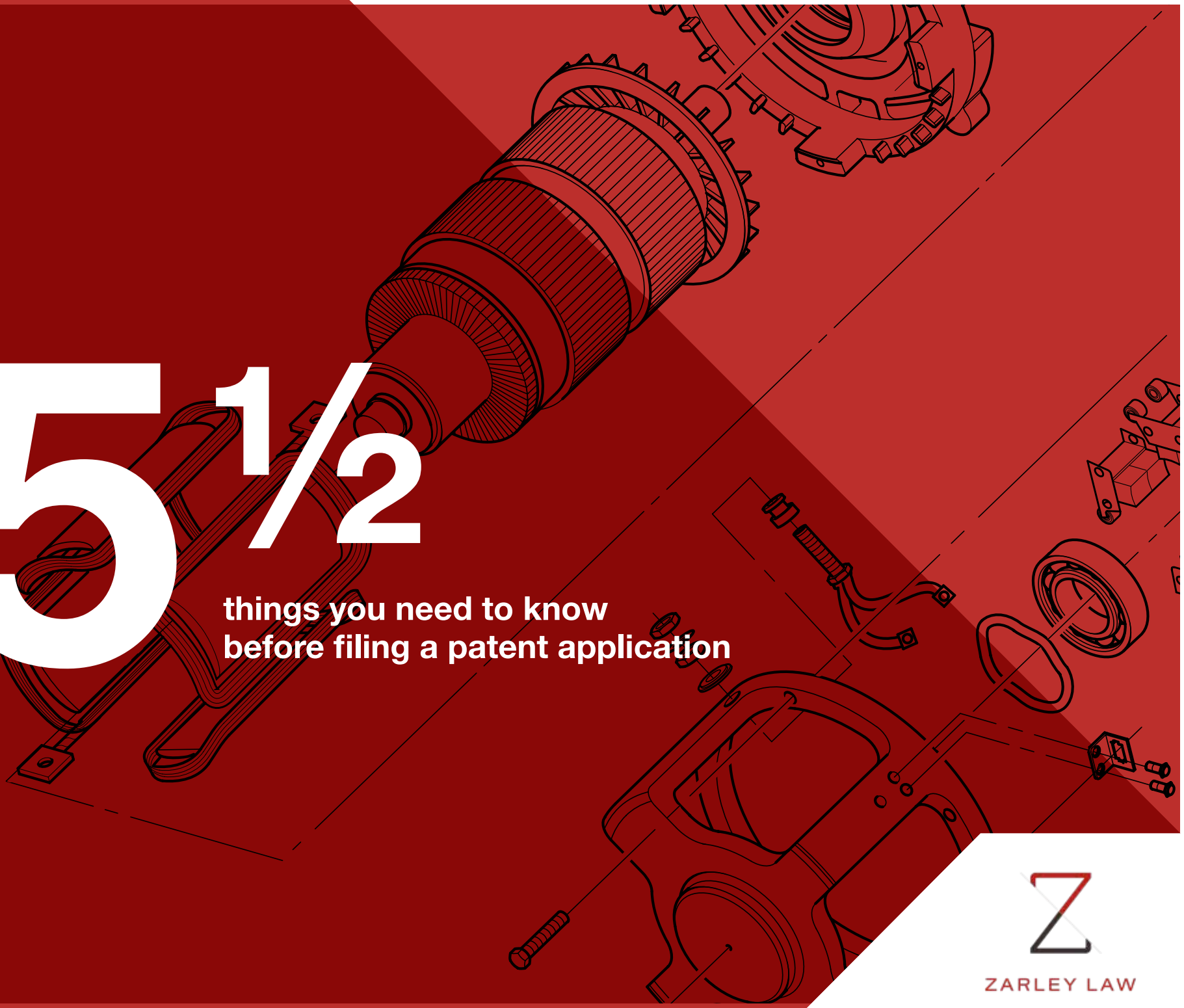
5½

things you need to know before filing a patent application



ZARLEY LAW

UNDERSTANDING THE PROCESS IS HALF THE BATTLE

THE INVENTION PROCESS IS AN EXCITING *undertaking on its own, but protecting your work is paramount. And when it comes to filing a patent application, having knowledge of the process, realistic expectations, and patience will prepare you for what lies ahead.*

Understanding these ***5½ things*** *will get you started down the path to filing your patent:*

1. *Utility*
2. *Novelty*
3. *Obviousness*
4. *Cost and expectations*
5. *Timeline*

5½. *Consultation checklist*

Whether it's that brilliant thought you had in the shower or a scientific a-ha from the lab, in order to be an inventor named on the patent application you must take part in the conception of the invention.

