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Path to a Patent, Part V: Claim drafting – It's the name of the game



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Objectives

- Quick recap
 - Provisional vs. Nonprovisional
 - Specification: Written description, drawings, and definitions
- Claim fundamentals
 - Basics: formatting and strategy
 - Claim anatomy
- Claim examples
- Common issues with claim language



Provisional vs. nonprovisional

Provisional

- Automatically abandoned after one year period
- *No claims required*
- Written disclosure must meet same requirements as nonprovisional
- Note: provisional applications are not allowed for design patent applications

Nonprovisional

- *At least one claim required*
- Written disclosure must meet requirements of 35 USC 112 1st paragraph (pre AIA), or 35 USC 112(a) paragraph (post AIA)
- Examined for patentability, can result in a patent

35 USC 112 (1)/(a): The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The “originally-filed disclosure”

- Specification which contains:
 - the written description of the invention
 - how to make and use the invention
 - full and definitive terms that will convey the instant invention(s) to a person having ordinary skill in the art
- At least one specific embodiment (e.g., examples)
- At least one independent claim (must begin on a new page)

Written description of the invention

- Focus on explaining the structures, processes or compositions of the invention.
- Refer to the figures, if applicable, and explain the different parts by use of reference numerals shown in the figures.
- The written description should provide clear support or antecedent basis for all terms used in the claims so that the meaning of the claim terms in the claims may be ascertainable by reference to the description.



Drawings

- Part of disclosure of the invention and are required if necessary to understand the invention
 - A drawing necessary to understand the invention cannot be introduced after the filing date
 - Replacement drawings are allowed
- Must show every feature of the invention claimed
- Must contain as many views as necessary to show the invention
- Must be clearly labeled, described, and defined



Claim fundamentals and examples

Claims – the basics

If a limitation is in a claim, it **must** be in the specification:

- Define the invention and what aspects are legally enforceable
- Must conform to the invention as set forth in the remainder of the specification
- Terms and phrases used in the claims must find clear support or “antecedent basis” in the description so that the meaning of the terms in the claims are clearly understood by reference to the description



Claims basics – form and formatting

- Start on a separate sheet with a clear header (i.e., "Claim Listing;" "Claims;" etc.)
- 1.5 or double spaced
- Each claim is a single sentence (begins with a capital letter and ends with a period).
- Amendments to claims must:
 - Indicate correct status identifiers (i.e., "New," "Canceled," etc.)
 - Use proper editing to reflect added/removed text
- Numbered consecutively in ascending order; original numbering preserved throughout prosecution



Claims – form and formatting (cont.)

- Minimum of one independent claim required
 - Has the greatest breadth and scope of all the claims
 - Sets forth the statutory category of the invention
 - Typically contains support or basis for dependent limitations
- A dependent claim will:
 - Refer to a claim(s*) that precedes it
 - Incorporate by reference all the limitations of the claim(s) that precede it
 - Narrows the scope of the preceding claim

*see **MPEP §608.01(n)** for examples of proper/improper forms of claim dependency



Before drafting claims

Prior to writing a claim, try to answer these questions:

- What is the invention?
- What are the critical elements of the invention?
- How do the pieces and parts relate to one another?
- Do you have more than one invention?
 - Tangible: Apparatus, machine, composition
 - Method: making or using
- Are there multiple versions of each invention?



