpected one)?

Step 1: How to spot an invention.

- Find a **sole new feature**
- Find a **new combination** of (known) features
 - the hard part is deciding which few elements of the combination are needed to define the invention and get the desired benefit.
 - Note: If A, B, & C are all already known in the art but have previously only been used individually, the combination A+B+C is novel.
- Identify what **problem** did the inventor intend to solve and what problem he did objectively solve.

Step 1: Look for the trick of the invention.

- What is the “trick” of the invention – how would you summarize the invention in one or two sentences?
- The “trick” or “gist” of the invention is related to the **technical effect, advantage or benefit** which the invention provides over the closest prior art.
- Identify the most commercially important advantage(s) of the invention.
- What needs to be there to achieve that advantage?
- It is sometimes helpful to use **a finger to show where** in a drawing (picture) the important feature of the invention can be seen.

Step 1: What provides the benefit or trick?

- Generally the person drafting the patent application has to analyze the prototype to see which of its features work together to provide the benefit. You need to consider carefully the accuracy of what the inventor says.
- If there is more than one advantage you need to consider if they are due to the same distinct set of features.
- If **different advantages** come from some quite distinct sets of features, then they are likely to belong to separate inventions.

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Step 2: Generalizing the embodiment of the invention

- Once we have spotted the feature or combination of features essential for defining the invention we are still not quite ready to draft the claims.
- We need to **generalize** the specific feature(s) and crystallize what we think the general idea (**concept**) underlying the invention is.
- This can be done once a narrow independent (main) claim has been drafted and is reviewed (several times).
- It is important to generalize the concept of the invention by concentrating on the essential features, by using broad technical concepts, **broad language** and by **avoiding unnecessary limitations**.

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Step 3: Sketches and Drawings

- Drawings are required when they are necessary for the understanding of the invention.
- Ask the **inventor for sketches or drawings** showing the preferred embodiment of the invention
- Ask for drawings showing important alternatives and **variations of the preferred embodiment**
- Ask for drawings showing the big picture of the invention as well as drawings showing details in schematics, diagrams, flow sheets, perspective, elevation, plan, or sectional views.
- Take whatever sketches or drawings you can get and select later.

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Step 4: Ordered Set of Drawings

- After having understood the concept behind the invention and having collected some sketches or drawings you have to decide how to explain (disclose) the invention to the future readers (patent examiner, judges, competitors, licensees, general public, inventor) and **select (clean) drawings**.
- To make patent drafting easier, it is good to arrange the drawings selected so as to have a sensibly ordered set of drawings which move from a broad overview, via intermediate drawings to those that show the details of the invention.

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Step 5: Deciding on the terminology to describe the invention

- When writing the claims /description it helps to have a set of drawings to hand which you have labeled with the names of the parts shown in the drawings
- Write down (together with the inventor) next to the figures of drawings what they show
- Write down next to each element shown in each of the figures how these elements are called by the specialist and how they could be named in broad terms (e.g. instead of „copper wire“ it might be „electrical conductor“)
- Use **dictionaries** and/or **published patent** documents downloaded from the internet

