

Patent Drafting for Beginners
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Lecture – 40
Claim Drafting Best Practices

Claim Drafting Best Practices. Let us look at some of the best practices that you need to follow while drafting the claim.

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Aim for Broad Coverage

- Encompass all embodiments
- Avoid prior art
- What is not claimed is disclaimed
- Direct the claim to many categories (apparatus, method)
- Claim for an article
 - (1) **The article;**
 - (2) **The process of manufacturing the article;** and
 - (3) **Use of the article** (process)




Aim for the broad coverage, now this is something which you will do because once you have an invention you will have to look at all the embodiments that the invention is capable of and your description should encompass all the embodiments, you will ensure that you can only claim an invention or the scope of the claim can only be as far as the prior art will permit it to be. So, you should avoid the prior art and at the same time have a claim as broad as what the prior art will allow you to have, understand that if you do not claim something, then that is regarded as disclaimed you have given up a claim over it. So, what is not claimed is disclaimed, there are case cases decided by the courts which essentially tell you that if you have left out something, or if you have not claimed something, then it is as you do not have a right over it.

Now, try to direct the claim towards multiple classes or categories like you could have an apparatus claim you could have a method claim, and you could have different types of

method claims as well. Now a claim for an article you can have an article claim what is called an apparatus claim, you could have a process of manufacturing the article that could be a method claim, you can have a process claim or a method claim for use of the article.

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Aim for Broad Coverage

- Include claims of varying scope
(broad, narrow claims)
- Claims should not be broad to cover non-enabled
- Subject matter  ground for invalidation



Now, include claims of varying scope this is one thing which normally people would do because, once you have an independent claim which is really broad, then you can have dependent claims of varying scope because, most of the time you would not know what would be the objections that will come either from the patent office or by a competitor who wants to challenge your patent.

So, having claims of varying scope allows you to give up some claims, if there is an objection saying that the claim is over clay broad and at the same time salvage something if, you have a narrow claim which can be enforced in infringement suit. So, you could you could have claims with varying scope and this could be done using dependent claims.

Now, claims should not be brought to cover non enabled matter, now enablement or enabling disclosure as they call it, which is something which you will see in the future lectures which will cover how to write a specification the specification part. Now we are concentrating on the claims. Now you have to enable a person skilled in the art to do the invention or to come up with the invention. So, what you have not enabled you will not

be able to claim because, that could be an objection on your claim. So, you can only claim the things which are enabled. So, you have to ensure that the claims are not too broad to claim things that you have not enabled in your specification

Now, there could be a subject matter, objection or a subject matter which could be a ground for invalidation. Now we know that certain subject matters cannot be patented under the Indian patent act for instance inventions pertaining to atomic energy, if they come under section 20 of the atomic energy act, then you cannot have a patent over it. So, always be careful about while trying to claim a broad coverage for your claim, we cautious about the subject matter.

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Prepare the broadest claim

- Claim **essential elements**
- Use **dictionary** and **thesaurus**
- Should include sub-elements of the invention
- Complex machines — multiple claims directed to patentable sub-elements and substances
- **Avoid unnecessary limitations and elements** (preamble, transition body)



Now, in preparing the broadest claim you would claim the essential elements, the elements that have to be in your independent claim, you would use dictionary and the thesaurus to expand the meaning of the elements to get words to expand the scope of the elements, you should include sub elements of the invention as well we had seen that you know you they could be an element and the element could have sub elements. So, you get you can introduce the sub elements in detail in the dependent claims.

Now, complex machines normally have multiple claims covering the sub elements. So, you should whenever you are patenting a complex machine, you should factor that they could be multiple claims directed towards the patentable sub elements and substances, avoid unnecessary limitations and elements now the limitations can come in the

preamble, it can come in the transition or in the body. So, you should need to ensure that because, having a limitation in the preamble and this is a point we have covered earlier having a limitation in the preamble could mean that the claim will be read in a restrictive manner, a narrow interpretation would be given to that claim.

