Do’s And Don’ts For Claim Drafting: A Litigator’s Perspective

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Five Recommendations

1. Consider How Infringement Will Be Proven

2. Take Advantage of Different Claim Types

3. Use “Means Plus Function” Terms

4. Use Dependent Claims Wisely

5. Align Your Patenting Strategies With Your Business Goals
1. Consider How Infringement Will Be Proven

- Ideally, infringement could be established based on the public literature.
  - Press releases
  - Data sheets
  - Articles or studies
  - White papers
  - Application notes

- Remember: an opposing party’s marketing literature can hurt your business even before the accused product is generally available.
1. Consider How Infringement Will Be Proven

For software, have you claimed the invention in a way that would be touted by an accused infringer?

- If not, what clues to infringement will there be? Modern software has many “access points” and typically interacts with many files. Consider whether accessible data flows can provide evidence of infringement and what claims might look like to enhance that possibility.

- It is often easier to prove infringement based on user manuals and software specifications than on the source code produced during discovery.
1. Consider How Infringement Will Be Proven

If a potentially infringing product must be reverse engineered, what are the costs or obstacles involved?

- If a schematic can be easily created, then describe the components and their interrelations.
- If reverse engineering is costly and difficult, such as for a semiconductor device, ask yourself:
  - Can I craft a claim that can be validated by current testing methodologies?
  - Are certain tests easier or more reliable?
  - Can I craft a claim based on outputs generated in response to certain inputs?
1. Consider How Infringement Will Be Proven

Examples:

1. A solid conductive device for controlling electrical energy that comprises a body of semiconductive material having two zones of one conductivity type separated by a zone of the opposite conductivity type, said two zones being contiguous with opposite faces of said zone of opposite conductivity type, and means for making electrical connection to each zone.

4. An electrical translating device comprising a body of semiconductive material including zones of opposite conductivity type and an intervening barrier, means for establishing electrical connections to said zones, and means including a third connection to said body for producing in said body an electrical field substantially parallel to said barrier.
1. Consider How Infringement Will Be Proven

Examples:

11. Amplifying means comprising a semiconductive body including two zones of material of one conductivity type separated by an intermediate zone of material of the opposite conductivity type, means for making contact to each of said zones, means for interconnecting the contact means including a source of relatively low voltage connected to one of the separated zones, a source of relatively high voltage connected to the other of the separated zones, the sense of the high voltage being such as to cause electric current flow toward the high voltage connection, and means for controlling the flow in the intermediate zone.

31. A circuit element which comprises a block of semiconductive material, one part of said block being of one conductivity type, an adjacent part being of opposite conductivity type, an electrode in contact with each of said parts, another electrode, a work circuit interconnecting two of said three electrodes, and connections for applying a signal to the third of said electrodes, whereby the current in said work circuit is modified under control of said signal.
1. Consider How Infringement Will Be Proven

**“Do”** craft claims with an eye toward proving infringement

- You need a good faith basis to file suit in the United States
- You don’t get discovery until after suit is filed

**“Don’t”** neglect varying claim types and varying claim scope.

- In general, the easier infringement is proven, the more vulnerable the patent claim may be to attack
- Have detailed claims in your patent because you will get discovery necessary to prove infringement
- Always want to approach the invention from different vantage points
1. Consider How Infringement Will Be Proven

Consider how often infringement will occur:

- Does the apparatus sitting on the counter infringe?
  - If claims require an electrical device to be connected to a source of power, it will typically not infringe when sold
  - If claims require voltage to flow through device, it will typically not infringe when sold

- Does the apparatus infringe all the time when turned on?

- Does the apparatus infringe some of the time?
  - If so, is the occurrence of infringement predictable?
  - Is the infringement guaranteed?
  - Are there non-infringing modes of operation?
1. Consider How Infringement Will Be Proven

- Always consider how hard it would be to “design around” the patent claims
  - Go back to inventor and say “assuming this was patented by someone else, what would you do?”
  - **Figure out possible solutions and patent them too!**
2. Take Advantage Of Different Claim Types

- Apparatus
- Method Performed By An Apparatus
- Method Of Using Apparatus
- Pure Method
2. Take Advantage Of Different Claim Types

Apparatus Claims
- Intuitive for mechanical & physical inventions
- Usually first claim drafted and provides template for further claims
- Tends to be narrower in scope than method claims

- “Do” use apparatus claims, which are not only infringed when “used,” but also when “made,” “offered for sale,” “sold,” and “imported”
2. Take Advantage Of Different Claim Types

- "Do" include apparatus claims that use functional terms
  - May be easier to prove infringement with functional language
    - You may find references to the function performed by the accused product in the documents of the accused infringer.
    - Structural language will generally be narrower than functional language

- "Do" use claims with structural terms and other claims with functional terms for maximum coverage
  - Maybe a similar structure will serve a different function years from now

- "Don’t" include functional limitations that do not connote any structure if you wish to stay outside the statutory "means plus function" rule (Section 112, paragraph 6 of the United States Patent Code)
2. Take Advantage Of Different Claim Types

Example of Functional Terms:

1. A vegetable cutter, comprising:
   a frame having an open end and defining a retention compartment,
   a container defining a retention chamber which is configured for reception within the retention compartment,
   a means for rotating a vegetable retained within the retention compartment,
   a blade assembly operably coupled to the container for slicing a vegetable retained within the retention compartment as the vegetable is rotated by the rotating means,
   wherein the sliced vegetable passes into the retention chamber defined by the container.