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Step 6: The Claims

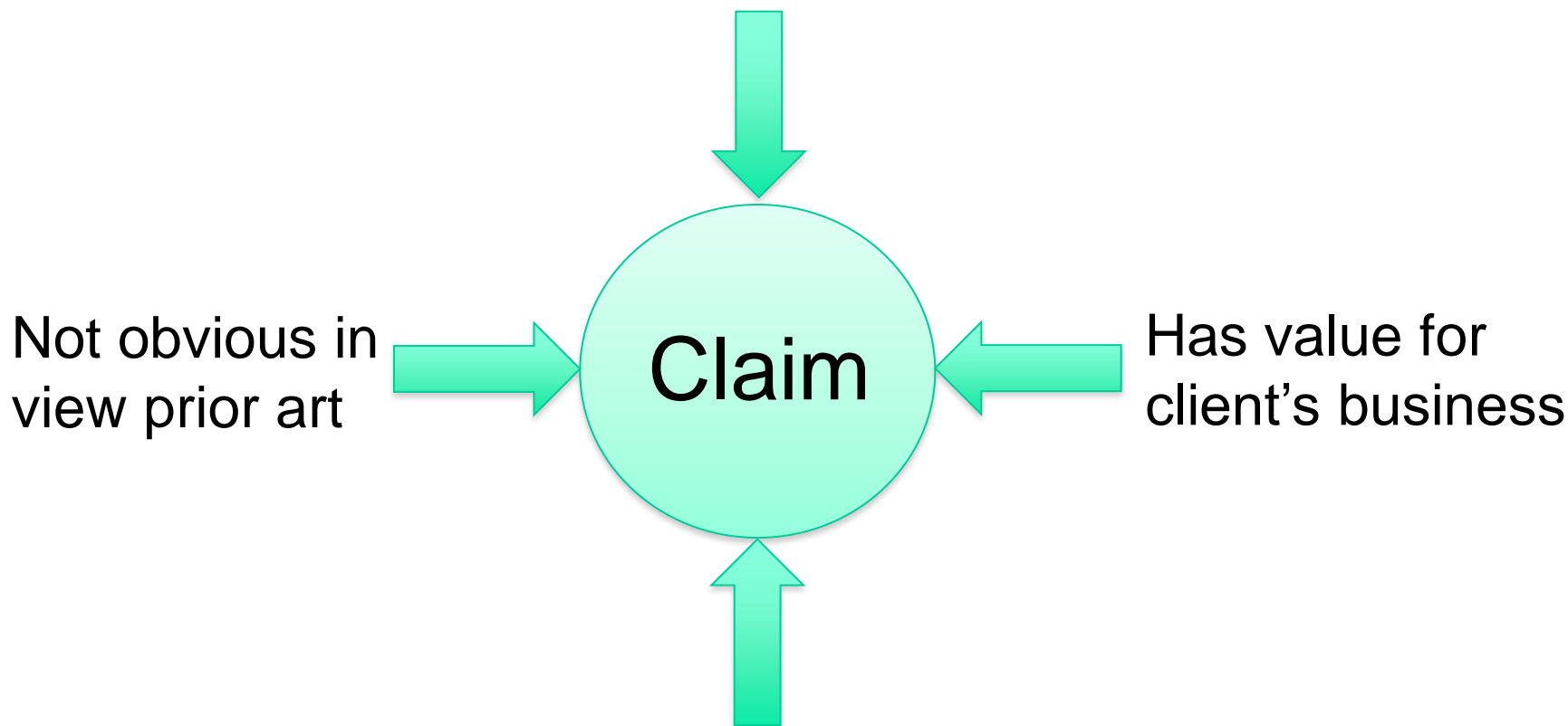
The claim or claims shall **define** the matter for which **protection** is sought.

Claims shall be **clear and concise**.

They shall be fully **supported** by the description.

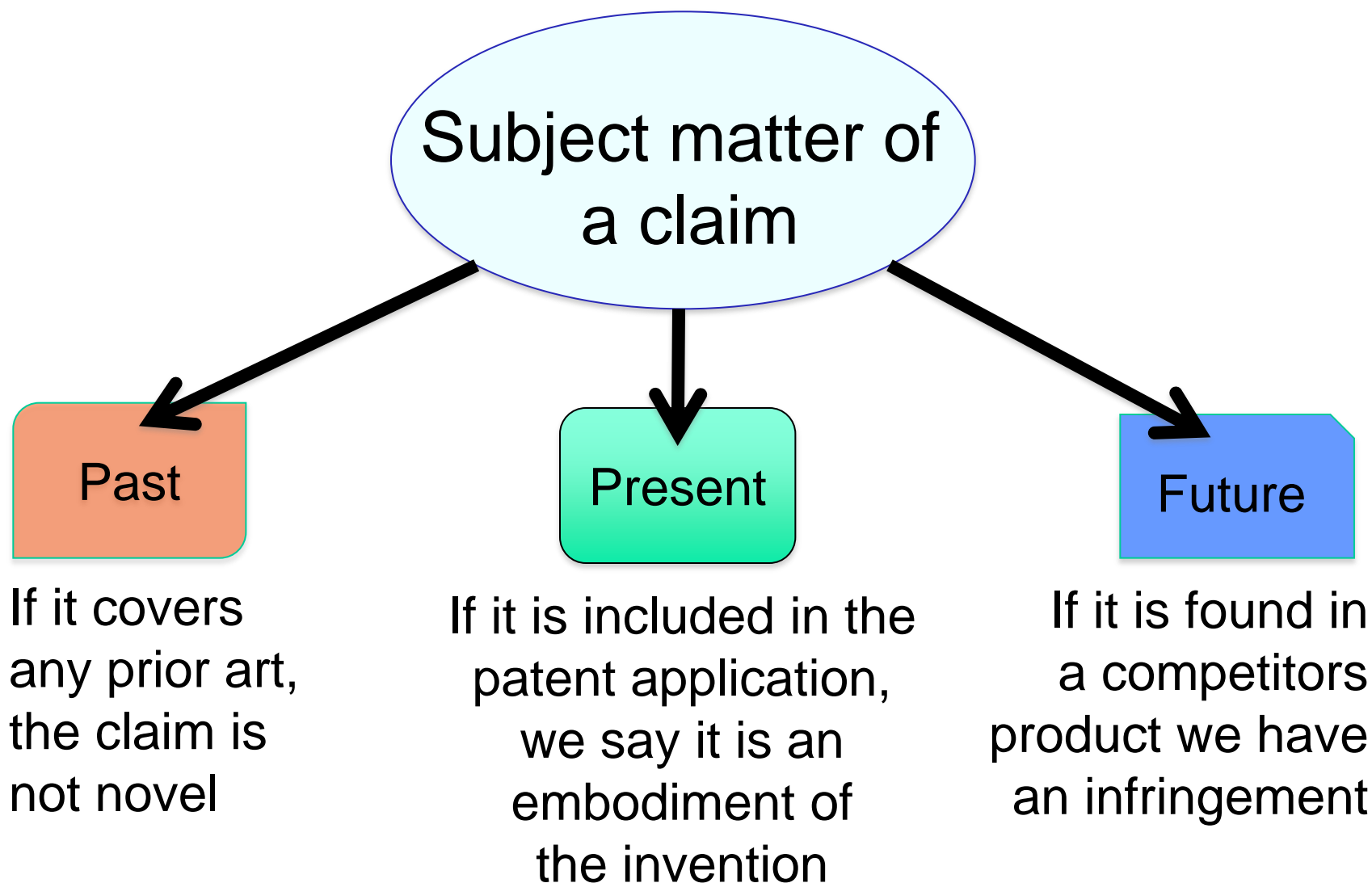
What you need to understand to draft a claim

