

Tutorial for Drafting a Patent Application

There are many reasons to file a patent:

1. Blocking competitors from entering your market
2. Attracting investors who see IP as a moat
3. Serving as IP assets for large companies' balance sheets
4. Licensing technology to others and collecting royalties, like Dolby or Qualcomm
5. Acting as a bargaining chip: "We won't sue you if you don't sue us"
6. Preventing copycats and IP theft
7. Securing government contracts or grants
8. Using "patented technology" as a marketing strategy to enhance authority and consumer trust
9. Personal motivation: recognition as an inventor

Based on the clients' priorities, the strategy for drafting the patent will vary. This tutorial assumes the client is a startup. Given this, the priorities are:

1. Raising money to launch the business
2. Blocking major competitors from entering the market
3. Creating an offensive patent for licensing or acquisition

Thus, this tutorial focuses on patent drafting for startups and solo inventors. However, depending on the facts and the client's objectives, the strategy may differ. Additionally, the target audience differs: for startups, the first audience is investors and the second is the USPTO examiner; for established companies, the examiner is typically the only audience. Drafting strategy must be balanced accordingly.

As a case study, I reference my [U.S Patent 9,144,343](#) (the '343 Patent), which I enforced against Keurig® alongside three other patents, resulting in a multi-million-dollar settlement. Also, I have included the [Patent Template](#) to draft your patent.

Below are the general rules and my recommendations for drafting the patent for a start-up and solo inventors. I will review your draft and revise it accordingly, and once you agree with the final draft, we will file it with the patent office.

1. Title

- General Rule:
 - The title should be precise to the invention. Avoid vague boilerplate like "system and method for..." and generic terms like "best" or "novel."
- My Recommendation:
 - Do not be overly precise. For instance, the title of the '343 Patent is "Beverage Brewing System." A more specific title like "**Coffee** Brewing System" might wrongly imply that tea is excluded. Similarly, "Beverage **Machine** System" might suggest the patent covers only the brewer, excluding pods or software. While these nuances may not pose a major issue, they could be exploited

during litigation, forcing you to spend money defending the title's scope. For startups, large competitors can outspend you, leading to unfavorable settlements.

2. Field of the Invention

- General Rule:
 - It should be a concise paragraph that identifies the general technical area of the invention. Avoid disclosing the novelty or specific solutions, but that belongs in the Summary.
- My Recommendation:
 - I agreed to the general rule; however, briefly describe only the minimum structure necessary to practice your invention. If additional parts are not necessary, remove them and reintroduce them in an alternate embodiment. And, describe the problem and how your invention will solve this issue.

3. Background of the Invention

- General Rule:
 - Briefly describe the technical field and prior art, calling out key references and their shortcomings. Keep it short, and misstatements can hurt you.
- My Recommendation:
 - For startups, the first goal is to raise funds. Expand on the problem your invention addresses and highlight the dominance of market leaders. Do NOT suggest the solution in this section because the Examiner may construe that the solution is in the background section, so it may be prior art to your invention. Also, mention the market size (as I did with Keurig in the '343 Patent). Investors often skip the claims/specifications and only read the background and summary because they are more accessible. Whatever you write here must be truthful; therefore, the falsehoods will be challenged. Investors trust what's in the patent more than pitch decks, so they will more likely read the background and summary, and are more likely to believe what you said in the patent. In my experience, this strategy helped me raise over **\$1.0 million** to fund litigation for the '343 Patent.

3. Summary of the Invention

- General Rule:
 - Provide a clear, concise summary of how the invention solves the problem identified in the background.
- My Recommendation:
 - While I agree with the general rule, avoid overly technical descriptions. Write this section like a marketing pitch, and why your solution works and how it solves the earlier problem. Again, the investors may be more likely to read this section.

4. Drawings

- General Rule:
 - Include drawings that explicitly show each feature recited in the claims.
- My Recommendation:

- I agree with the general rule, but also recommend including alternate drawings not initially claimed. In my case, the earlier '343 application has good claims, but after investigating the Keurig's Vue® brewer, which brewed both K-Cups® and Vue Cups, I filed expedited new patent applications that claim the Vue Brewer, which avoids the prior art and is particularly applicable to the Vue Brewer. This wouldn't have been possible without the original application having alternate drawings, so that I could support the new claims.

5. Detailed Description / Specification

- General Rule:
 - Fully describe how to make and use the invention so a person skilled in the art can reproduce it without undue experimentation.
 - Disclose the best mode. That means you cannot keep a trade secret for the best method of practicing the invention; you must disclose it. The bargain you have with the government is that you have to disclose the best way to practice the invention, and you will have the exclusion of someone else practicing your invention for a certain time.
 - Support each claim term with a consistent explanation and tie it to the figures.
- My Recommendation:
 - I agreed with the general rule, and for the start-ups, there are more suggestions.
 - In one embodiment, describe only the minimum structure necessary. If additional parts aren't essential, remove them and reintroduce them in an alternate embodiment.
 - Provide alternative terminology for critical structures. In the '343 Patent, “needle” was used to inject the hot water into the K-Cup. Keurig claimed their Vue Brewer used a “puncture,” not a needle. Though we won, it cost \$300K to fight that point. When I was drafting this patent, I thought “needle” was a simple structure, and I did not give an alternative name. This was an expensive lesson.
 - *Amgen v. Sanofi* (May 2023), your specification must **enable the full scope** of any claims. Broad claims require supporting data, examples, or disclosure covering the breadth claimed. With the '343 Patent, see Table 1, which has a table of how the Keurig Brewer performed. This was a simple experiment that supported the claims. Also, when the Examiner sees that the description has data in your patent application, it feels that it is a solid patent and it will take it more seriously.
 - Avoid limiting words like “must,” “only,” “critical,” “essential,” or “have to.” Use flexible terms like “preferably,” “such as,” “for example,” and “may be.” This keeps the claims broad and less vulnerable.

6. Claim Strategy

- General Rule:
 - Claims define what others can't do. Use broad, functional language (e.g., “fastening means” vs. “screw”) and support all terms in the spec.
 - Provide multiple layers: broad independent claims supported by narrower dependent claims to protect different fallback positions.

- Draft with claim construction in mind: examiners apply the **broadest reasonable interpretation** consistent with the specification, while courts use the specification as the primary interpretive guide.
- My Recommendation:
 - Drafting claims is a complex process, and you need a lot of experience to draft a good claim. I will draft them, and you don't have to. However, please you should define the core structure needed for the invention by eliminating what you don't need, then provide 3 to 4 alternative embodiments. I will convert these into strong claims.

7. Abstract

- General Rule:
 - A well-drafted abstract (≤ 150 words) gives a high-level view of the invention without limiting the scope. It's useful for public searchers and examiners.
- My Recommendation:
 - I agreed with the general rule; however, do not put limiting words in the abstract, as we already talked about. The abstract is in front of the patent, so what I do is that when we have a prior art search, the first thing I read is the abstract to see if it is relevant. Again, this is the elevator pitch, so make it count.