Thinking strategically

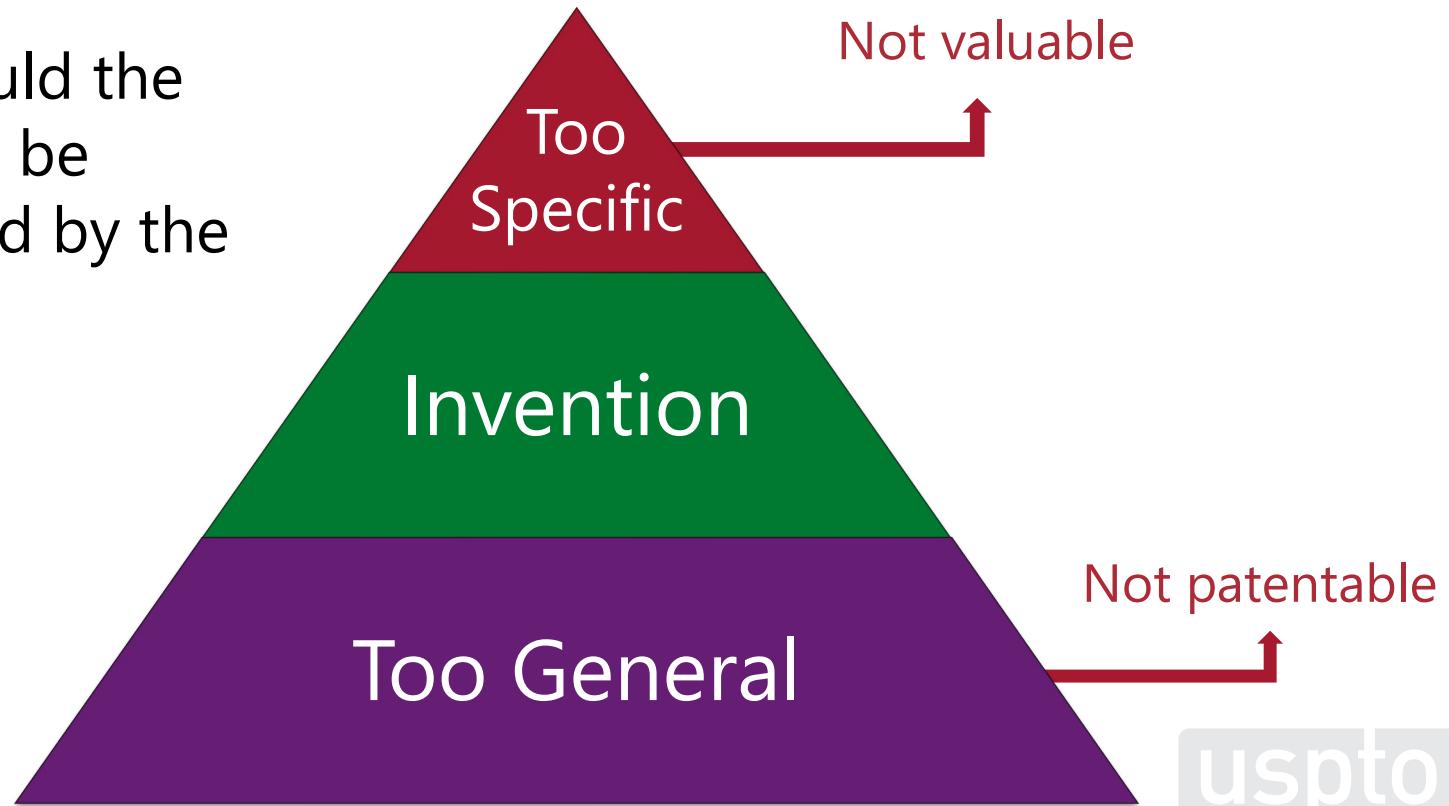
So what we trying to accomplish with the claims?

- Define an invention that is described, enabled, and within the scope of the instant specification
- Obtain the broadest possible, valid, independent claim(s)
 - Consider different categories and scopes of independent claims
- Add different, supported, limitations to narrow the invention(s)
- Allow for the inclusion of some unclaimed elements while excluding others
- Claim construction is not a one-time event at the time of filing; it requires constant consideration throughout prosecution



Thinking strategically – claim scope

How should the invention be delineated by the claims?



Thinking strategically

How much should I budget to spend on claims?

- The basic filing, search, and examination fees include an upper limit of the number of claims to be filed
 - Independent in excess of 3 = \$120 per claim* (Subject to change)
 - Each claim in excess of 20 = \$25 per claim* (Subject to change)
 - This is not a one-time payment at the time of filing; it also requires consideration throughout prosecution
-
- **Example - If a 21st claim is added in an amendment, and it is an independent claim, then the filing fee for that claim will be \$145*

(*) All of the above fees are for micro entity status.



Example invention

Let's first visualize what it is that we are trying to invent and identify some of the critical elements to be captured:



Example invention (cont.)

Using these identified elements, we can now draft an independent claim.



Basic anatomy of a claim

A claim in a utility application or patent has three (3) main parts:

1. A preamble or the introduction
2. A transitional phrase, such as:
 - “comprising” (open)
 - “consisting of” (closed)
3. A body reciting the elements of the invention



The preamble

- Defines the statutory category of the invention
 - Apart from this, the general rule is that the preamble does not limit the overall scope of the claim
 - Intended use/functional language generally, does not contribute to the patentability of a claimed invention
 - A “boot for exercising” is still a boot regardless of how it is used
 - The preamble of a dependent claim must cite the claim from which it depends
 - “The boot according to claim 1...”



Transitional phrases

- Defines the scope of the invention
 - “Comprising” is the broadest in scope and means the invention includes, but is not limited to, the elements that follow it in the claim
 - “Consisting of” is the narrowest in scope and is closed to only those elements that follow it
- Common to use both phrases in the same claim to limit different aspects of the invention

Source: MPEP §2111.03



The body of the claim

- The bulk of the claim that sets forth those elements, steps, and/or relationships that define the claimed invention
- The limitations should be consistent with the statutory category set forth in the preamble
 - “A method of preparing...” should have steps that define the claimed method
- The limitations should use terms/phrases that have clear support and definition in the specification (aka antecedent basis to the spec)
- The body should also set up antecedent basis for those terms and limitations that appear in the claims that depend from it
- The body may be used to introduce new elements, steps, and/or relationships to the invention (e.g., further comprises)
- The limitations should not employ language that renders the claimed invention indefinite



Example invention and claim

Using these identified elements, we can now draft an independent claim.



Example claim

A boot comprising a frame, at least one fastening mechanism, and a propagation mechanism.

A boot



Preamble

comprising:



Transitional
Phrase

a frame, at least one fastening mechanism,
and a propagation mechanism.



