

Patent Drafting for Beginners
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Lecture – 21
How to Pitch an Invention

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Inventions as concepts

Can you foretell the future?

At least the developments that are going to take place in your field in the next 5 years?

Patents are written in the present, read in the future



How to pitch an invention? Inventions should be ideally pitched as concepts. When we say pitch, we refer to the way in which an invention is presented to the patent office. And that will be critical when you draft a patent specification because patent specifications are essentially presenting the invention to the patent office. So, how you pitch the invention or how you present the invention to the patent office can be critical for it to get granted; and more importantly how the patent will be enforced in the future.

So, one of the approaches for presenting inventions is to present inventions as concepts. Let me explain that you in greater detail. Let me ask you this question can you foretell the future? Or at least the developments that are going to take place in your field in the next 5 years, it is very hard for us to predict the future or even to make a reasonable assumption as to what would happen; for this reason, patents are documents which are written in the present and read in the future.

If you draft a patent application today the chances of it being examined will be a few years down the line. And in case the patent is granted and it ends up in the court in an

infringement proceeding then the court will be looking at your patent and trying to interpret the terms in the patent, probably 5 or 10 years down the line. Which means or which tells us that patents are documents which are written for the future in other words patents have to be future ready.

So, one way you make them future ready or capable of these documents to withstand a scrutiny in the future is to word the invention as a concept. Now there are limitations to this approach, but understand that rather than merely describing the physical embodiments in an invention it pays to craft an invention and present it as a concept.

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Concepts ≠ physical embodiments

- Can you see a concept when you see an invention?

- Conceiving the invention not as a physical embodiment, but as a concept
 - Invention as a concept
 - Textualisation of the invention
 - Elevate the invention to the level of a concept
 - Taking the specific to the general: concept or principle



So, we start with the fundamental principle that concepts are not description of the physical embodiments. So, when you elevate the pattern to the level of a concept, you are simply not describing the physical embodiments. Description of the physical embodiments is what you would do in a normal technical explanation of the invention. If you have to do some technical writing about the invention then you would normally describe the physical embodiments and how they work.

They need to elevate an invention as a concept comes because you are essentially carving out property rights when you draft a claim for a patent. You are trying to carve out or make an intellectual property right, which can be used for people to know where the limits of your property are. So, that they do not encroach upon it, what is called infringe.

So, you you you de market the limits of your property very clearly, and you also describe the way in which your invention is made and the way in which it works. So, there is a descriptive part that comes out in the patent specification where you in detail disclose the working of the invention. And there is also a claiming part where you de market the boundaries of the invention. So, that you so that it becomes private property.

So, the question you should ask is whenever you see an invention either the physical invention itself or when you read an invention disclosure form, are you able to envisage the concept behind the invention? Because this is critical for the purposes of drafting. Now conceiving the invention not just as a physical embodiment, but as a concept is critical because when an invention is elevated and described as a concept it is chance a it stands a much better chance for the invention to be granted one in the first place. And secondly, it also can withstand a challenge that can come in the future.

Now, this process of elevating invention to a concept is what we call textualisation of the invention. The invention is actually the physical embodiment. If you describe the physical embodiments in technical language it is still a description of the physical embodiments, but when you textualise the invention you are not you are the purpose of the textualisation is not just to describe it. You do describe it in the patent specification, but because there is an additional objective of claiming something as a private property, claiming something as a private right you would create or you would draft the claim as a concept or you will attempt or you will endeavour to draft a claim as a concept.

So, elevation of the invention to the level of a concept helps to create a principle or a concept of an invention. This is very similar to taking a specific thing and trying to generalize it. Again, there are limitations to the way in which this can be done, but this should give you an idea about claim drafting; that claim drafting is not simply the description of the physical embodiments.

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Abstractions

- Look for the “inventive concept”
 - Taking the invention to the level of abstraction
 - Not the same as an invention on an abstract idea
 - abstraction = “inventive concept”
- Inventive Concept [Section 10 (5)]

“The claim...of a complete specification shall relate... to a group of inventions linked so as to form a single inventive concept...”



