

**Patent Law for Engineers and Scientists**  
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**Lecture - 17**  
**Patent Specification**  
**Reading a Patent Specification**

“Reading a patent specification” we are already seen the structure of the patent specification that there is entitled, abstract, description claim. We had seen format which is in normally filed in the US patent office and we had also seen an Indian patent specification. Now how we known this structure it should be much more easier for us to read the patent specification because the patent specification is a document that is created by group of people patent attorney in coordination with the inventor. So, over the US there are some conventions that have developed as to what can come within a patent specification, and there are certain techniques or requirements which have to be satisfied while drafting these documents. So, let us look at how to read a patent specification and let us also see; what is the function that the patent specification performs?

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**Concepts in Specification**

<b>Prior Art</b>	<b>Internal Requirement</b>
• Novelty	• Enabling disclosure
• Inventive Step	• Best method
• Utility	• Definiteness
• Priority	• Fair Basis
• Subject Matter	• Single Inventive Concept



Now before we look at the patent specification, we have to see that there are certain concepts in a specification; though the specification is a document we need to understand certain concepts in patent law, which come in repeatedly in the patent specification and

unless we have a good grounding on these concepts it may be very hard for us to understand what function is being done by this specification.

Now, we divide these concepts as prior art or requirements that a patent specification should address with regard to the prior art, and internal requirements. Internal requirements are requirements that the patent specification has to address within the document itself. So, you can call them external requirements and internal requirements, we are using the word prior art because prior art is the reference point when it comes to knowledge. So, there is some knowledge that is contained in the patent specification, and there is the comparison that is being done by the applicant to the prior art, you saw that field of invention background of the invention these are all instances where the applicant would bring in some amount of prior art or prior knowledge to say that there was a problem in some cases as we saw in the combination when, there was a problem in the prior art and the invention solve that problem which is what we call that problem and solution approach.

So, the prior art there are the patent specification has many concepts and these concepts are established concepts in patent law, which figured within a patent specification. Now let us look at those concepts in detail. Now on prior art first thing that the patent specification should satisfy his novelty, the claim drafted in the claim part of the specification should be novel. Novel means that the invention should be new, what is claimed has to be new and it should not be anticipated by the prior art. Anticipated means there is a disclosure and the disclosure completely has all the elements all the integral elements or the technical features that is covered in the claim. If the claim has five technical features and the prior art before the claim was filed at disclosure in another document before this data filing of the claim.

If the prior art completely mapped all those five technical features, then we will say the invention is anticipated by the prior art. So, when the invention is anticipated by the prior art we say there is lack of novelty or there is no novelty. So, novelty is something which has to be satisfied in this specification itself. So, if you draft a specification which overlaps on a existing prior art, though you may have done a good work in drafting the claims; if you have not the check with the prior art then there could be a possibility that the claim that you have drafted all the essential technical features have already being

disclosed in another prior art, and because it was disclosed in another prior art your claim would lack novelty.

So, novelty is something which has to be demonstrated in the claim part of the specification, and it has to be compared with the prior art. Inventive step: just as novelty has to be satisfied by the claim, the claim should also satisfy inventive step. An inventive step is much more stringently artistic than novelty because in determining an inventive step we looked at the invention from the view point of a person skilled in the art it should not be obvious to a person skilled in the art. So, again you find that the specification will have to consider the prior art and it has to the claims have to be drafted in a way it is not obvious to a person skilled in the art. Utility: utility is the fact that the invention is capable of industrial application that in the other word for it is utility.

Utility is not a comparison with the prior art, but further to be utility we have to it has to be understood from the use to which the invention can be put to. If the prior art has a particular use you are going to claim that one of the objective is to use this invention has in different objective which is the prior art did not address or if the prior art had a problem the use of the invention solve that problem. So, again there could be some comparison between the prior art in demonstrating utility, utility is also called the third requirement which is also known as capable of industrial application.

Priority claims when they are filed for them to be valid they should have a valid priority, valid priority in the sense that they should not be any prior disclosure before the point on which the claim was drafted. So, priority every claim has a priority; we will see that in section 11 that each claim will have a priority and the priority of a claim can either be referred back to an earlier document or it can also be priority can also be given up and claims can be postdated, antedating and postdating we will look at that in greater detail in the forth coming lectures.

So, priority is again to determine priority there has to be if there is a prior art the prior disclosure before your date of priority, then that could be used as a prior art for in validating the invention. So, priority is a concept which is outside the specification, but never the less in drafting you will have to consider it. Subject matter: whether the claimed invention is a subject matter that is excluded or not is going to be a comparison with something it is going to be an external comparison, for instance there are certain

subject matters that are excluded from being granted a patent a literary or an artistic work cannot be granted a patent.

So, that is a subject matter exception and subject matter will determine what kind of protection you will get. That also a requirement that biological materials have to be disclosed and there is a requirement for depositing biological material. Now that has to figure in the complete specification though it is something external if the biological material is available in the public domain, you have to refer it in an identifiable manner or if it is not available then you will have to deposit before a depository. With regard to the internal requirements there is a concept called Enabling disclosure. So, in the descriptive part you are going to describe the invention with examples with illustrations, drawings and showing how the invention works.

Now, the standard of disclosure is that the disclosure should enable a person skilled in the art to come up with the invention, to make the invention. So, there is a particular standard, you cannot just have a skeletal disclosure or a barred disclosure without getting in to the details; which if a person skilled in the art asked reject will not be able to come up with the invention. So, the disclosure in a patent specification should be of such a standard that the person skilled in the art who reached the patent specification need not come back to the dept with any doubt. So, it has to be a complete disclosure and the disclosure should also enable the person to come up with the invention.