Body

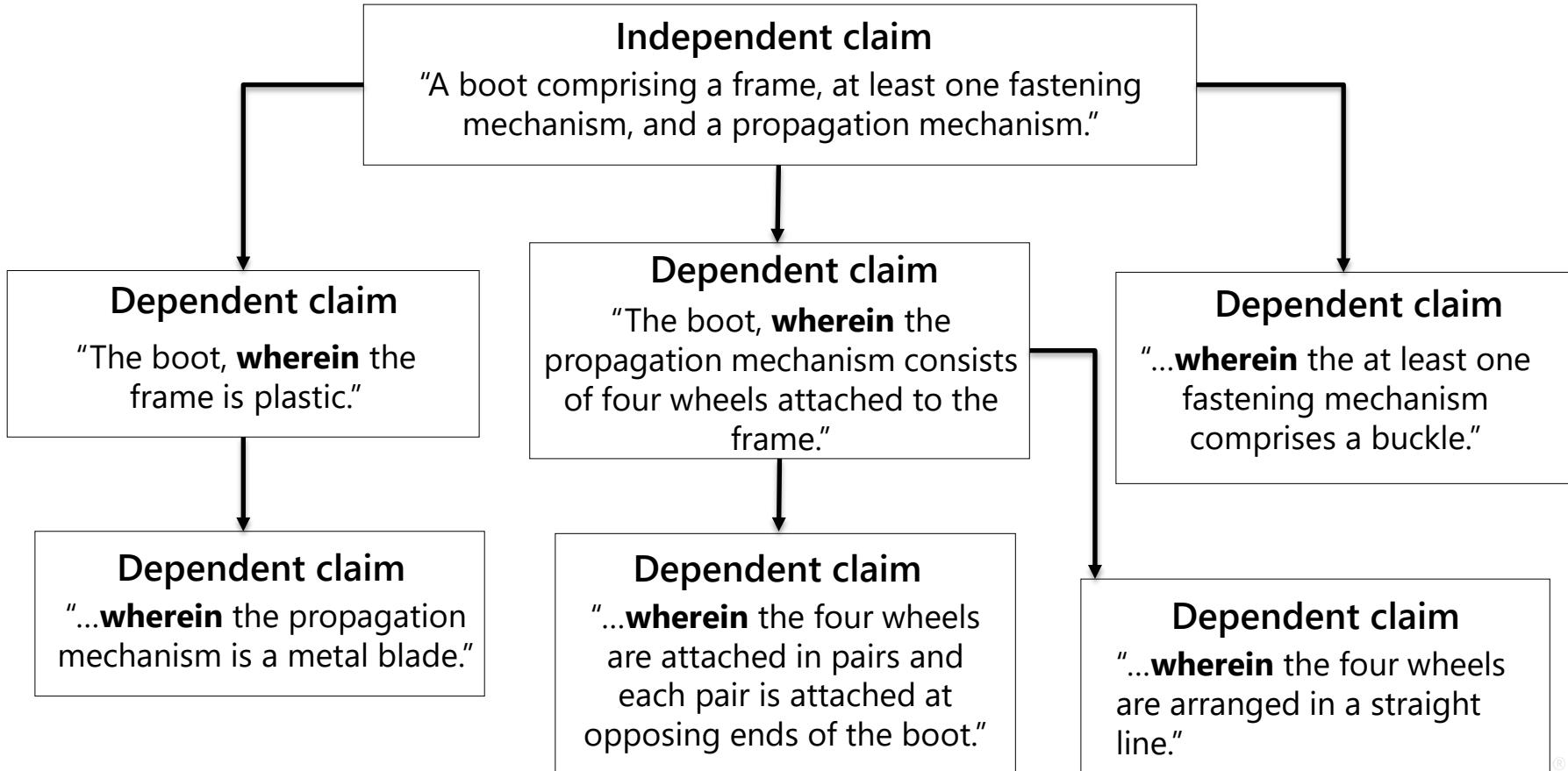
Consider the scope of the claim!

Based on this initial claim draft, what might read on our claim?