Idea vs. Invention

Is your invention half-baked?

BEFORE YOU DIG INTO THE 5½ THINGS, it's great to be sure that your work is an invention rather than an idea or a notion. It's a critical step before starting the process that will save you time and energy. You want to make sure that you have a keen grasp on how your invention works and why. This is known as conception, and if you have that, then go ahead and move onto the next page.

For the cautious, know this: Conception occurs when an inventor has set out the aspects of an invention in their mind sufficiently to execute the invention. Whether it's that brilliant thought you had in the shower or a scientific a-ha from the lab, in order to be an inventor named on the patent application you must take part in the conception of the invention.

From there, what is called "reduction to practice" has to happen, which can occur in one of two ways. You can either build the invention (which is the hard way), or provide a detailed written description of how you will create your invention with enough clarity that those in your field could build your invention after reading your instructions. If you have yet to do any of these things, that's fine, because having a patent application drafted will satisfy the reduction to practice requirement.

The non-patentable

What isn't patentable?

NEXT, IT'S HELPFUL TO UNDERSTAND WHAT ISN'T PATENTABLE. You can patent a wide array of inventions such as a process, machine, manufactured product, composition of matter, ornamental design, or even a plant created by man. There are many inventions that are considered patentable, but there are also a few categories that fall into what is called non-patentable subject matter. This includes things like physical phenomena, scientific principles, systems that depend on human intelligence alone, concepts, mental processes, mathematical formulas, and algorithms to name a few. That means even the great Einstein couldn't patent $E=MC^2$.

Additionally, you wouldn't be able to patent a new mineral discovered on Earth or a new plant found in the wild. Forces of nature, like the heat of the sun or even gravity, cannot be patented (sorry, Newton). While some of these more abstract inventions like literary, dramatic, or musical works may feel like they fall under a patent's protection, they actually are protected by a copyright instead.

Now that you have a little more information, you can get started on the 5 ½ things you need to know before filing a patent application.