Take into account legal and linguistic rules



Needs to cover all embodiments / inventive concept

Time-related aspects of the scope of a claim



Claims

A series of numbered statements in a patent specification, usually following the description, that

define the invention

and

establish the scope of the monopoly conferred by the patent.

Each claim consists of **one sentence** starting with a capital letter and ending with a full stop.

Independent Claims

- At least one such statement (usually the first) will be self contained - this is known as an **independent claim**.
- The first independent claim may be called the main claim because it is the broadest claim in the set of claims

Dependent Claims

Claims that refer to previous claims using wording such as

”... as claimed in (or as defined by, or according to) claim 1 or claim 2...”

- these are known as **dependent claims**.

The Claims

- The number of the claims shall be reasonable in consideration of the nature of the invention claimed.
- If there are several claims, they shall be numbered consecutively in Arabic numerals.

The Claims

Claims shall not, except where absolutely necessary, rely, in respect of the technical features of the invention, on references to the description or drawings.

In particular, they shall not rely on such references as: "as described in part ... of the description," or "as illustrated in figure ... of the drawings."

The Claims

Where the patent application contains drawings, the technical features mentioned in the claims shall preferably be followed by the reference signs relating to such features.

(they may be inserted later after having drafted the detailed description)

When used, the reference signs shall preferably be placed between parentheses. If inclusion of reference signs does not particularly facilitate quicker understanding of a claim, it should not be made.

Manner of Claiming

The definition of the matter for which protection is sought shall be in terms of the technical features of the invention.

Manner of Claiming

Whenever appropriate, claims shall contain:

(i) a statement (preamble) indicating those **technical features** of the invention which are necessary for the definition of the claimed subject matter but which, in combination, are part of the prior art,

and

(ii) a characterizing portion.

The characterizing portion of a claim

- is preceded by the words „characterized in that,“ „characterized by,“ „wherein the improvement comprises,“ or any other words to the same effect
- and states concisely the technical features which, in combination with the features stated in the preamble, it is desired to protect.