Now, to do that you need to look at the inventive concept, what is the inventive concept in the invention? What is the concept that runs through and the concept that is inventive? They could be concepts that are not inventive in the sense that in the sense that elements and features that are common to other inventions as well, but you should be able to identify the inventive concept when you look at an idf or when you interview an inventor.

Now, there is some amount of abstraction involved in this exercise because you will take the invention to a level of abstraction and that is not a level of abstraction where you do not know what the invention is ah, but this is different from looking at the invention as an abstract idea because abstract ideas per se are not patentable section 3 of the patents act prohibits claiming or even patenting abstract ideas. What we mean by taking it to a level of abstraction is we try to create a specific event into a broader general statement which is applicable in multiple cases.

So, the abstraction that we are talking about is the inventive concept, it is not the inventive feature because the inventive feature will be there in the claim, but you try to create the feature in or you try to elevate the feature to the level of a concept. Now the inventive concept itself is mentioned in section 10 5 of the patents act. It reads the claim of a complete specification this is just the abstract of it of a complete specification shall relate to a group of inventions linked so as to form a single inventive concept.

So, inventive concepts can be claimed, and there is some direction in the patents act as to how that can be done.

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Tangible → Intangible

- Danger of Defining the Physical Embodiment (tangible)
 - Intellectual Property Rights are intangible rights
 - By defining the physical embodiments you will limit the rights
- Look for the “inventive concept” in the embodiment
 - Capture the inventive concept in the claims e.g.: A claim defining the inventive concept, which is an abstraction of the invention
 - Claims define the scope of the invention for which protection is claimed [s.10(4)(c)]



Now, the drafting exercise is essentially an exercise of moving from the tangible to the intangible, tangible because there is a physical embodiment the the invention exists in time and space and it can be physically felt or what can be touched tangible the claim in most cases will have some abstraction in it which would make it intangible.

Now, the danger of defining the physical embodiment is you will just be describing the tangible parts of the invention, and you will not be covering the invention as a concept. And the danger of that is that others will be able to imitate your invention and get away with by infringing the invention and you will not be able to stop them, because if you literally claim the descriptive part of your invention it will be very hard for you to withstand the onslaught of an infringement case tomorrow because you will not be able to demonstrate that your claim was broad enough to cover that variant or that minor improvement to your invention.

Now, and this is the reason why we refer to intellectual property rights as intangible rights, and they are intangible in the sense that the rights manifest in a creative work that went into the invention. Now by defining the physical embodiments you will be limiting your rights. So, we look at the inventive concept in the embodiment, and capture the inventive concept in the claim. A claim defining the inventive concept which is an

abstraction of the invention. So, the claim does the job of de marketing the rights in the invention whereas, the the descriptive part of the patent specification describes the invention.

So, there are 2 functions that the patent specification would do. One part of the patent specification will describe in detail how the invention works, how it performs, various examples illustrations drawings and the other part the concluding part which is called the claim; captures the inventive concept in a language that can be applied to multiple scenarios. So, the claim defines the scope of the invention for which protection is claimed. This is again mentioned in section 10 4 c of the patent site.

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Paper Clip

- **Definition:**

"a piece of bent wire or plastic used for holding several sheets of paper together."

- **Claim:**

"A paper clip made of a single piece of metal wire comprising:

an isosceles triangle base portion having a base arm and two isosceles arms extending from two ends of said base arm respectively and contacting each other at a first connecting point;

a first clipping portion having two clamping jaws extending apart outwardly from said first connecting point of said isosceles arms and bending upwardly and reversly approaching to contact each other at a second connecting point whereby to permit a relative number of documents to be clipped there between; and

a second clipping portion including two horizontal arms contact closely and parallel to said two isosceles arms respectively so as to clip less sheets of documents." (United States Patent 4237587)



Now, to put this into practice let us look at the example of a paper clip the. Paper clip is defined as a piece of bent wire or plastic used for holding several sheets of paper together. This is a common definition as we understand. Now let me also show you a claim for a paper clip there are multiple patterns on the paper clip I have just chosen one so that, you can understand the difference between a mere description of the physical embodiments, which is a dictionary which is what a dictionary definition of paper clip does. And the difference between a claim.