- National Presto Industries, Inc. v. The West Bend Co., 76 F.3d 1185 (Fed.Cir.1996)
2. Take Advantage Of Different Claim Types

Example of Functional Terms:

21. An orthopaedic knee brace for laterally supporting the knee, the brace comprising:
   a pivotable joint for allowing pivoting of the knee;
   first and second substantially rigid arms attached to the pivotable joint, each support member extending substantially linearly from the pivotable joint to a location directly above and below the wearer's knee when the brace is worn to laterally support the knee; and
   an adjustable joint coupled to each rigid arm for allowing controlled medial and lateral inclination of each rigid arm relative to the pivotable joint.

2. Take Advantage Of Different Claim Types

- **Method Claims**
  - Method Performed By An Apparatus
  - Method Of Using Apparatus
  - Pure Method

- **Generally Provide Broader Coverage Than Apparatus Claims Because Fewer Structural Limitations**

- **But Fewer Classes Of Infringing Activity:**
  - Making, offering for sale, selling, or importing apparatus is **not an act of direct infringement**
2. Take Advantage Of Different Claim Types

⚠ Making, offering for sale, selling, or importing apparatus can constitute indirect infringement of a method claim:
  – Contributory Infringement
    • No substantial non-infringing uses of the apparatus.
      – Is claimed method practiced every time the apparatus is used?
      – Is a portion of the apparatus solely used to practice the claimed method?
2. Take Advantage Of Different Claim Types

“No Substantial Noninfringing Use” Prong Of Contributory Infringement:

“The district court held that even though Quanta's drives might be capable of being used to infringe Ricoh’s patented processes by writing discs, there was no liability for contributory infringement because the drives were also capable of “substantial noninfringing use” within the meaning of § 271(c) because they could also be used to read discs in a noninfringing manner.”

“Under such a rule, evasion of the protection intended by Congress in enacting § 271(c) would become rather easy. A competitor who wished to sell hardware that would enable infringement of a patented process could do so without incurring liability for contributory infringement by selling a device that simply embedded the hardware for practicing the patented process within other hardware that also performs another process, or by combining the enabling hardware with other hardware before importing it.”

2. Take Advantage Of Different Claim Types

Induced Infringement

- Aiding and abetting customers’ infringement
  - Requires knowledge of how the customer is using apparatus
  - Law uncertain as to whether alleged induced infringer has to know that the customer’s activities constitute infringement

- “It must be established that the defendant possessed specific intent to encourage another’s infringement and not merely that the defendant had knowledge of the acts alleged to constitute inducement. The plaintiff has the burden of showing that the alleged infringer's actions induced infringing acts and that he knew or should have known his actions would induce actual infringements.”
  - DSU Medical Corp. v. JMS Co., 471 F.3d 1293, 1306 (Fed.Cir.2006).
2. Take Advantage Of Different Claim Types

_method performed by an apparatus:

- “Don’t” simply make a virtually identical method counterpart to an apparatus claim
  - The result will be an apparatus claim and method claim of indistinguishable scope

- “Do” think creatively about the method or processes being performed by the apparatus
  - Focus on the functions performed rather than the specific structures used in the method
2. Take Advantage Of Different Claim Types

Beware Of The Mixed Method And Apparatus Claim:

- Claim 1: Permissible apparatus: “... the input mechanism enabling a user to use the displayed transaction information to execute a financial transaction or to enter selections to specify one or more transaction parameters.

- Claim 25: Impermissible mixture of apparatus and method: “The system of claim 2 wherein the predicted transaction information comprises ... and the user uses the input means to either change the predicted transaction information or accept the displayed transaction type and transaction parameters.

2. Take Advantage Of Different Claim Types

- The #1 Take-Away:

  **VARIETY IS KEY:**

  You Cannot Predict The Future
3. Use Means Plus Function Terms

U.S. Patent Law Explicitly Provides For “Pure” Functional Limitations

35 U.S.C. §112(6) States: “An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”
3. Use Means Plus Function Terms

- In the “old days,” means plus function were disfavored because they were considered to be exceedingly narrow.

- Today, the precise scope of “equivalents” applicable to a means plus function term will be in doubt until the fact finder decides.

- Means plus function claims are special because what is or is not an equivalent of the disclosed structure is a fact question – therefore, the jury effectively has a role in claim construction.
3. Use Means Plus Function Terms

- **Huge Benefit** – It is much more difficult for accused infringer to obtain summary judgment of non-infringement of a claim with means-plus-function limitations if the function is performed by the accused apparatus.

