V. Patent Claim Drafting

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A. Theory of the Patent Claim

Claim Scope
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 patent claims protect the invention (i.e. the inventor’s embodiment and all other possible embodiments of the invention).
Invention

Claim scope

Embodiment
Invention
= first cup to have a handle

Embodiment
= red clay cup with handle
Invention  
= first cup to have a handle

Claim 1. A cup with a handle
Narrowest scope  
= validity

Broadiest scope  
= commercially useful protection

Claim Scope
Some key requirements

• Scope of protection must be **clear and concise**

• The specification must **support** the claims
  – Consistent terminology must be used throughout

• Claims may be **amended** during prosecution with some limitations. Amendments must also be supported.
Part A - Quick Quiz

• Distinguish between an invention and an embodiment (of an invention)

• Which part of a patent defines the scope of protection that the patent provides?

• Why should a patent agent include both broad and narrow claims in a patent?
B. Patent Claim Format

• Single sentence, with punctuation

Claim Parts:

Preamble, Transitional Phrase: Body
Preamble

Identifies the category of claim

– Apparatus
– Article
– Composition
– Method
– Process
– ...

See page 69 for examples

Note: It is not necessary to use the “for” statement as in the examples. Some jurisdictions will not give any weight to the preamble, while others look at whether it “breathes life” into the claim as a whole.
Transitional Phrase

• Open-ended
  – comprising
  – [Also can consider: including, containing, characterised by...]

• Midway?
  – consisting essentially of

• Closed
  – consisting of

See page 70

It can be a good idea to define the transitional phrases you select to use in the specification
Body

• Recites the elements / limitations of the claim

• Recites the relationship of the claim features (if needed)
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.
An apparatus, comprising:

- a pencil;
- an eraser attached to one end of the pencil; and
- a light attached to the centre of the pencil.
Reference numbers

• Refer to features shown in the figures

• Not typically treated as limiting the claims, but rather to make the claims easier to understand.
  – Include a statement to this effect in specification

1. A pencil having an eraser (10), wherein the improvement comprises a light (12) attached to the pencil (3).
Improvement claims

• Preamble = prior art
• Body = invention

• Transitional phrases such as:
  – “...characterised in that...”
  – “...wherein the improvement comprises...” [Jepson]

1. A pencil having an eraser, wherein the improvement comprises a light attached to the pencil.
Means-plus-function claims

• Claims recite the **function** of a structure
  – Instead of specific definition of structure

1. An apparatus for cooking rice, comprising:
   
   a means for holding rice; and
   
   a heater configured to heat the rice-holding means.

• Be very careful to provide adequate support of such phrases in the specification
Markush claims

• “... selected from the group consisting of...”

• Typically the group is related but cannot be defined in one term
  – Avoids the need for multiple independent claims

“... an alkali metal selected from the group consisting of lithium, sodium, and potassium.”

• Most often seen in biotech & chemical inventions.
Part B - Quick Quiz

• Name the three parts of a claim and explain each

• What is the difference between an open-ended and a close-ended transitional phrase?

• What is correct antecedent basis in a claim?

• True or false: a patent claim may simply list the parts of the invention with no apparent relationship to each other described?
C. Claim Sets

• Each patent application must contain at least one independent claim
  – Multiple independent claims are ok (provided unity of invention requirement is met)

• Dependent claims by definition include all the features of the claim from which they depend and something further
  – Narrower in scope than the claim they depend from
  – Multiple dependencies can be considered

• Limit on claim numbering (and multiple dependency) is almost always for cost reasons
<table>
<thead>
<tr>
<th>INDEPENDENT CLAIMS</th>
<th>DEPENDENT CLAIMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capable of standing alone</td>
<td>Refers to an earlier claim (independent or dependent)</td>
</tr>
<tr>
<td>Starting claim for its group</td>
<td>Follows (depends from) another claim</td>
</tr>
<tr>
<td>Broadest claim of its group</td>
<td>“Fall-back” protection</td>
</tr>
<tr>
<td>Specifies all essential features of the invention</td>
<td>Not necessary as this is done in the independent claim</td>
</tr>
</tbody>
</table>
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 of claim 1, comprising:
   a pencil;
   an eraser attached to one end of the pencil; and
   a light attached to the centre of the pencil.
Claim Scope

Narrowest scope
= validity

Broasted scope
= commercially useful protection
Claim 1. A cup with a handle
Part C - Quick Quiz

• A dependent claim may depend from any other claim (independent or dependent) – true or false?

• What is a multiple-dependent claim?

• Why should a patent agent include both broad and narrow claims in a patent?