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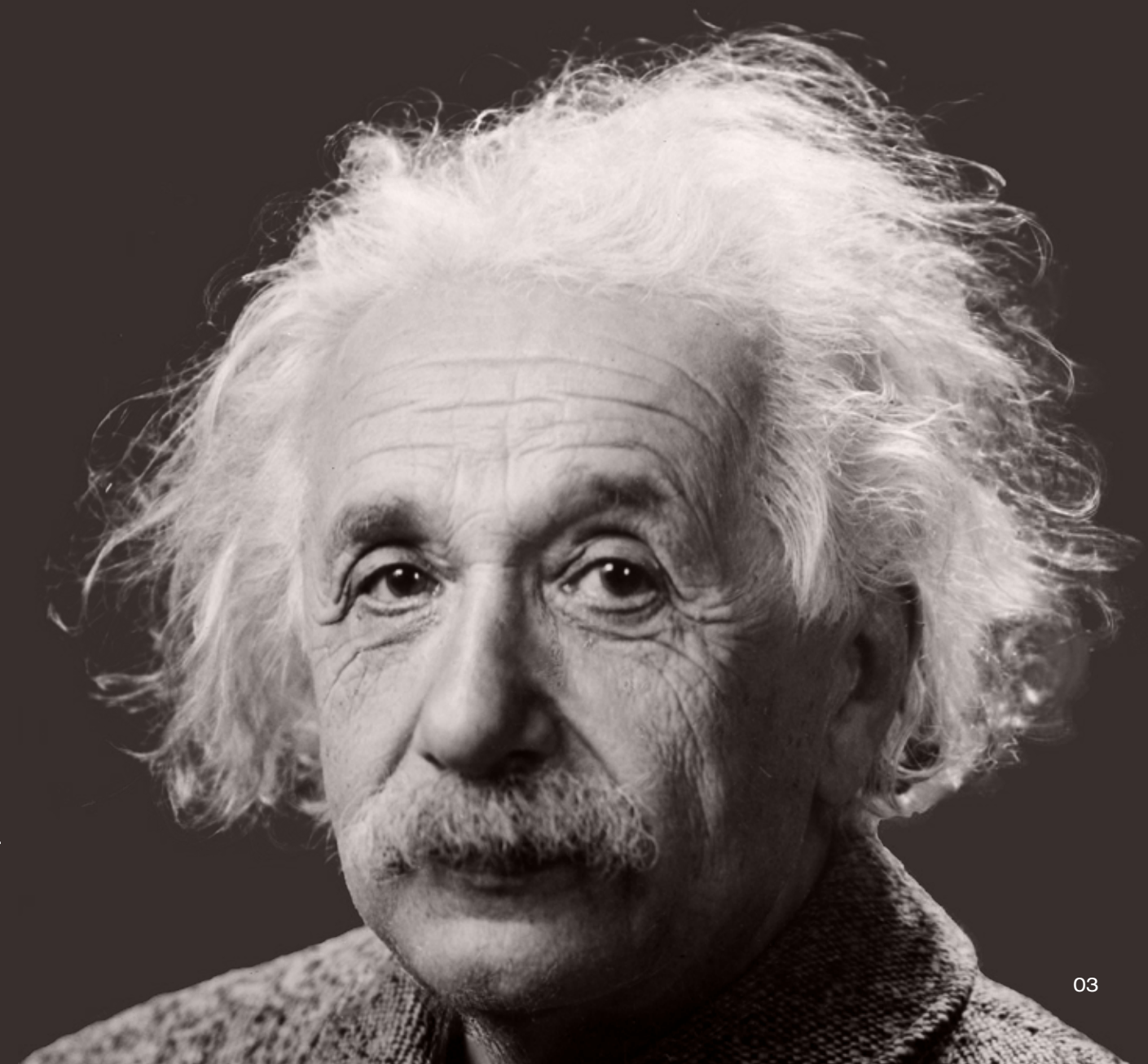


