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Basics of claim drafting for utility patent applications

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Notice

This content is for informational purposes only and is not legal advice. Please consult with appropriate sources for legal authority and guidance on these matters.

Objectives

- Overview of claim requirements
- Reviewing the invention
- Best practices for claim drafting
- Example claim
- One possible approach
- Claim drafting suggestions and cautions

Overview

- Claims:

- Claims define the scope of the invention and what aspects are legally protected and enforceable.
- A non-provisional utility patent application must have at least one claim.
- Start on a separate sheet of paper with the heading “claim listing” or “claims”.
- Each claim must begin with a capital letter and end with a period. Periods may not be used elsewhere in the claims except for abbreviations.
- If there are several claims, they shall be numbered consecutively in Arabic numerals.
- Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.
- May be written in independent or dependent form. An independent claim is a stand alone claim that contains all the subject matter necessary to define the invention. A dependent claim refers to a previous claim and specifies a further limitation of the subject matter claimed.

Overview

- Claims:

- A claim(s) shall particularly point out and distinctly claim the subject matter which the inventor regards as his invention or discovery.
- The claim or claims must conform to the invention as set forth in the specification and the terms and phrases used in the claims must find clear support in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.
- The claimed invention (or claims) must be to one of four categories:
 - Method/process claims: A claim directed to a series of acts/steps for performing desired functions.
 - Machine/apparatus: a claim directed to elements or components that comprise the apparatus or machine.
 - Article of manufacture/device: a claim directed to the structure and functional components of a device or a manufactured device or article.
 - Composition of matter: a claim directed to all compositions of two or more substances. This includes chemical compositions or mixture of chemicals.

Review invention

- Prior to writing claim(s) answer these questions:
 - What is the invention?
 - What are the pieces and parts that make up the invention?
 - How do the pieces and parts relate to one another?
 - Do you have more than one invention?
 - Product: Apparatus, machine, composition
 - Method: Making or using
 - Are there multiple versions of each invention?

Claim structure - #1 Preamble

- A claim usually begins with a preamble, which is the introductory phrase in a claim.
- The claim preamble must be read in the context of the entire claim.
 - Any terminology in the preamble that limits the structure of the claimed invention or is intrinsically linked to the body of the claim it is given patentable weight.
 - Any terminology in the preamble that merely recites the purpose or intended use of the invention, and does not add structure, is not considered a limitation and is not given patentable weight.
- Example “A device...”
 - Does not add structure. Here the preamble does not limit the scope of the invention.
- Instead of: “A device to be worn by a user...”
 - Does add structure due to the phrase “to be worn”. Here the preamble limits the scope of the claimed invention. The preamble should be interpreted to cover a device that is capable of being worn by a user.

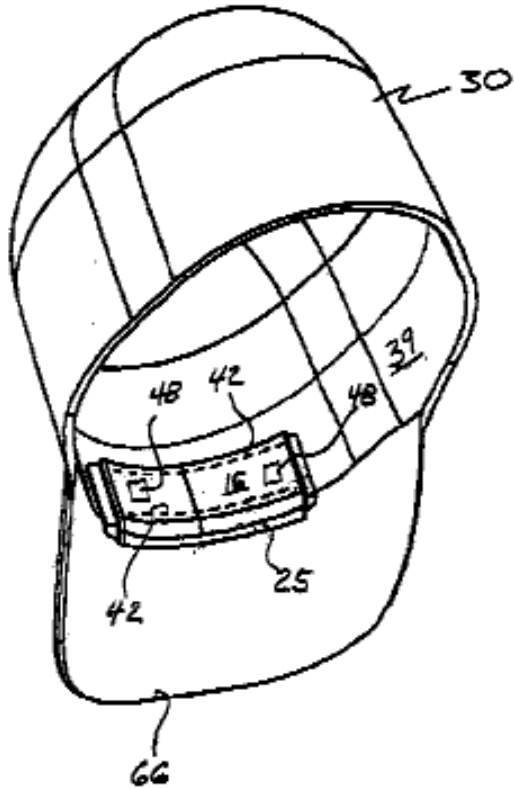
Claim structure - #2 Transition

- A claim usually includes a transition phrase. Commonly used transition phrase include: “comprising”, “consisting essentially of,” and “consisting of.”
 - “Comprising” which is synonymous with “including”, is considered an open-ended term and does not exclude additional, unrecited elements. Thus, the claimed invention includes but is not limited to the elements recited in the claim.
 - Comprising is generally the most commonly used transition phase.
 - “Consisting of” is considered a closed-ended term and does exclude additional, unrecited elements. Thus, the claimed invention is limited to the elements recited in the claim.
 - “Consisting essentially of” limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention.
 - A ‘consisting essentially of’ claim occupies a middle ground between closed claims that are written in a ‘consisting of’ format and fully open claims that are drafted in a ‘comprising’ format.
 - Absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising".