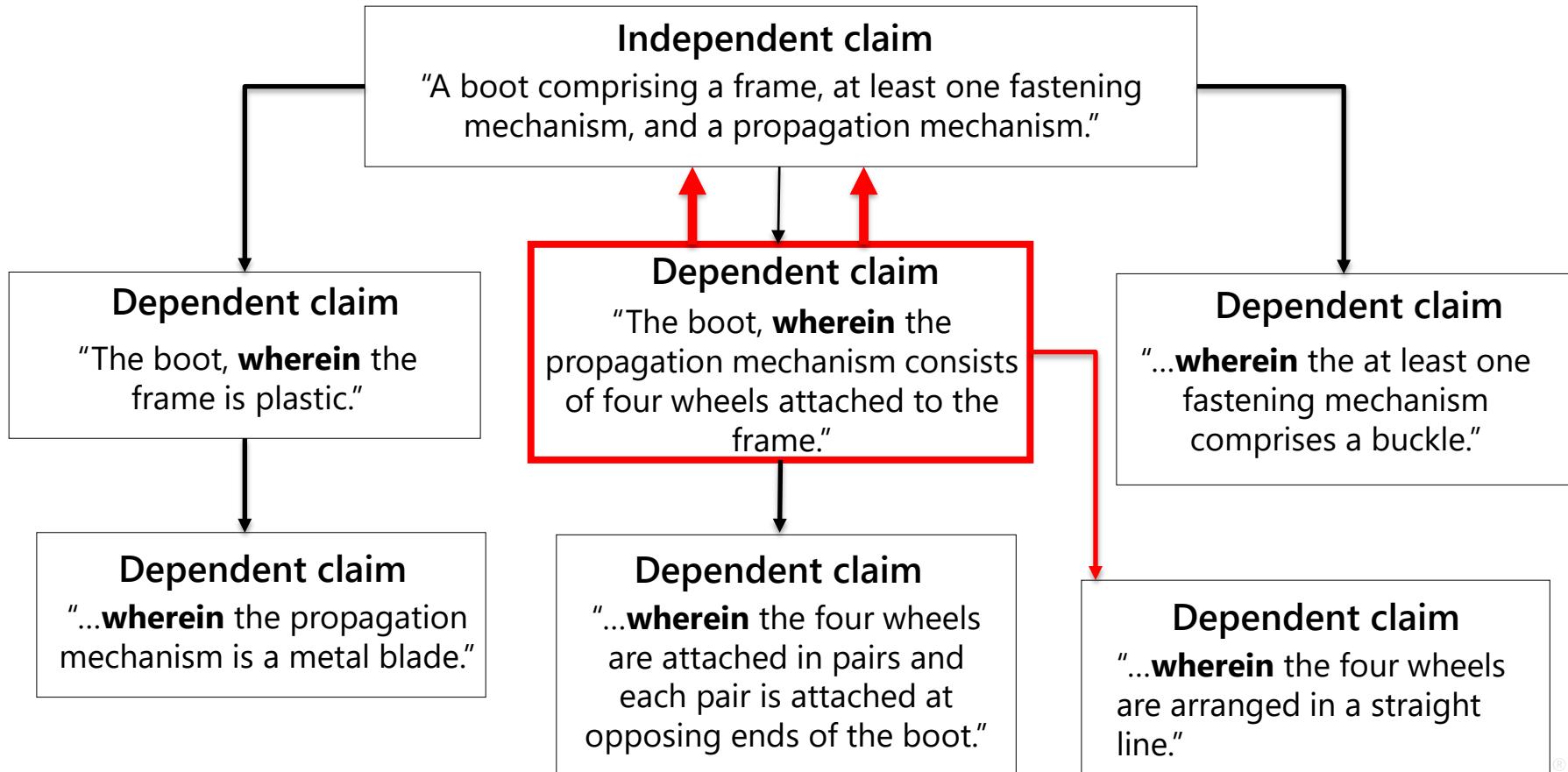
Claim 1. A boot comprising a frame, at least one fastening mechanism, and a propagation mechanism.



Expand coverage with dependent claims



Based on what reads, let's narrow the scope



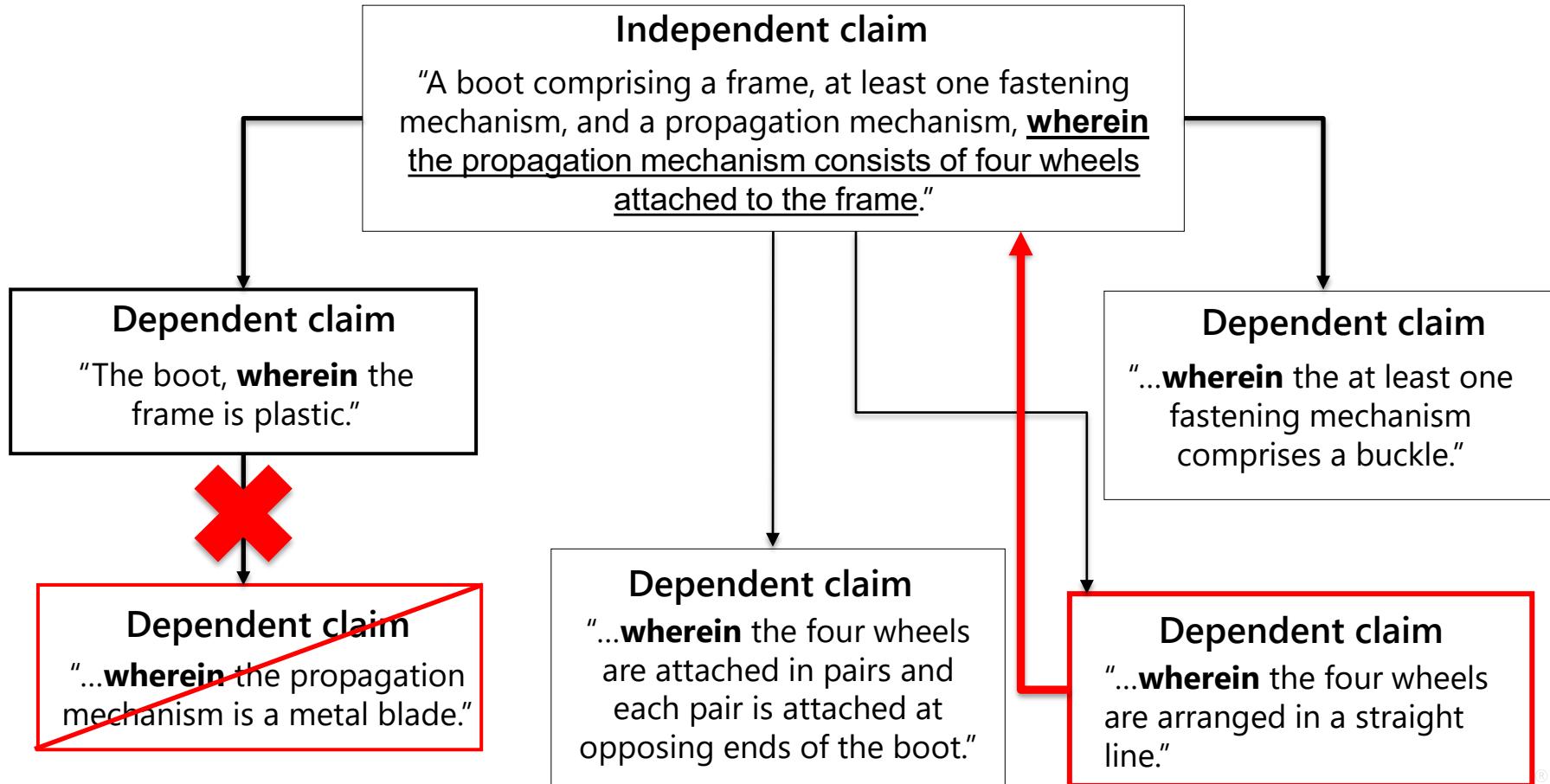
Consider the scope of the claim!