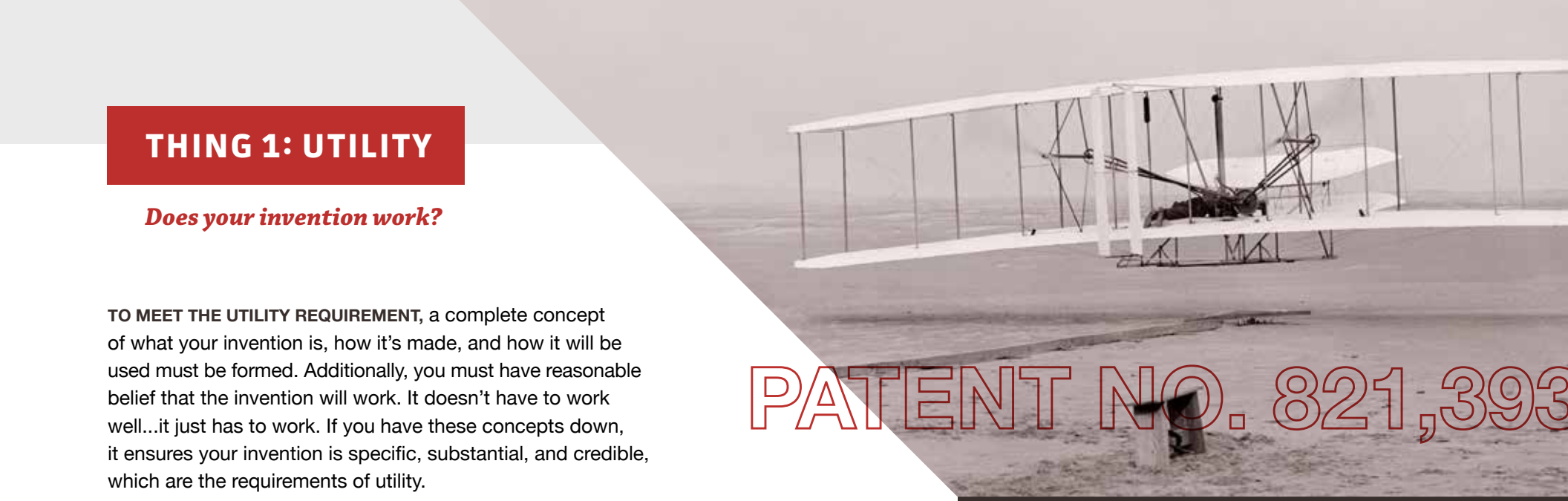
THING 1: UTILITY

Does your invention work?

TO MEET THE UTILITY REQUIREMENT, a complete concept of what your invention is, how it's made, and how it will be used must be formed. Additionally, you must have reasonable belief that the invention will work. It doesn't have to work well...it just has to work. If you have these concepts down, it ensures your invention is specific, substantial, and credible, which are the requirements of utility.

Utility should be the easiest hurdle for you to achieve in the patent-obtaining process. In fact, it's fairly rare to see an application rejected because of lack of utility. Only during the credibility portion, which is based on what is known in the field, have there been hang-ups with inventions that have never been seen before.

Short of finding the outright cure for cancer you will likely not have a difficult time overcoming this hurdle.



WILL YOUR IDEA FLY? A CLASSIC PATENT EXAMPLE.

Famously, the United States Patent Office (USPTO) required further evidence when the Wright brothers patented the airplane because they simply didn't believe a machine could fly. The aviation field was yet to be established which is what lead to the patent office's skepticism. Obviously, the idea took off after the Wright brothers proved its functionality, and they obtained the patent back in 1906.

THING 2: NOVELTY

Has anyone ever made your invention in the exact same way?

Novelty means that no one else has ever created something exactly the same as your invention. It's an original!

Whatever the difference is between your invention and all those that have come previously, even if that difference is relatively small, you can overcome the novelty requirement.

STAYING "IN TOUCH" WITH NOVELTY:

Consider the MacBook Pro with Touch Bar as an example of meeting the novelty requirement. While many attributes of this product are familiar to previous MacBooks (some attributes unchanged, even), the Touch Bar component is an improvement, although relatively small when considering the whole product. The simple addition of the Touch Bar is enough to make the invention novel. Novelty is considered to be any improvement like increasing efficiency, lowering cost, using fewer parts, or having a slightly different structure. Any difference, no matter how small, will likely make your invention meet the novelty requirement.

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THING 3: OBVIOUSNESS

Is what makes your invention "new" obvious?

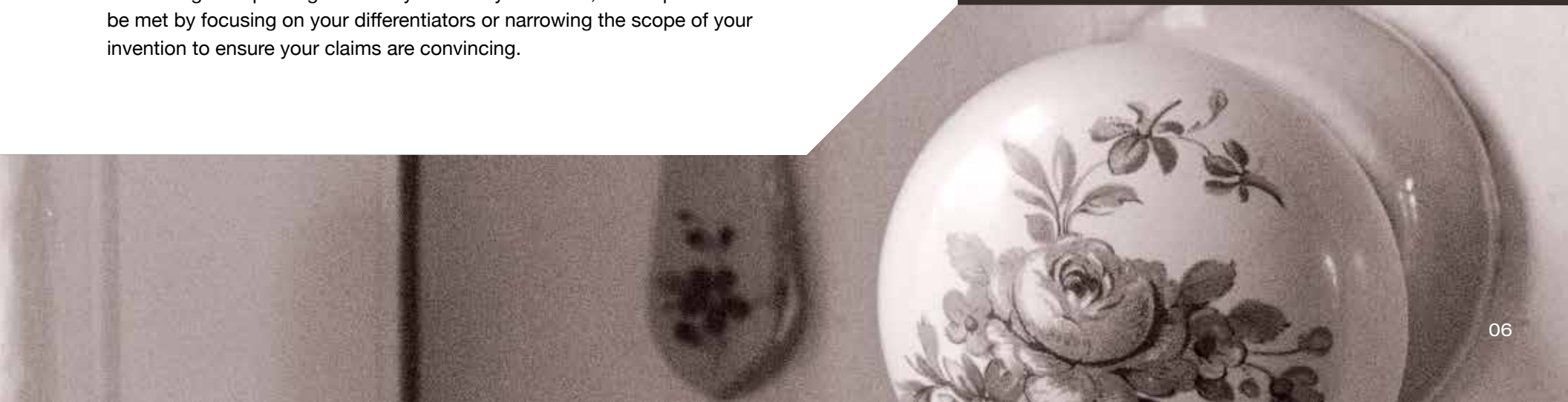
WITHOUT GETTING INTO THE NUMEROUS INTRICACIES OF THE CONCEPT, non-obviousness means that what makes your invention new is unique enough to justify granting a patent. To reach the conclusion that your invention isn't obvious, the USPTO has to **feel** that the difference is substantial enough to justify a time-limited monopoly. The word "feel" is emphasized because that is often what it seems a patent examiner at the USPTO does– they determine an application is obvious by going with their gut feeling even though they are required to do much more to justify a rejection for obviousness.