- **Downside** – More uncertainty because if accused structure is not identical to structure disclosed in patent then unlikely to win summary judgment of infringement.

- **#1 Take Away**: You will likely get to the jury with a means plus function claim.
3. Use Means Plus Function Terms

- “Do” Use Means Plus Function Terms In Your Patents

- “Don’t” rely exclusively or predominantly on them. Rather, build your claim set using other techniques and then add some means plus function claims to ensure a jury trial.
3. Use Means Plus Function Terms

“Don’t” make each limitation of a claim a means plus function limitation.

Focus on the point of novelty of the invention and use generic structural components for common portions of the claim.

10. Means for controlling the flow of electric current comprising a semiconductive body including two zones of material of one conductivity type separated by a third zone of material of the opposite conductivity type, means for making substantially ohmic contact to each of said zones, means for interconnecting the contact means including power sources connected to the separated zones for causing a current flow from one zone to the other through the intermediate zone, and variable field producing means for controlling the electron distribution in the intermediate zone to thereby vary the current between the separated zones.
3. Use Means Plus Function Terms

“Do” Make Sure That Structure Is Actually Disclosed In The Specification That Performs The Recited Function

- Does the specification clearly link the function to the disclosed structure?
- Is the complete structure disclosed in the specification?
- If not, then the claim may be invalid
3. Use Means Plus Function Terms

Adequate Disclosure Of Means Plus Function Term:

- “[I]f one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.”
  - In re Donaldson, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc).
3. Use Means Plus Function Terms

Adequate Disclosure Of Means Plus Function Term:

- “[I]n a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.”
  - Aristocrat Technologies Australia Pty Ltd. v. International Game Technology, 521 F.3d 1328 (Fed. Cir. 2008)

- “[T]hat ordinarily skilled artisans could carry out the recited function in a variety of ways is precisely why claims written in ‘means-plus-function’ form must disclose the particular structure that is used to perform the recited function.”
  - Blackboard, Inc. v. Desire2Learn, Inc., 574 F.3d 1371, 1385 (Fed. Cir. 2009)
3. Use Means Plus Function Terms

Adequate Disclosure Of Means Plus Function Term:

- Example of an invalid claim:

Claim Term:

“. . . means for creating a vertical partition for each and every column of the database table, each vertical partition having data values for only a single column of the database table. . .”

- Disclosure Parroted Back Function In Claim Without Describing Algorithm:

“To insert a record into a table, therefore, a table-level object breaks the data down by column and then hands off each column value (user data) to a particular column object.”
4. Use Dependent Claims Wisely

In general, there is really only one reason to have dependent claims:
- Fear that your independent claims might be found invalid.
- One possible exception: expanding damages base by including additional components, but safer to address larger damages base by filing additional independent claims:
  - 1. A car navigation system comprising: A, B, and C.
  - 2. A vehicle comprising: X, Y, a navigation system, and Z.
  - 3. A global navigation system comprising: base stations, vehicles, etc.
4. Use Dependent Claims Wisely

Too often, we see dependent claims that add fairly obvious details that flow naturally from the independent claims.

- These sort of dependent claims do not intimidate potential infringers and will likely stand or fall with the validity of the independent claims.
4. Use Dependent Claims Wisely

Therefore, add dependent claims that drill down into the point of novelty of your invention from different directions.

When considering dependent claims, assume a judge or jury has already decided that your independent claim is invalid.

- If your independent claim was deemed obvious, what is your basis to believe the dependent claim would not also be considered obvious.
4. Use Dependent Claims Wisely

Example Of “Wasted” Dependent Claims:

- Independent claim: “1. In a motor vehicle, a combination comprising: [X, Y, and Z].”

2. The structure of claim 1, wherein said torque transmitting system comprises a clutch.

3. The structure of claim 1, wherein said shifting element comprises a gear shifting member.

4. The structure of claim 1, wherein said load lever includes a gas pedal.

5. The structure of claim 1, wherein said brake means comprises at least one of a vehicle brake and a parking brake.
5. Align Your Patenting Strategies With Your Business Goals

Finally, don’t let the technology drive your claiming strategy
- Predict where your competitors are likely going—don’t just protect your commercial embodiment
- Always ask how your claim sets might be avoided by competitors
- Consult both the technical and marketing personnel responsible for the product being protected

There is likely considerable patentable subject matter around your “core” technology
- Consider Hewlett Packard’s approach to patenting its laser printer
5. Align Your Patenting Strategies With Your Business Goals

Align your patent to the future direction of the market to enhance success at trial
- If your patent sounds like the accused infringer’s marketing literature, it will be easier to convince a jury of infringement
- If your claims use terms that the industry later recognizes as important, it will be easier to establish the value of your patent
- So, always ask “where is the market going and how does this invention add value?” and not only “what is technically nifty about this invention?”
Thank You

Any Questions?

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