



Dependent Claims

National Patent Drafting Course

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Patent Claim Drafting

Prepare the claims first

- Write draft claims before preparing the specification, drawings, *etc.*
- Discuss the draft claims with the inventor early in the application drafting process
- Review/revise the claims again once the specification has been completed

Patent Claim Breadth

Include both broad and narrow claims

- Include claims of varying scope
- Also consider **claim sets** of varying scope
 - Not just an independent claim followed by narrower dependent claims
 - One claim set for **each** of product, methods of making , and methods of using

Patent Claims – Review

Independent Claims

- Stand alone
- Contain all claim limitations
- Always broader than dependent claims
- One independent claim may be broader than another independent claim

Dependent Claims

- Reference a specific independent claim
- Include all limitations of the recited independent claim
- Add more limitations to the independent claim
- Immediately follow the independent claim

Range of Options is Always Best

Gives the client a range of options

- A “basket” of broad *independent* claims will catch a wider group of infringers
- A “basket” of narrow *dependent* claims will be more likely to be “valid” in light of prior art not known during prosecution
- These options are not mutually exclusive
 - Give you client both options

Example

Example. Assume the client has invented a novel apparatus for eliminating bugs with a light. The client shows the patent agent the physical embodiment of the invention, and this is the embodiment that the patent agent uses in writing the specification.

- First need to distinguish this specific “embodiment” from the broader “invention.”
- The Invention is an abstract concept and something broader than the client’s physical embodiment.

Example

- Often the Inventor writes the first claim describing his/her invention.
- But BEWARE!
 - Inventors often take a narrow view of their own invention.
 - They often just consider the embodiment not the invention.

Patent Claim – the Inventor’s Perspective

The Inventor’s first draft claim:

1. An apparatus for zapping mosquitoes, comprising:
 - a cage-like metal frame;
 - a 120 V electric power source mounted inside the box-like metal frame;
 - a bowl for retaining dead mosquitoes housed at the bottom surface of the box-like metal frame; and
 - a light-based zapper element attached to the top of the bowl and inside the cage-like metal frame and configured to receive electric power from the electric power source.

The Bug Zapper!



Patent Claims – seek broadest coverage

Patent Agent's Re-write of draft claim:

1. An apparatus for zapping mosquitoes, comprising:

~~a cage-like metal frame;~~

~~an 120 V electric power source mounted inside the cage-like metal frame;~~

~~a bowl for retaining dead mosquitoes housed on a surface of the box-like metal frame;~~ and

a light-based mosquito zapper element ~~attached to the top of the bowl and inside the cage-like metal frame and~~ configured to receive electric power from the electric power source.

Patent Claim – seek broadest coverage

Patent Agent's second draft claim:

1. An apparatus for zapping ~~mosquitoes~~ flying insects, comprising:
 - an electric power source; and
 - a light-based ~~mosquito~~ zapper element configured to receive electric power from the electric power source.

Patent Claim – seek broadest coverage

Patent Agent's third draft claim:

1. An apparatus for ~~zapping flying insects~~ killing bugs comprising:

~~an electric~~ a power source; and

a light-based ~~flying insect zapper~~ bug killing element configured to receive ~~electric~~ power from the ~~electric~~ power source.