While determining obviousness, there tends to be a lot of back and forth with the USPTO. Typically, an examiner will reference two or more published documents and assert that it would have been obvious to "one of ordinary skill" to combine the references and arrive at your claimed invention. If that happens, you can amend how you claim what your invention is to further distinguish what you have invented from the references cited by the examiner, or you can submit remarks and argue as to why you disagree with the examiner's allegation that the invention is obvious.

Overcoming obviousness during the patenting process might take a bit more convincing than proving its novelty and utility. However, this requirement can be met by focusing on your differentiators or narrowing the scope of your invention to ensure your claims are convincing.

A MERE CHANGE IN MATERIAL WON'T OPEN THE DOOR TO A PATENT:

A great example of a difference that would be considered obvious is a mere change of material. Think about a wooden door. Now imagine it was invented last week. You wouldn't want to file a patent application for a metal door because it is clear that an upgrade in material from wood to metal has an added benefit that would be expected. This example isn't too far from reality, as an inventor once filed an application for a ceramic door knob back in the 1800's, claiming that it was an improvement over metal door knobs. Much to the chagrin of that inventor, the USPTO found that the difference in the material was an insubstantial improvement.



Quick Fact: What's the difference between *provisional* and *non-provisional?*

Provisional

A PROVISIONAL PATENT APPLICATION IS INFORMAL AND DOES NOT REQUIRE CLAIMS, formal drawings, or a number of other aspects found in a non-provisional application. A written description of your invention and informal images necessary to understand the invention are the only requirements. The advantage of a provisional patent application is that it establishes a filing date, spreads the cost out evenly over time, and allows the inventor one year to test the invention or determine its commercial value. The only disadvantage is speed. If you are in a hurry to file your patent application, a provisional application can be prepared very quickly in some instances, but can actually extend the application examination process in other instances. That's because the USPTO does not take any action with your filing unless you file a non-provisional application claiming priority to the provisional application within one year.

VS

Non-Provisional

ON THE OTHER HAND, a non-provisional application is a formal application that contains all of the required information including a background, a summary, a brief description of the drawings, a detailed description of the invention, claims, and an abstract. Starting out with a non-provisional typically costs more than a provisional application initially. Once filed, the application is placed in line to be reviewed by the USPTO, and you're able to begin the examination process more quickly. Either way you file, you can mark your product as patent pending during the process.