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Prepare the broadest claim

- Define novel and non-obvious elements
 - Compared to prior art
 - Not obvious to a person skilled in the art
- Define elements by their invention
 - Means clauses
 - “means for heating” “means for holding”



Now define the novel and non obvious elements, you can do this by comparing it with the prior art and, you could ensure that what your invention is not obvious to a person skilled in the art, define the elements by their invention because, the elements will define the invention. If it is an apparatus claim you are going to define the elements in the parts in it and, if it is a process claim you are going to define the steps. You could have means clauses by which you know which you could have a broader claim, a means for heating rather than identifying a particular heating element, or a means for holding rather than high identifying a holding element.

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Prepare the broadest claim

- Use functional language
- To describe a function of result that necessarily flows from an element described
 - “having sufficient flexibility”
 - “an effective amount of X”
- Compare broadest claim with prior art



Now, use functional language we have already covered this aspect to describe a function of result that necessary flows from the element described. Now whenever you describe element, you describe the function which flows from that element as well. Now you could broaden this by saying and these are words which have been allowed in some jurisdictions having sufficient flexibility, now what that flexibility is you can describe it later, but having sufficient flexibility or an effective amount of X.

Now, these are these gives you a broader scope because, the effective amount you necessarily have to explain what that amount it is in the specification nor in a dependent claim, but this allows you to have a broader scope. Now compare broadest claim with the prior art because, prior art will you have to ensure that there are no prior art objections at the time of prosecution, and also when the pattern if you want to enforce your patent reading, if your invention reads into the prior art, then it is a possible objection a competitor can raise against due to invalidate your patent after it is granted.

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Have claims of different classes

– Different types of method claims

- Having breadth associate with functional language
- Without structural limitations
- Protecting the replacement of a part not patentable
- Covering the performance achieved by the invention



Have claims of different classes different types of method claims, you can have having you the breath of a claim could be associated with the language you use, and the process patents or method patents allow you to have claims without structural limitations because, the elements are not the parts. So, the elements are the steps so, you are not bound by structural limitations.

You could also protect by in certain cases you could also protect replacement parts of your invention, though they may not be in patentable by covering the method of replacement, there are some issues with a form of claim which covers a method of replacing say a method of replacing an ink cartridge.

Now this has been disputed in some jurisdictions, which essentially allows the user to replace the ink cartridge, but without getting into the merits of such claiming, but this is a practice that has been done to protect the replacement of a part which is not patentable through by means of a method claim. Covering the performance achieved by the invention what is the output; what is the performance you could also cover that.

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Convert process claims to apparatus claims

- For practicing the claimed process
- Cover manufacturers

- Take process claim, add “means for” language




Now, there is an easy way to convert a process claim into an apparatus claim. So, if you draft the process claim first to convert it into an apparatus claim, there is an it is its quite easy to convert a process claim into an apparatus claim. Now you also try to cover through a process claim you can also try to cover the manufacturers of your of the gadgets that are required to come up with the invention, sometimes the invention may not be manufactured by the person whose putting it out in the market, it could be manufactured by a different person. So, by covering the process you could also have some influence in covering, the aspects of infringement where a manufacturer contributes to the infringement.

Now, you can take a process claim and add means for language to make it into an apparatus claim. So, the process claim can now be made into a product claim just by adding the means for language, we will look at an example.

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Convert process claims to apparatus claims

Process Claim	Apparatus Claim
— A method for manufacturing pen comprising:	— A machine for manufacturing pen comprising:
(a) Holding a lower casing in a selected position;	(a) Means for holding a lower casing in a selected position;
(b) Inserting a refill into the lower casing; and	(b) Means for inserting a refill...
(c) Placing an upper casing over the lower casing; and	(c) Means for placing an upper casing...
(d) Sealing the upper casing and the lower casing with the refill inside.	(d) Means for sealing the upper casing...



Now, let us look at this example there is a process claim, and let us see how it can be converted into an apparatus claim. The method for manufacturing pen comprising this is a process claim becomes a machine for manufacturing pen comprising, holding a lower casing in a selected position becomes, means for holding a lower casing in a selected position, inserting a refill into the lower casing becomes, ins means for inserting a refill and lower casing, placing an upper casing over the lower casing, becomes means for placing an upper casing and sealing the upper casing and the lower casing with the refill inside becomes means for sealing.