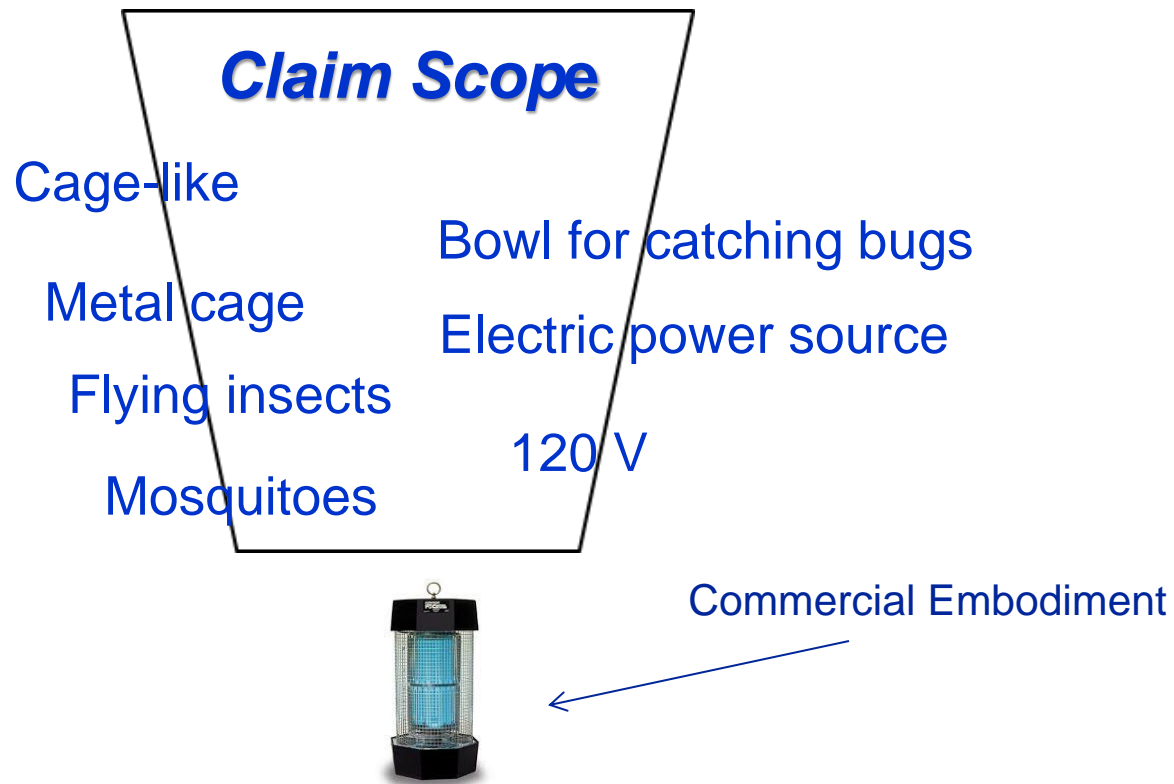
Patent Claim – essence of the invention

Patent Agent's final realization about the invention:

The light-based bug killer element alone should be the subject of the claim.

Patent Claim – vary scope of protection

Dependent claims should be drafted from things removed from the broad claim



Patent Claim – Example of Dependent claims

Example –

2. The apparatus of claim 1, further comprising a cage like frame surrounding the light-based bug killer element.
3. The apparatus of claim 1, wherein the cage-like frame comprises metal.
4. The apparatus of claim 1, further comprising a bowl for catching dead bugs.
5. The apparatus of claim 1, wherein the power source comprises an electric power source.
6. The apparatus of claim 1, wherein the bugs comprise flying insects.
7. The apparatus of claim 6, wherein the flying insects comprise mosquitoes.

Patent Claim Sets

The patent application normally includes multiple claim sets, e.g., product claims and method claims.

Each patent claim set comprises

- One Independent (main) claim and
- Dependent (sub) claims

Patent Claim Sets

A dependent claim can only add and not subtract limitations from the parent claim.

For example, dependent claim 2 cannot read as follows:

- 4. The apparatus of claim 1, wherein a bowl is not attached to a metal frame.*

Patent Claim Sets

Claim 1 (independent) sets out the invention in its broadest form

Claim 2 (dependent) depends from claim 1

- Incorporates by reference all of the limitations recited in the parent claim
- Adds limitations to independent claim

Claim 3 (dependent) depends from claim 2

- Incorporates by reference all the limitations of claim 2 and claim 1
- Adds limitations to the parent claim (claim 2)

Patent Claim Sets

Multiple-dependent claims

- Dependent on more than one claim in the alternative
- Preamble refers to more than one claim
- More common in European practice than in US practice – but acceptable in both.

*Claim 4. The apparatus of claim 1 **or** 2 . . .*

*Claim 4. The apparatus according to **anyone of** claims 1 to 3 . . .*

- *Must be recited in the alternative, e.g., “or” not “and”*

Patent Claim – Tips for drafting

Claim Tips:

- Varying claim breadth protects against arguments that the claims are invalid over prior art not available during prosecution.
 - After a patent issues, a third party may attempt to invalidate the patent.
 - The best prior art is often found long after patent prosecution ends.
- Claims of different scope can also assist in showing that someone has infringed the claims.

Patent Claim – Tips for drafting

Claim variations/modifications of the invention

- Think about variations or other *embodiments* of the invention
- Think like a potential competitor trying to avoid the patent
 - Assume that the competitor has a piece of prior art that can knock out your broadest claim
- Incorporate alternative embodiments into the specification and cover with claims
- Alternative embodiments broaden protection

Patent Claim – tips for drafting

Claims should cover competing products

- Keep abreast of competing products in field of invention
 - Ask the inventor/client about competitors and their products
- Background knowledge useful in drafting claims that cover competing products

Q&A?

Thank You for your attention!

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