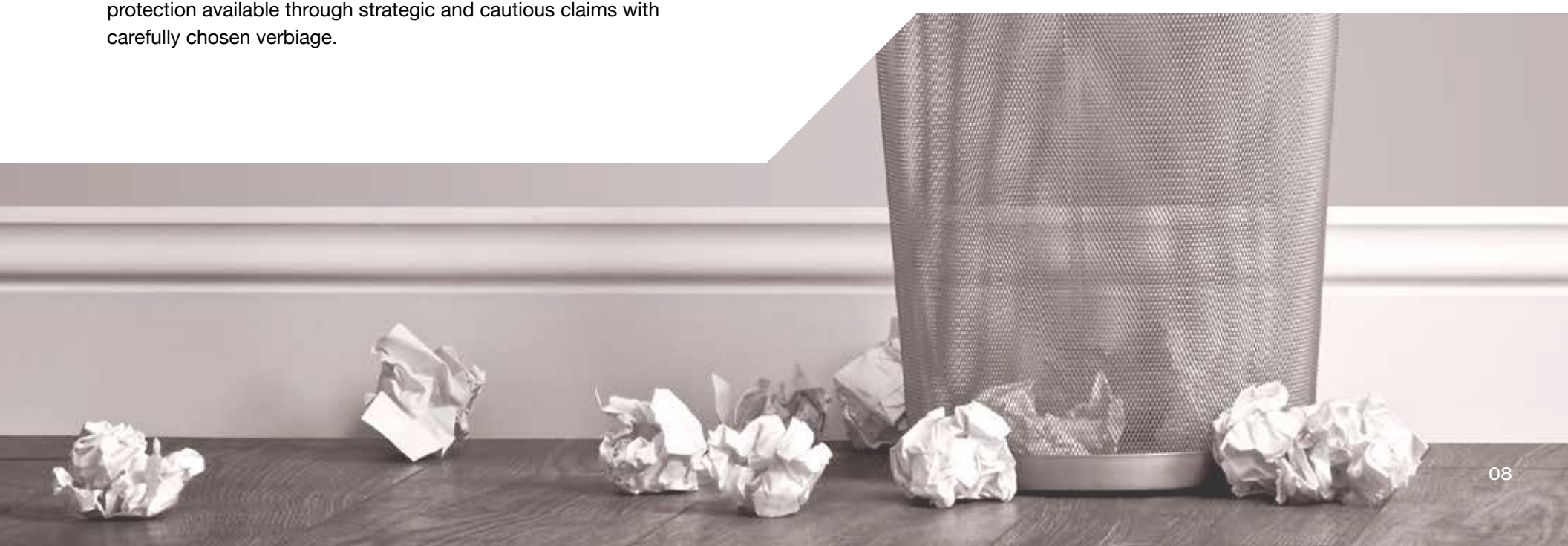
THING 4: EXPECTATIONS

Is rejection a good thing?

CONTRARY TO INSTINCT, having your patent application rejected is a good thing. In fact, if an application is allowed on the first shot, it can raise concern that the submission was too narrow. Patent application rejection should be much easier to swallow than other types of rejection in life because a denial by the USPTO means that your application has been filed the right way: with strategy and superior protection in mind.

When filing for a patent, the goal shouldn't be to only cover what you've invented. Instead, the savvy patent attorney builds their application with anticipation of what others might do to design around your invention. To accomplish this, you should include as few limitations in your claims as necessary. The idea is to achieve the broadest protection available through strategic and cautious claims with carefully chosen verbiage.

Your invention is precious and requires a law firm capable of protecting it properly.



How should you choose a firm?

ONE OF THE MOST IMPORTANT CHOICES YOU MUST MAKE IS SELECTING THE FIRM TO HANDLE YOUR INTELLECTUAL PROPERTY WORK. Your invention is precious and requires a firm capable of protecting it properly. If you don't know where to begin, it's never a bad idea to meet with a firm that exclusively works in intellectual property (or IP). These firms, sometimes referred to as "boutiques" only work with patents, trademarks, copyrights, and trade secrets. These types of firms are well-versed in all things IP. As opposed to a full-service firm that might dabble in IP work, IP boutiques live, eat, and breathe IP.

The advantage of working with a group of IP specialists is that they have likely handled a case similar to yours. Since a firm probably can't know your company and products as well as you do, a good partnership with an experienced firm is key. Once you have reached out to a firm, here are the factors you should look for in an effective IP partner:

- Experience: Can they handle your patent? Have they ever filed patents within your particular industry or field?
- Creativity: Will they be able to describe in detail what you have invented, as well as anticipate what others might do to get around your patent? Along with imaginative abilities, do they have a broad vocabulary? Since much of filing a successful patent application lies within careful wording, an ideal patent attorney utilizes a non-limiting vocabulary.
- Efficiency: Are they prompt and responsive? Time is of the essence when it comes to filing patents, and the last thing you want is a firm that gets slowed down by irrelevant details. Look for someone who answers your questions quickly and charges you fairly.
- Location: Unlike other types of firms, it is not as important that your IP firm be local to the USPTO or you. It is incredibly rare that your firm will need to be physically present at the USPTO in Virginia or meet with the examiner, who can be working remotely anywhere in the United States. That is why it is common to have a close relationship with a patent attorney that is working on your patent application, even though you have never met with them face-to-face.