Claim structure - #3 Body

- The body of the claim follows the transitional phrase and recites the limitations (structure/elements or acts/steps in clear, full, and concise terms) necessary to define the invention.
 - The body of the claim is not merely a list of components/parts or steps. The body of the claim should also recite how the essential elements are interrelated.
 - If the invention is directed to a composition of matter the body of the claim may show the chemical formula of the compound or a list of ingredients of the mixture.
 - Where a claim sets forth a plurality of elements or steps, each element or step of the claim should end with a semicolon.

Example of an independent claim



1. **An** air circulation device, **comprising**:
 - a** hat;
 - a** base having **an** arcuate first side and **a** second side, **the** second side having **a** rib extending from **the** second side and oriented to allow air to pass between **the** hat and **a** wearer's head; and
 - thread attaching **the** base to **the** hat so **the** arcuate first side faces **an** inside surface of **the** hat.

From US Patent No. 6,526,595 titled "Air Circulation Device."

Examples of dependent claims

2. The device of claim ①, wherein the base has a lip extending away from the arcuate first side.

3. The device of claim ① further comprising an abutment connected to the base.

4. The device of claim ③ wherein the abutment is positioned distal from a lip.

Example of an independent method claim

US Patent No. 6,635,133

1. A method of making a ball, comprising:
 - a) forming an inner sphere by forming an outer shell with a fluid mass center;
 - b) forming a plurality of core parts;
 - c) arranging and joining the core parts around the inner sphere to form an assembled core;
 - d) molding a cover around the assembled core.

Example of an dependent method claim

US Patent No. 6,635,133

2. The method of claim 1 further comprising molding nonplanar mating surfaces on the core parts, wherein the core parts comprises meshing the mating surfaces.
3. The method of claim 1, wherein forming the inner sphere comprises freezing a sphere of a fluid.
4. The method of claim 1, wherein the forming of the core parts comprises compression molding the core parts.

One possible approach

- **Focus on the inventive concept**
 - What features set the invention apart from prior inventions?
- **Identify fundamental elements**
 - Omit unnecessary elements unless they are needed to distinguish over prior inventions
- **Terminology and interrelationships**
 - Select broad terms and identify their relationship carefully
- **Claim review and revision**
 - Remove unnecessary claim limitations

Wrapping it all together

- When you write a claim you want to introduce all of the components and characterizations of the components that are necessary for the invention to work and for it to be different than what is already in the public domain.
- Try something like this (letters represent either components or characteristics of the components):
 1. A - insert title - comprising: A, B and C.

Wrapping it all together (*cont.*)

2. The invention of claim 1 further comprising D, which is [insert connection/relation].

3. The invention of claim 2 further comprising E, which is [insert connection/relation].

4. The invention of claim 3 wherein D is [insert a specific characterization].

5. The invention of claim 4 wherein E is [insert specific characterization].



Wrapping it all together (*cont.*)

- Notice the dependent transitions.
- When you are adding a component you can use "further comprising" and then explain how the component is connected to or relates with the components already introduced.
- When you are further describing something that has already been introduced you can use "wherein."

Claim drafting suggestions

- ✓ Consider drafting an outline of the invention first and then your claims based on terms used in the specification.
- ✓ Think about what legal protection you want for your invention and tailor your claims accordingly.
- ✓ Look at the claims in patents issued in your field of technology.
- ✓ Particularly point out and distinctly claim the subject matter regarded as the invention.
- ✓ Review and reconcile both the specification and claims, making necessary additions and corrections so that the claim terms find support in the specification.
- ✓ Check for antecedent basis issues in dependent claims, making sure all the limitations of the claim from which it depends are present and specifies a further limitation. (35 USC 112(d), MPEP 608.01(n))

Claim drafting cautions

- ✗ Avoid the use of claims covering multiple statutory classes of invention (“A widget and method for using same...”).
- ✗ Avoid the use of non-standard transitional phrases, which may raise questions of interpretation. (MPEP 2111.03)
- ✗ Avoid the use of terms inconsistently between the claims and/or specification (e.g. visor, visor member, visor section, removable visor portion).
- ✗ Avoid referring back to only a portion of another claim in a dependent claim (e.g., “The widget of the apparatus of claim 1...”).
- ✗ Avoid “removing” or “replacing” elements from another claim within a dependent claim (e.g., The vehicle of claim 1 where the removable top portion is non-removable).

Claim drafting cautions

- ✗ Do not use functional language that is unconnected to the structure or steps that perform the function.
- ✗ Do not use terms in the claim that are unsupported by the specification.
- ✗ Do not use trademarks or tradenames in the claims; instead use generic terms, e.g., “hook and loop fastener” instead of Velcro.®
- ✗ Do not use language that merely suggests or makes optional and, thus, does not limit the claim.
- ✗ Avoid using negative limitations unless clearly supported by the written disclosure (specification and drawings).

Summary:

- You should now have a better understanding of:
 - The questions you need to answer before claiming your invention
 - The format and structure of independent and dependent claims
 - Possible methods of drafting your claims