So, you can see the transition the holding an ING form word can be converted into a means for holding, which means it is a functional language which allows you to have a apparatus claim flowing out of a process claim, this is a quick way to convert to draft to begin with the process claim, and to convert it into an apparatus claim.

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Scope of the claim

- Add limitations to a claim without narrowing by reciting the purpose –

“efficient burning of air fuel mixture”

- Claims the environment
- Spark plug arrangement in an engine

“spark plug for an engine”

“engine that includes a patentable spark plug”




Add limitations to the claim made without narrowing by reciting the purpose. Now you can add a limitation without narrowing the scope of the claim, by reciting the purpose. We had seen this in the Bajaj patent, Bajaj patent recites efficient burning of air fuel mixture which is essentially a limitation, but it does not narrow the claim because, that is what all internal combustion engines do. You can also claim the environment in the sense that we had seen in the Bajaj case, there was an arrangement of the invention pertain to sparkplug arrangement. So, rather than claiming a spark plug for an engine, which is the way they could have claimed it, they are claimed in engine that includes a patentable spark plug or a patentable arrangement for a spark plug.

So, So what was claimed was an engine with the patentable arrangement as a part of it. So, this is a way to claim the environment; environment, in this case being the engine.

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Use dependent claims

- Have some ratio between independent and dependent claims
(1 : 5)
- Can define scope of independent claim
- Can be used to show order of steps is not relevant
- Can protect matter when parent is not patentable
- Can clarify indefinite claim language
"an effective amount of X"
"1 to 5 gms of X"



You should have some ratio between the independent and the dependent claims. Now we say this because the more the number of dependent claims try to one independent claim, it could make your invention look complex and, the examiner or the controller who is going to look at your claim, will spend more time on it and he may feel that there is that there are reasons he may feel that your invention has not come out clearly, the fact that you had to use so many dependent claims.

Now, some people say that the ratio between the independent and the dependent claim has to be 1 is to 5. Now that is left to personal choice, but understand that for claims beyond then, you will be charged separately. So, you need to bear that in mind. Now dependent claims can define the scope of the independent claim. So, we saw in the in the claim arrangement chart definition of element X.

So, you saw that there was a broad claim and the first dependent claim would explain an element or define an element. So, you could use dependent claims to define the scope of independent claim, they can be used to show the order of steps is not relevant, for instance you have a plus b plus c to achieve a particular result that can be dependent claim 2.

Now, dependent claim 3 can be a plus c plus b in a different sequence to achieve the same result. So, what you do here is to convey through 2 dependent claims that the order in which you have done things is not relevant, it could also be done through an

alternative order. So, that is one way you try to tell the world that you cannot do it in another way because, I have already covered that way as well.


To protect matter when the parent is not patentable, now you could use dependent claims which we had already mentioned in the in the context of refilling ink cartridges, you could though there are some controversies as to whether such an claim can be allowed without getting into the subject matter of them or the merit of it, you could use a way of doing a particular thing, when the thing itself cannot be patented. You could clarify indefinite claim language through the dependent claims. So, the dependent claims can clarify bring in more detail to the claim language, where the independent claim is broad and is not very definite.

Now, for instance if the independent claim has narrates or recites an effective amount of X; now there could be some issue with regard to what the effective amount is, in a dependent claim you can say, wherein the effective amount is 1 to 5 grams of X you could explain that.

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Use dependent claims

- Can show additions and alternatives
- Can focus on commercial embodiments
(what is sold)
- Foreign filings
(some countries restrict to one independent claims)
- Claims are disclosed embodiments



Now, you could use dependent claims to show additions and alternatives to the main invention, you should focus on the commercial embodiment, you should the dependent claim can be used to claim what is actually sold in the market the market embodiment, because in an infringement suit if a competitor raises an objection, challenging your patent, or seeking for a revocation of your patent that is a difference which any infringer

can take, or the infringer looks at your patent application and files for an opposition against your patent application.