Our invention is narrowed, but what still reads?

Claim 1. A boot comprising a frame, at least one fastening mechanism, and a propagation mechanism, **wherein** the propagation mechanism consists of four wheels attached to the frame.



Just one more amendment...



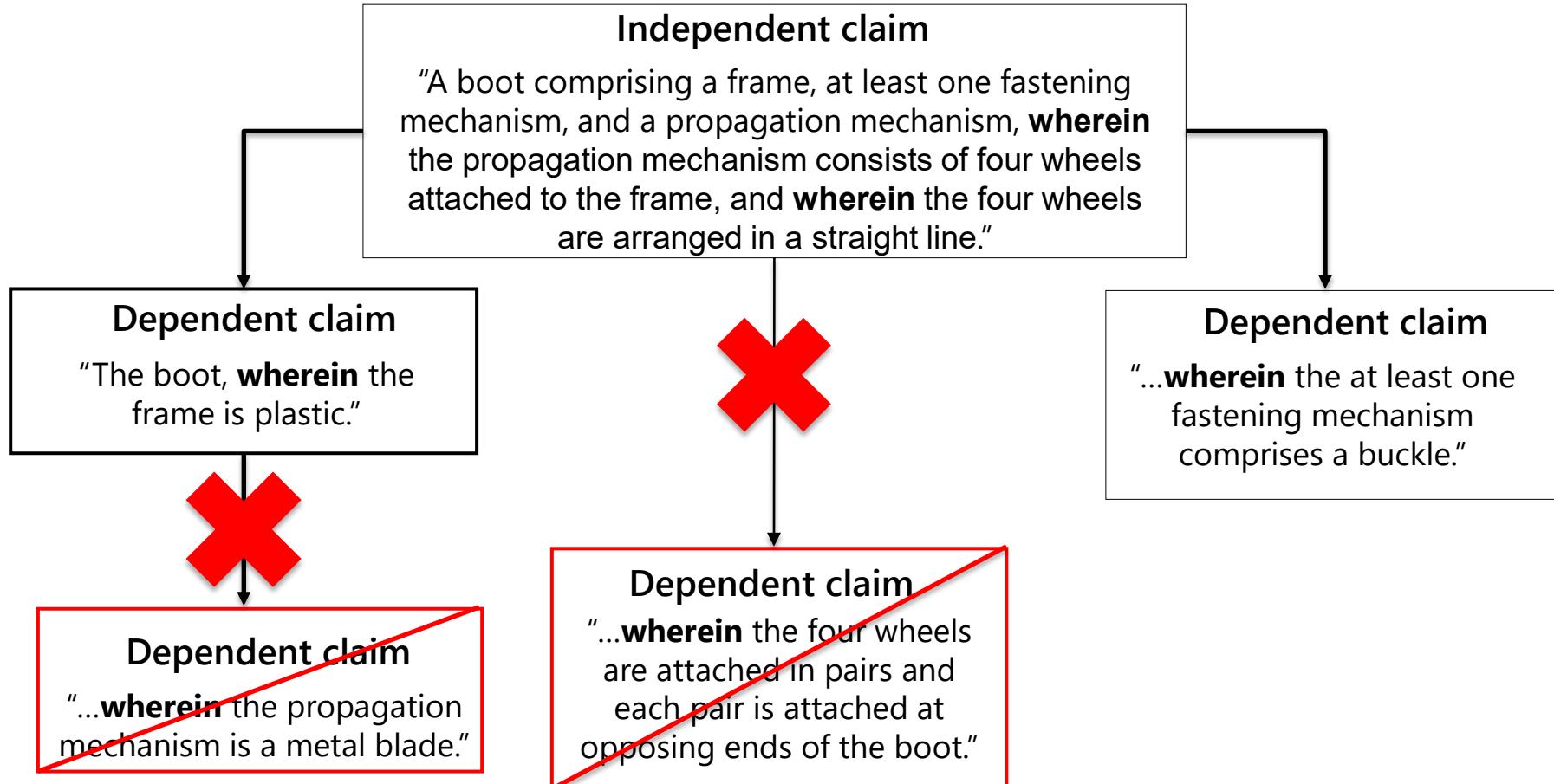
Consider the scope of the claim!

