

Let's get started: Well-planned Patents

by Todd Bailey
Chief IP Officer &
General Counsel

Not all patents are created equal. But well-planned patents have a far greater chance of helping reach your business goals. A well-planned patent isn't an accident – it requires understanding your objectives, selecting which idea is best for you to patent, crafting the patent in the best way to achieve your objective, and filing your patent(s) at the best possible time. Believe it or not, you play an essential role in ensuring that your patent is the best it can be.

1) What does a patent look like?

A patent has several key sections: the background, description, figures (drawings) and claims. The **claims** define the legal protection. The claims use only words (there are no pictures or diagrams in the claims) to list and describe the essential elements of the invention.

Al and software are patented in terms of the functional **methods** they perform, so the patent claims will list and describe the essential steps of the Al or software method.

Think of a patent claim like a recipe that lists the "ingredients" of the invention. A patent usually has many claims; think of these as recipe variations.

A patent is **infringed** when someone, without permission, uses all of the ingredients of at least one patent claim. If anything is missing, it's probably not infringement (but substitutions can complicate things). Having extra ingredients won't avoid infringement, if all listed ingredients are present.

Understanding these basic concepts will be important when it comes time to review your own patent claims before filing. More on this important subject in a moment.

2) Patent it, or keep it secret?

Many technology ideas could be patented or kept secret. But you won't be able to patent it and keep it secret, because patents are eventually published. So, how do you decide?

Of course you'll need a patent for the benefits described in IP WHY Episode 7: Ten Patent Benefits.

Secrets can protect only certain kinds of IP, as we saw in IP WHY Episode 8: Well-Planned Patents, and IP WHY Episode 9: Protecting Secrets. If you've created your IP roadmap and still can't decide which is right for you, here's a few more things to consider:

- Exclusivity: To be the only one using your idea, patenting is the better choice. Secrets usually can't do this very well.
- Differentiation: If similar ideas are known, patenting may be difficult. If your idea doesn't really differentiate you in the market, a patent may not be worthwhile.
- The "newness" of your technology field:
 Patents can only be obtained for new ideas (never patented or published before).
 Existing technology fields can be harder to patent in, because people have been patenting and publishing for a longer time.
 For the same reason, on average, patenting in newer fields (e.g. augmented reality) has a higher probability of success.
- Deriving economic value: If you want to derive value from others, such as earning royalties or gaining access to technology in exchange, patents work better than secrets.



3) What should I patent?

I am often asked: "what can I patent?" but that is completely the wrong question. Patenting only helps your business if what you patent drives your value or competitiveness. So, the real question is: what should you patent? To answer that requires an understanding of why you want a patent.

The "power" of a patent is a measure of its ability to help you achieve you business objective. In IP WHY Episode 7: Ten Patent Benefits, we saw 10 different objectives a patent can help you reach.

Whether you decide to patent, and what you choose to focus on, will be driven by your objective. For example:

- ❖ To dissuade copying, think of a patent like a gate: its usefulness to depends on its surroundings. A gate in an unfenced field is easy to avoid, but a gate between narrow canyon walls is not. Is your idea just one of many possibilities (easy to avoid), or is it on a path through which everyone must pass (hard to avoid)? To dissuade copying, you want your patents to be in narrow canyons.
- To improve your exit, think about your potential acquirer. What would enhance their patent portfolio, or catch their interest? Studying their patents can help you decide what to patent, and how.
- To boost your technical credibility, you'll want a technically interesting topic. The legal protection of the claims may not even be as important to you in this case.
- To avoid competitor roadblocks, your patent should include all the details that you want to use, to ensure others won't be able to later patent them to block you.
- For additional security when collaborating, you will want to focus your patent where technology overlap is more likely.

These considerations may initially all point in the same direction, but it's still useful to have clear objectives - especially for later in the patent process, when you may be forced choose one path over another.

4) What's your role?