Then a ground that the INF the infringer would raise is to say that your claims are too broad, and it does not match the commercial embodiment this is one way they can either challenge the claim, or they can say they are not infringing. So, what you could do is to claim the commercial embodiment that thing that you are selling by means of an dependent claim. So, you could have a broad claim as we have already discussed the broad independent claims could be at the a concept, but the dependent claim you could have few claims covering your market embodiment.

This is important when you already have a product in the market which is being sold and your application is still pending in the patent office. So, when your pattern gets granted you have an independent claim which covers the broad invention at the level of a concept, you also have dependent claims which actually covers what you are selling in the market.

So, dependent claims can be used to cover what is sold foreign filings. Foreign filings can also be important, in the sense that in some countries they restrict the filing of independent claims to one, you can only file one independent claim there are some countries which have that restriction. So, in such countries you would have multiple dependent claims to cover the broader scope and you would do that by having dependent claims. And dependent claims are also important in prosecution because, if you have features of the invention covered through dependent claims of varying scope some are broad some are narrow, then during prosecution, if there are objections you can give up some and retain the others.

Now, if your invention has embodiment says it has 10 embodiments, you have to cover all the 10 embodiments in your claim and dependent claims are a great way to do that.

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Kit claims

- Where products can be combined to achieve a particular result
- Pregnancy detection kits
 - “a kit for detecting blood sugar level comprising
The patch of claim 1; and
The measurement device of claim 20”



You could also have kit claims apart from apparatus claims and method claims. And the kit claims are used where products can be combined to achieve a particular result an off cited example is pregnancy detection kits because, they have multiple things which you will have which have to work together to get the desired result.

Now, kit claims for instance a kit for detecting blood sugar level comprising the patch of claim 1, and the measurement device of claim 20. Now this is a claim for detecting sugar level, where there is a patch already claimed in claim 1 and a measurement device which is already claimed in claim 20. So, you could it is a combination of a patch and a measurement device which makes it a kit now, you could also have a method claim on how the kit works or how the test is conducted. Now that would if it is a diagnostic kit, then there is some argument that it will not come under a method of treatment because it is a diagnostic kit.

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Number of claims and ranges

- Charged beyond 10 claims
- Claim amount and time for prosecution
- Terms of approximation – “about”
“temperature of about 100°C to about 120°C”
- Avoid a strict numerical boundary



Now, number of claims and ranges, how do you claim numerical ranges; now you could have multiple dependent claims, but anything beyond 10 claims you will be charged, separately for that and the patent office you normally charges it is fee based on the time it spends. So, if it has to read more than thirty pages you are charged for that, if it has to analyze more than 10 claims then again you are charged extra for that.

Now, for numerical ranges it is advisable to use about because you are not in some cases you are not exactly sure about, what is the precise numerical or number at which a particular thing happens for instance, temperature of about 100 degree centigrade to about 120 degree centigrade because, the reaction may happen before 100 or even before 120 or soon after 100. So, if you are not sure about where the reaction is happening, then you could use an approximation.

Now, try to avoid strict numerical boundary because, if you use a very strict numerical boundary then you are claiming only that, if you say that 7 for some number or some for a range which could be between 5 and 10. If you are precisely claiming 7, then your limit is that number. So, you can only use that numerical boundary, you cannot claim anything below 7 or above 7. So, it is preferable to avoid strict numerical boundary.

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Number of claims and ranges

- Avoid precise numbers in numerical limitations

“from 100.00°C to 120.00°C”

- Better “from 100°C to 120°C”

- Use functional language instead

“heating the elements sufficiently long”



You should also avoid precise numbers in numerical limitation for instance, if temperature is defined using a decimal, as is in this case from 100.00, 120.00 it should be there will be some significance attributed to what follows the decimal rather it is better to claim it this way, 100 degree to 120 degree.

Now, you could use functional language like which describes the function heating the elements sufficiently long and, you can describe what sufficiently long in is in dependent claims, they are sufficiently long can be a range of a temperature. So, the functional language allows you to capture a broader group broader part of your invention.