Our invention is narrowed, but what still reads?

Claim 1. A boot comprising a frame, at least one fastening mechanism, and a propagation mechanism, **wherein** the propagation mechanism consists of four wheels attached to the frame, and the four wheels are arranged in a straight line.



Just one more amendment...



Common issues with claim language

An examiner's method...

Before the search and patentability determination is done, the examiner needs to:

- Understand what the invention is
- What are the limits to that invention (aka, the “metes and bounds”)
 - Analyze the claim language using the broadest reasonable interpretation (BRI)
 - Determine if the metes and bounds of the claims are clear, and
 - If warranted, write a clear rejection providing a sufficient and clear explanation as to why the invention is indefinite



So what's not clear exactly?

Four of the most common reasons for a claim being unclear are:

- Lack of antecedent basis
- Unclear/relative terminology
- Exemplary language
- Improperly dependent claims



Our claimed boot invention...

1. A boot comprising a frame, at least one fastening mechanism, and a propagation mechanism.
2. The boot of claim 1, wherein said at least one fastening mechanism comprises a buckle.
3. The boot of claim 1, wherein said buckle is plastic.

Question: which claim has an issue and why?



Lacks antecedent basis to claim 1

1. A boot comprising a frame, at least one fastening mechanism, and a propagation mechanism.
2. The boot of claim 1, wherein **said at least one fastening mechanism** comprises a buckle. 
3. The boot of claim 1, wherein **said buckle is plastic**. 

Relative terminology

4. The boot of claim 1, wherein the frame comprises a **polymer-like** material.

Question: would a person of ordinary skill in the art understand the phrase, "**polymer-like**"?



That depends...

- What does the specification say?
- The specification defines what '**polymers**' are envisioned, but only mentions that '**polymer-like**' compounds as a member of the list of materials that may be used.
- Specific polymers are known in the prior art, but the prior art is silent as to "polymer-like" compounds.

Conclusion

- The limitation of “**polymer-like**”, is a relative term that renders the claim indefinite.
- The specification sets forth that, “polymer” and “polymer-like” are materials that may be used to construct the frame.
- As there is no definition what is meant by “polymer-like”, beyond the inclusion of the polymer, the claim is indefinite.



Exemplary language

1. A boot comprising a frame, a fastening mechanism such as a buckle, and a propagation mechanism.

Question: is the phrase “such as a buckle” clear as to the intended scope of the recited fastening mechanism of the boot?



Conclusion

- The claim, which recites “a fastening mechanism such as a buckle” includes a broader term followed by exemplary language featuring a more narrow scope
- This leads to confusion over the scope of the claim
- The result is that the metes and bounds of the claim containing this language are unclear

Additional types of exemplary claim language

Examples of claim language which have been held to be indefinite because the intended scope of the claim was unclear are:

- (A) "R is halogen, **for example**, chlorine";
- (B) "material **such as** rock wool or asbestos" Ex parte Hall, 83 USPQ 38 (Bd. App. 1949);
- (C) "lighter hydrocarbons, **such, for example**, as the vapors or gas produced" Ex parte Hasche, 86 USPQ 481 (Bd. App. 1949);
- (D) "normal operating conditions **such as** while in the container of a proportioner" Ex parte Steigerwald, 131 USPQ 74 (Bd. App. 1961); and
- (E) "coke, brick, or **like** material". Ex parte Caldwell, 1906 C.D. 58 (Comm'r Pat.)

Source: MPEP §2173.05(d)



Improperly dependent claims

1. A boot comprising a frame, at least one fastening mechanism, and a propagation mechanism, wherein the propagation mechanism consists of four wheels attached to the frame.
2. **(Cancelled)**
3. **The boot of claim 2**, wherein the four wheels are arranged in a straight line.