Now, this is how the claim looks, a paper claim made of a single piece of metal wire comprising now I have highlighted certain words and certain colors I will soon explain that we will be we will be having a more detailed discussion in the in the coming lessons

on this. An isosceles triangle base portion having a base arm and 2 isosceles arms extending from 2 ends of the said base arm respectively and contacting each other at a first connecting point, then it is one single sentence because by convention patent claims are drafted in a single sentence. And then there is a second part to the sentence, the first clipping portion having 2 clamping jaws extending apart outwardly from the said first connecting point of the said isosceles arms and bending upwardly and reversely approaching to contact each other at the second connecting point, whereby to permit a relative number of documents to be clipped there between and there is a third part.

A second clipping portion including 2 horizontal arms contact closely and parallel to the said 2 isosceles arms respectively so as to clip less sheets of documents. Now this if you see the first part of the claim which begins a paper clip made of a single piece of metal wire comprising. This is traditionally called the preamble. The other parts whatever follows are what we call the operative portion or what is what includes the invention concept.

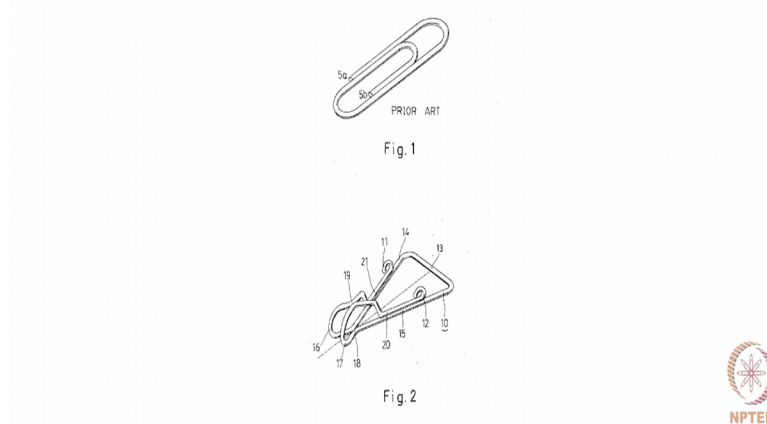
Now, the words highlighted in red are called transition terms comprising, extending, contacting, extending, bending, approaching, including what this does it it allows a transition to happen. So, it allows more information to come about a particular a particular element. Now I have highlighted in green the 3 parts of the inventive concept; there is a base portion there is a first clipping portion and a second clipping portion and I have also highlighted in purple at there are 2 connecting points, the first connecting point in the first in the second paragraph and the second connecting point.

Now, what I have highlighted in brown way by to permit and in the last line so as to clip are the purpose for which the clip is being made, to hold a relative number of documents or to clip less sheets of paper. Now this tells us and I have also given the patent number this tells us how to claim a patent for a paper clip as a concept. So, anything that comes within this, where there is a base portion which has a base arm and 2 isosceles arms and has a first clipping portion and a second clipping portion as described here will be covered by this patent. So, if there are improvements minor variations made to this concept this concept should be able to stop those minor variations or infringement as we would call it in legal parlance in the future.

So, because claims are drafted for the future it needs to be written in this language. Now you should be wondering how this particular pattern looks like.

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Paper Clip US Patent 4237587: Drawings



Now, this is how it looks like now these are drawings taken from the patent itself. So, figure one describes the prior art and figure 2 describes the invention.

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Inventions = Concepts

Do

- Identify what is needed to solve the problem in the art
- Elevate the invention to the level of a concept
- Draft the claim covering the concept

Avoid

- Explaining the physical embodiment in the claim
- Specificity in the main claim
- Implementation details



Now, the lesson that we take from here is that inventions should be equated as concepts, there are certain things which you would do to achieve that. You identify what is needed to solve a problem in the art that is the problem solution approach which will be discuss

in greater detail in the coming lessons. You elevate the invention to the level of a concept and draft the claim covering the concept. What you will avoid is explaining the physical embodiment in the claim, specificity in the main claim and implementation details. This can narrow down the scope of your invention. So, you will try to avoid it.