You play an essential role in the patent process, because you are an expert in your business and your technology. You can assist your IP professional in several key ways:

1) Define & communicate your IP strategy objectives: I can't say this enough: you need an IP strategy roadmap. It helps you decide if you need a patent, and who it should target (competitors, collaborators, customers, etc.).

Very few people just order "a coffee" in the morning – instead, they have very specific instructions on how they want their beverage. Likewise, you don't just want "a patent". An IP roadmap puts you in a much better position to guide your IP professional.

2) Find an IP Professional: It's possible to file a patent application by yourself, but the effectiveness of your patent completely depends on the words chosen. Without training and experience, it's unlikely that your patent will be effective. You are probably better off not filing any patent at all.

So, find an IP professional you trust, who understands your needs, and whose style fits your business. Don't be shy to ask others in your community for recommendations. More tips on working with IP professionals are coming in a future IP WHY episode.

3) Help your IP Professional: Once you have an IP professional, it's not time to sit back and let them work. To create an effective patent, your IP professional needs to understand your technology and your business. Patents are business tools, and your business model and goals are important to help focus the patent.

Your IP professional also needs to understand how your technology idea relates to the existing technology – i.e. what is the closest technology, and how does your idea differ? Doing your own patent searching before meeting with your IP professional will also help. See the IP WHY guide Let's Get Started – FTOs for more how-to on patent searching.

The more of this kind of information you can provide in an organized way, the quicker your IP professional can prepare a better patent. All good news for you.



4) Carefully review the draft patent and claims: A strong patent is the product of a marriage between the IP professional's expertise and your business and technology expertise. Your review of the patent draft ensures the technology aspects are properly described and the claims aligned with your business objectives.

That's why one crucial activity is reviewing the claims. The patent's effectiveness is ultimately determined by the claims - but they are not easy to read. To help you with this, try reading actively – colour-coding words or sections, breaking the claim into a table to separate ideas, or reorganizing line or section breaks to help you visualize better. But whatever you do, don't just assume the claims are correct as drafted – ask your IP professional questions, and challenge what you think could be done differently. The claims will ultimately make - or break - your patent.

Remember your patent will be infringed only if someone uses all the ingredients of a claim. This means your independent claims (claims that don't refer to another claim) should contain only essential steps or descriptors (none missing), and nothing optional or inessential. Including optional features in independent claims makes the patent easier to avoid.

Concretely, for each claim word and phrase, ask yourself: **is this necessary**? Or, just *preferred*? Are there other ways I could implement my idea without this, even if those ways are not as good as my preferred approach?

For broader coverage of your idea, your claims should be focused on the **technology solution** to a business problem – not just on a specific approach you used to implement that solution. Involve a diverse internal business team to help review your draft patent, to avoid becoming too focused on one technology implementation.

5) The right time to file: Provisional patent applications

Many startups think it's better to delay patenting until they have more money. But procrastination and patenting do not mix. Patents must be sought before you publicize or commercialize the idea. Worse, if someone else patents first, you could even be blocked from using your own idea.

On the other hand, filing too early means missing later improvements because, once filed, your patent application can't be changed.

So, it's best to file early, and then file again whenever there are significant improvements. And that's not expensive because of a filing option known as a provisional patent application. The patent office fees are quite low, and there's also some costs from your IP professional.

A "startup-friendly" IP professional will have strategies to help you manage your budget, will coach you on how to do some of the work yourself, and can help you delay certain costs until later.

But don't get too stingy when it comes to patenting. The old adage "You get what you pay for" definitely applies here. Plus, your ideas are your single most valuable asset right now, and it doesn't make sense to cut corners on your most valuable asset. We'll discover some tips and secrets about working with IP professionals and managing costs in an upcoming IP WHY episode.

You will eventually have to file a regular patent application within a year to continue the patent process. But that year gives you time to iterate and decide which ideas are worth pursuing. One regular application can include in many provisional applications.

It's a good idea to prepare a first draft of your provisional patent application before you hire your IP professional, to give you an idea of what's required, and get you thinking about your objectives. It also provides a great jumping-off point for your IP professional to kick-start your patent.