Claim drafting DOs

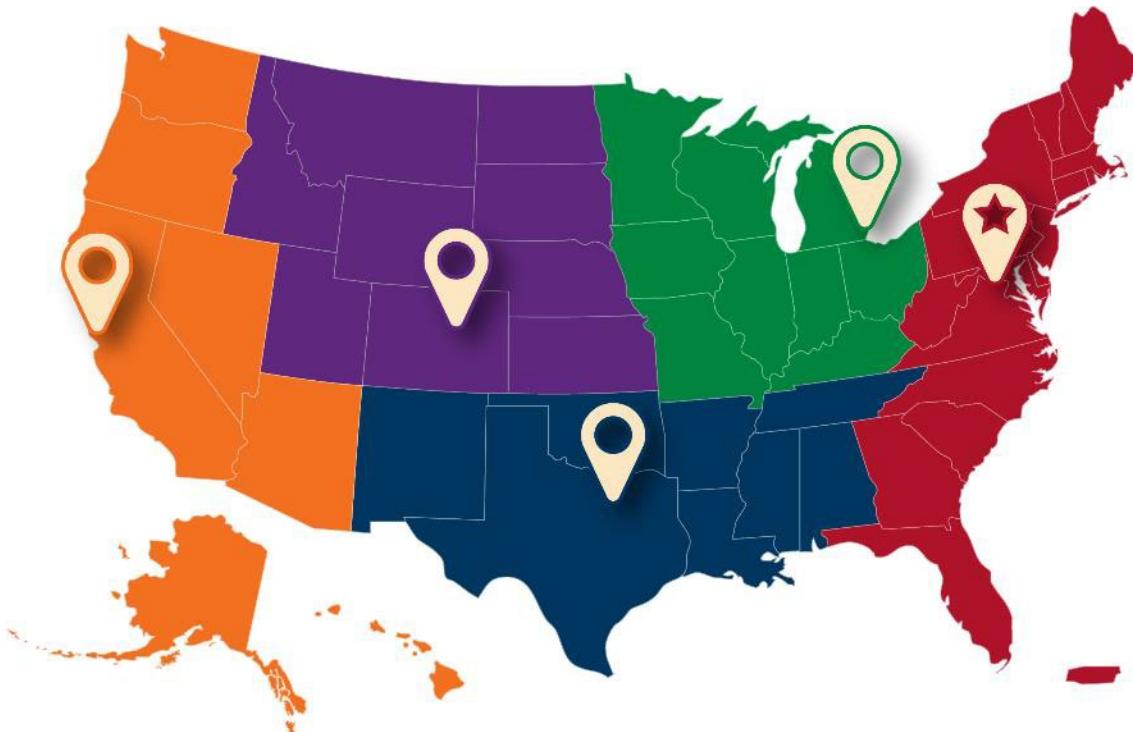
- ✓ Particularly point out and distinctly claim the subject matter regarded as the invention.
- ✓ Consider drafting your claims first and then your specification based on terms used in the claims.
- ✓ Review both to make necessary additions and corrections so that the claim terms find support in the specification.
- ✓ Look at the claims in patents issued in your field of technology.
- ✓ Ensure each term has proper antecedent basis.
- ✓ Think about what legal protection you need for your invention, and tailor your claims accordingly.

Claim drafting cautions

- ✖ Do not use claims covering two statutory classes of invention ("A widget and method for using same...")
- ✖ Do not use terms inconsistently between the claims and/or specification (e.g. visor, visor member, visor section; removable visor portion)
- ✖ Do not write multi-sentence claims
- ✖ Do not refer back to only a portion of another claim in a dependent claim (e.g., "The widget of the apparatus of claim 1...")
- ✖ Do not "replace" elements from another claim within a dependent claim

Resources

Resources in your area



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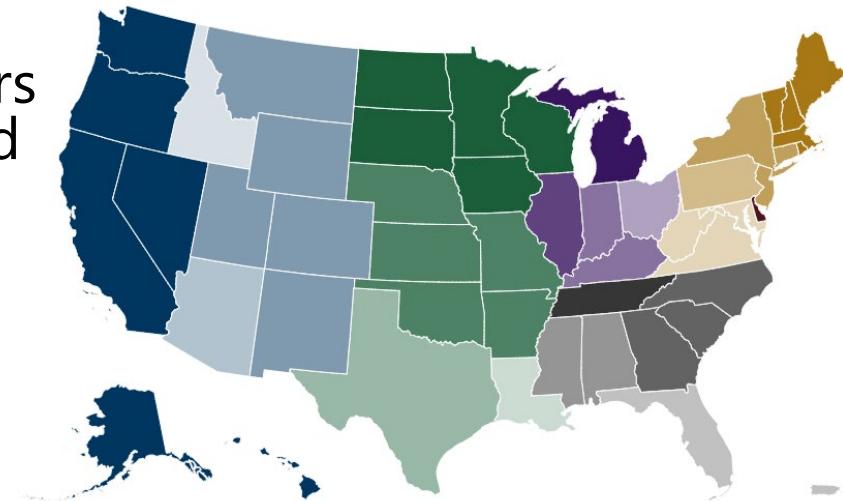
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- The nationwide program matches financially under-resourced inventors and small businesses with registered patent attorneys
- In general, there are three basic eligibility requirements:
 - household income below a certain threshold;
 - knowledge of the patent system; and
 - you must have an invention – not just an idea!