As opposed to a full-service firm that might dabble in IP work, IP boutiques live, eat, and breathe IP.

What's the *cost?*

THE TRUE COST OF FILING A PATENT APPLICATION VARIES DEPENDING ON THE COMPLEXITY OF THE INVENTION ITSELF.
While it's difficult to pinpoint the exact cost of your application without knowing the specific details, realize that almost every interaction with the USPTO requires a fee of some kind. During the application process, you can expect to encounter fees such as:

- Application fees
- Search fees
- Prosecution fees
- Disclosure fees
- Issue fees
- Continued examination fees
- Appeal fees
- Maintenance fees

While many of the fees will cost you several hundred dollars apiece or more, know that the maintenance fees must be filed 3½ years, 7½ years, and 11½ years after obtaining a patent. If you should decide that there is no longer any commercial value to having the patent, you can abandon it at any time. The best way to understand the true cost of a patent application and its upkeep is to consult with a patent attorney and reference the most up-to-date USPTO fees.

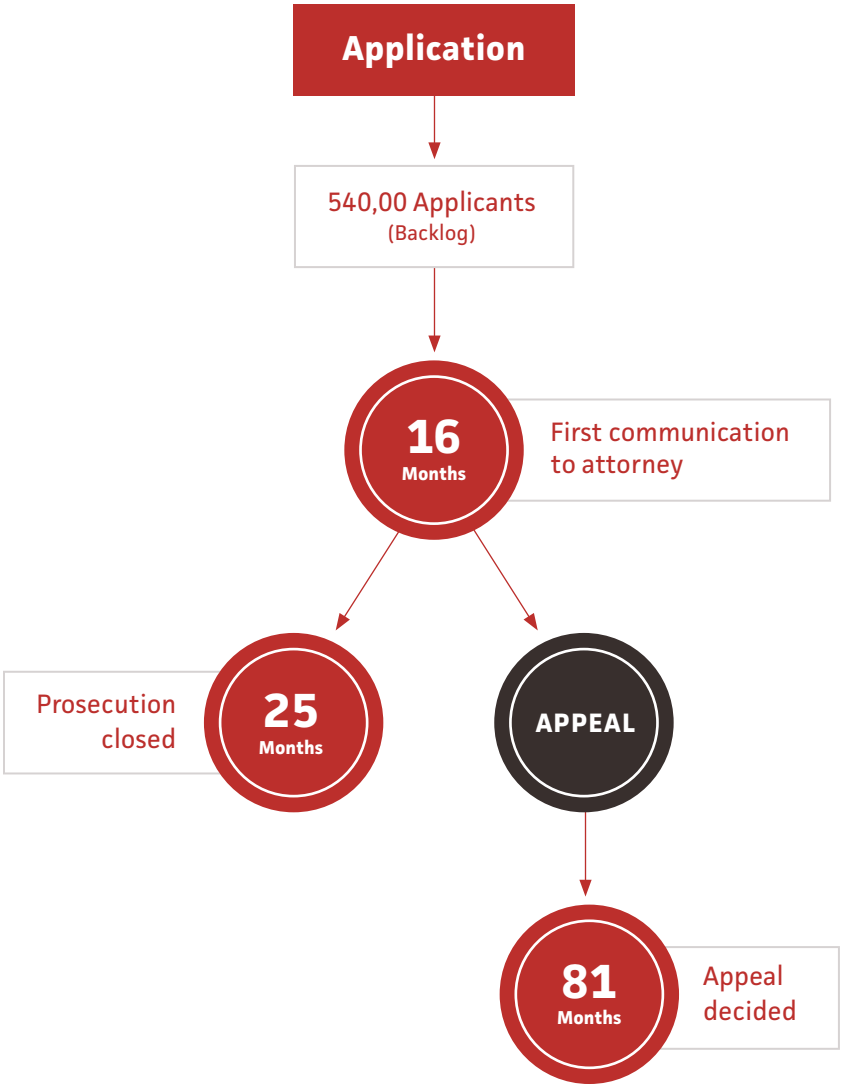
THING 5: TIMELINE

How long is it going to take?