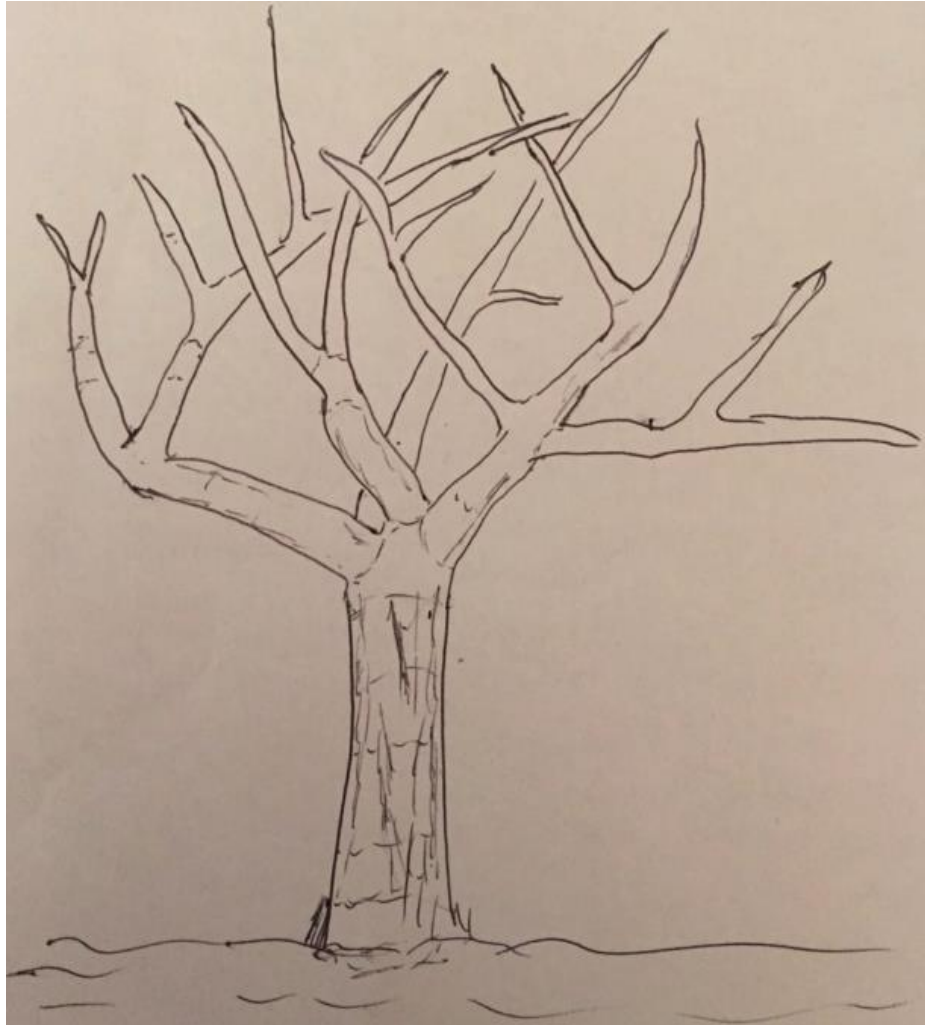
Where do you start?

- Most of the time you will start with the beginning of claim 1, e.g.
 1. A device for ...
- But sometimes you might want to draft first the characterizing portion (the features that distinguish the invention over the closest prior art, the gist or trick of the invention) and then draft the first part of the claim so that the claim becomes a clear definition of the invention.

Dependent claims

- Any claim stating the essential features of an invention may be followed by one or more claims concerning **particular embodiments** of that invention.
- Any claim which includes all the features of one or more other claims shall do so by a reference, if possible at the beginning, to the other claim or claims and shall then state the additional features claimed.

Claim tree of dependent claims



Dependent Claims

- Any dependent claim shall be construed as including all the limitations contained in the claim to which it refers or, if the dependent claim is a multiple dependent claim, all the limitations contained in the particular claim in relation to which it is considered.
- All dependent claims referring back to a single previous claim, and all dependent claims referring back to several previous claims, shall be grouped together to the extent and in the most practical way possible.

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Step 8: Inserting the reference numerals in the claims

- When the detailed description is finished it takes only a little time to insert the reference signs or reference numerals into the claims drafted earlier.
- The parts list made during the drafting of the description can help to avoid errors or omissions

Final Review

- When you have finished your specification (complete description, claims, drawings, abstract) review it, particularly with reference to the language of the claims (novelty, clarity, **unnecessary limitations**).
- Are all the features mentioned in the claims also present in the description?

Advice from a German Litigation Judge

Dr. Matthias Zigann (2014)

- Claim all alternative embodiments
- Don't submit drawings or a description of embodiments with equal effectiveness, unless they are also claimed
- Avoid contradictions between a claim and the description / drawings
- Scrutinize the description / drawings if changes are made to the claim
- **Success ≠ grant**
- Success = grant of a claim with **largest possible scope** of protection

Thank you for your attention!

What are your questions?