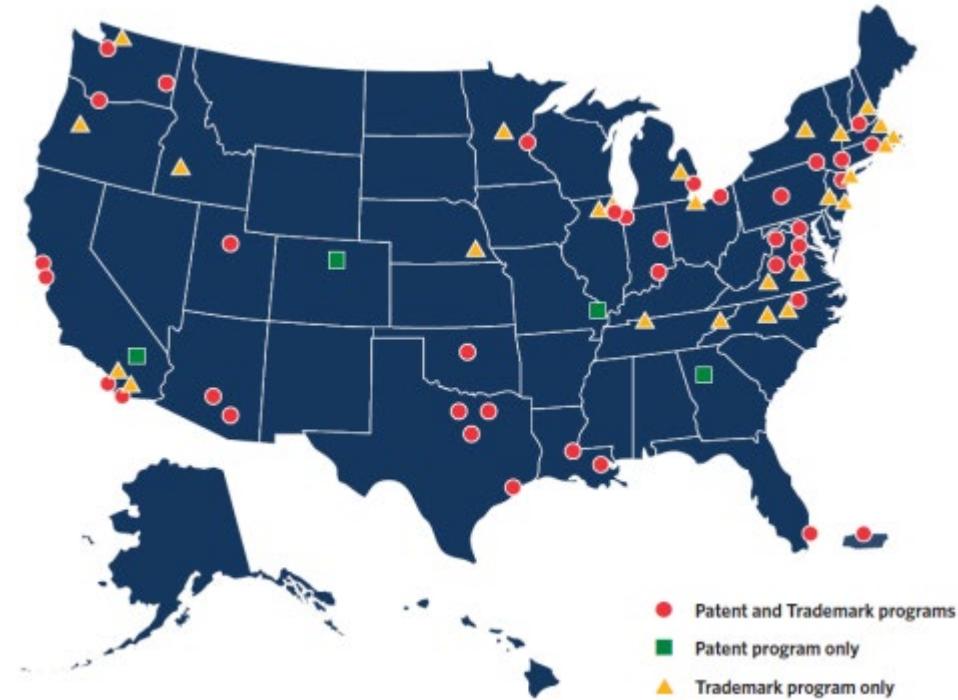
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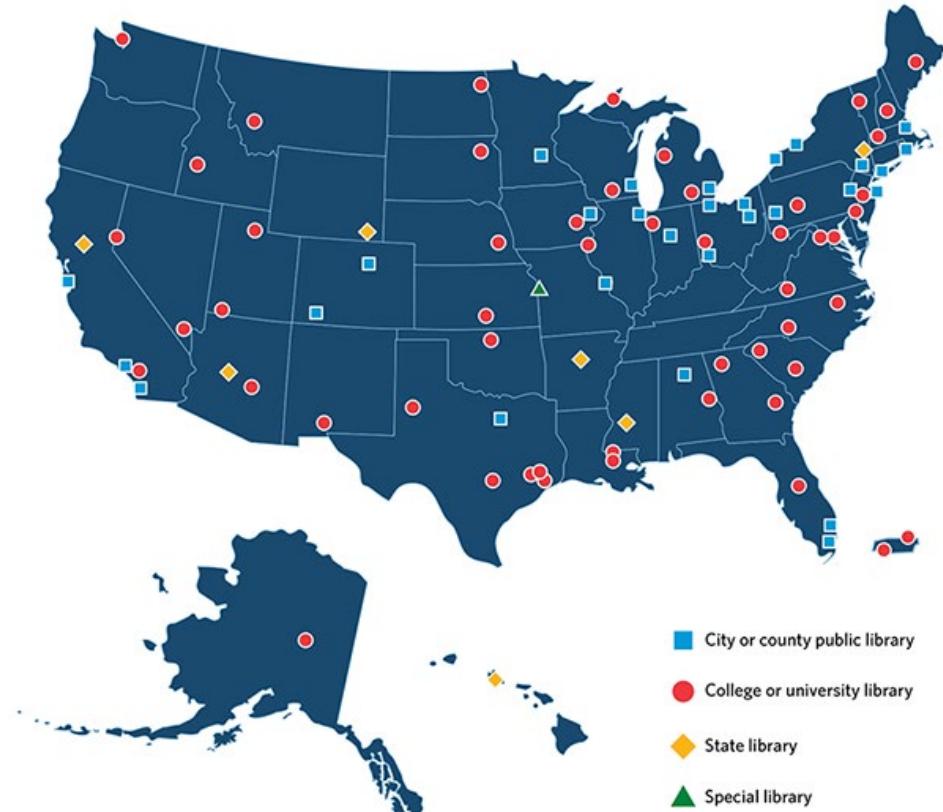
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Nonprovisional (utility) patent application filing resources online

Filing guide

- Specifies the required parts of the utility patent application and identifies some of the forms that may be used
- <http://www.uspto.gov/patents-getting-started/patent-basics/types-patent-applications/nonprovisional-utility-patent>

Filing checklist

- While not comprehensive, contains the most commonly required elements when assembling an application
- [https://www.uspto.gov/sites/default/files/inventors/Checklist for Filing a Nonprovisional Utility.pdf](https://www.uspto.gov/sites/default/files/inventors/Checklist%20for%20Filing%20a%20Nonprovisional%20Utility.pdf)

Resources

Helpline: 1-800-PTO-9199

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