WE ALL KNOW THAT TIME IS MONEY, and now that you know some of the basic fees that will come your way during the application process, it's a good idea to understand what kind of timeline you'll be looking at until you gain "allowance" and finally get your hands on that patent.

Just like the cost of an application varies depending on the type of invention and its complexity, so does the timeline. It's safe to say that the USPTO is a little busy with a backlog of about 540,000 applications. So once you file an application, your patent attorney will usually receive the first communication back from the patent office in just over 16 months (sometimes sooner). Between the back and forth of the first office action to examination and prosecution, the USPTO says that "traditional" pendency of an application is about 25 months. That being said, if an appeal occurs during the process, that will extend your wait time to an average pendency of about 81 months due to the Patent Trial and Appeal Board's own backlog of cases.

Thinking back to Thing 4, the importance of choosing an efficient IP partner really comes in handy here, as a great partner will cut out any delays by working with your expectations and meeting deadlines.



Once you file an application, your patent attorney will usually receive the first communication back from the patent office in just over 16 months (sometimes sooner).

THE ½ THING: MATERIALS

What should you bring when you meet with a patent attorney?

WHEN YOU MEET WITH A PATENT ATTORNEY, they are going to need all the information you can provide so that they can gain a full understanding of your invention. While an in-person meeting and conversation can uncover a lot of information, you should seriously consider bringing the following materials if possible:

- Images, doodles, CAD drawings, rough sketches, and photos of any and all designs
- Prototypes of the product itself
- Videos of the invention in use
- Information on competitors or other inventions similar to yours

Bringing detailed notes is always helpful to give your attorney more of an idea about how your invention is made, how it works, and how it is different or better than what's currently out there. To provide great notes, consider asking yourself the questions on the following page.

Providing your attorney with the most information possible will provide you the best protection possible.

Eight *pre-meeting questions* to ask yourself:

1

What is the working title of the invention?

For example, your attorney will want to know that your invention is a "voice-activated smoke detector" and not just its brand name "Noise Bgone."

2

What technical field does the invention relate to?

This question helps your attorney understand if your invention is a component of a much larger field that they may not know about from the title. For instance, your invention could be a "dual conveyor" that is in the field of "crop harvesting" or "lumber manufacturing." Since crop harvesting and lumber manufacturing are very different fields of work, this difference would be important to know.

3

What problem are you solving? Have others solved it in the past?

If so, why do you think no one has tried to solve it in the past?

4

Describe how the invention functions differently or is structurally different from what has been done in the past. What features are important to customers?

Questions 3 and 4 are useful to help your patent attorney understand not only how your invention is novel, but more importantly, how your invention is non-obvious in comparison to what others in your field have done.

5

When you were developing your invention, did you find anything that didn't work or that had to be done in a certain way?

This question is also important to helping distinguish your invention over what an examiner would consider obvious. If other options were attempted and failed, this indicates that your invention has identified a critical aspect that your invention needs to work, which in turn demonstrates that your invention was not obvious.

6

When did you first think of the invention?

This can be helpful to determine the evolution of your invention.

7

Have you told anyone else about your invention in any way? If so, when and how?

Your patent attorney will need this information in order to determine if you need to expedite filing your patent application. For example, if you published a paper on your invention, you only have one year from that publication to file your application. Otherwise, your own publication could prevent you from obtaining a patent.

8

Who is/are the inventors of the invention?

Provide their name, address, and citizenship.

BY KNOWING THE PROCESS, YOU'RE HALFWAY THERE

ARMED WITH THESE 5½ THINGS, you will be ready for the patent application process that lies ahead. By working with an experienced patent attorney to help you along the way, you can rest assured your invention will be protected properly so you can get back to innovating. And who knows? You might need to revisit these 5½ things the next time you're struck by genius with another invention.

WE PROTECT YOUR IDEAS

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