So, the descriptive part will have illustrations if a person skilled in the art looks at those illustrations, he should be able to work the invention as it is described and come up with a invention as a product as an end result. Best method: section 10 requires the disclosure of best method, best method of working the invention has to be disclosed again it is an internal requirement, enabling disclosure it is an internal requirement, if the disclosure that is done in their specification is not enabling that can be a ground for revocation.

Similarly, if the best method is not disclosed, it could again be a ground for revoking the patent. Definiteness: again it is a requirement under section 10; it requires the claim as it is claim to be clear and succinct. So, definiteness requires the claim to be clear and succinct there cannot be ambiguity in the claim, if the claim is ambiguous again it can be a ground for rejecting the claim that is an internal requirement. Fair basis: again it is a requirement under section 10 the claims have to be fairly based on the matter disclosed.

Now, we had seen earlier that the patent specification broadly has two parts the descriptive part and the claim. So, whatever is claimed in the claims part should be based on something that is disclosed in the specification, what the act says section 10 says on the matter disclosed in the specification. So, the fair basis is requirement that you cannot claim something which you have not disclosed. So, you should disclose something in the descriptive part and based on the disclosure you should make a claim. So, if there is a claim which incorporates an element or a part which is not disclosed or explained in the descriptive part, then we say the claim is not fairly based on the description.

So, the claims have to come from the description. Now the claim you can one analogy or one example that will help you understand the claim is like prayer that you make in a suit that you file before a court. If you file a complaint or a petition as a petition of before the court normally you will request for a prayer you will ask the court for a relief the relief will be in the form of a prayer. If you have a dispute between your neighbor if the dispute pertains to land say your neighbor as encroach on your land. So, your prayer will be to injunctive to stop him from encroaching and to claim back the land that he has encroached these are going to be the relief that you claim.

So, the prayer or the relief that you claim are going to be based on what you have pleaded in your case what you have pleaded in your petition or your complaint. You may not ask for a relief without giving the factual circumstances for claiming that relief. You cannot ask for your neighbor to be arrested because you have not pleaded a case as to what wrong here done for which he should be arrested, because the civil consequences will be different from a criminal case.

So, you cannot ask for any relief that is unconnected to what you have pleaded in your petition or in your complaint. Similarly you cannot claim something that is unconnected to what you have described in your descriptive part of the invention. So, this is what we say fair basis; the claim should be fairly based on the matter disclosed in the description. So, if a claim contains something which is not disclosed in the description that could be a ground for invalidation, section 10 also says that an invention should be contained in a single application, one application per invention.

If there are more than one invention then there has to be a similar number of application. So, there is a single inventive concept or the fact that each application should only

contain one invention. So, if you have multiple inventions and you combine all these multiple inventions in one single application, then the patent office may require you to divide the application depending on the number of inventions you have included in a single application and perceive them as separate independent applications. So, from this we understand that there are certain requirements that the specification has to satisfy some of which are compared with the prior art or what we called external requirements and others are what we called internal requirements.

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## Priority and Length

- Length of Patent
- Priority: Determines Length
  - Different for Each Claim
  - Multiple Priority
- Revocation: Also determines length
  - Non-payment of Renewal fees, Opposition, Surrender, Revocation etc



Now, priority is a concept that is type to the length of the patent; length of the patent is the time during which the patent remains valid and enforceable from the date of the application till the date the patent expires is what we called the length. Priority determines the length the length of a patent is determined by the priority. So, when you get the priority you start you can determine the length of a patent the time period during which it is valid can be ascertained. Each claim has a different priority we will see in section 11 that the priority for each claim will be different and there can also be cases where there are multiple priorities, claims can also have multiple priorities.

The length of a patent is also determined by revocation because normally the patent will be alive if the patentee raise the renewal fees over a period of time, it would kindly kept alive for 20 years from the date of application. But if 3 is a pall challenge to the patent and if the patent gets revoked, then the length of the patent gets shortened. Patent may

also the length of a patent may get shortened even if the renewal fees are not paid on time then we say that the patent has lapsed if there is opposition then the patent term may again the length may short shortened or if the patentee voluntarily surrenders the patent or if it is revoked in proceedings; now these are multiple instances where the length of the pattern can be affected.

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## Parts of Specification

Parts	Function
Title	<ul style="list-style-type: none"> <li>Indicates the subject matter of the invention [S.10(1)]</li> <li>Disclose specific features of the invention <math>\geq</math> 15 words [R.13(7)(a)]</li> </ul>
Abstract	<ul style="list-style-type: none"> <li>Provide technical information on invention [S.10(4)(d)]</li> <li>Can be amended by Controller for providing better information</li> <li>Concise summary <math>\geq</math> 150 words [R.13(7)(c)]               <ul style="list-style-type: none"> <li>Indicate technical field</li> <li>Technical advancement to existing knowledge</li> <li>Principal use (exclude speculative use)</li> </ul> </li> <li>Efficient instrument for searching in a particular field</li> </ul>



Now, let us look at the parts of a specification; the title performs the function of indicating the subject matter of the invention and discloses this specific feature of the invention in not more than 15 words. So, you can see the section and the relevant provisions; the abstract provides technical information can be amended by the controller is a concise summary not more than 150 words, it indicates a technical field a technical advancement to existing knowledge, principle use and it is used as an efficient instrument for searching in a particular field.

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## Parts of Specification

Parts	Function
Description	<ul style="list-style-type: none"><li>• Every Specification shall describe the invention [S.10(1)]</li><li>• Drawings shall be a part of specification [S.10(2)]</li><li>• Describe operation, use and method of performing</li><li>• Disclose the best method (known to applicant)</li><li>• Biological Material: Deposit under Budapest Treaty within 3 months from date of filing application [R.13(8)]</li><li>• Background, prior art, problem solved, contribution made</li></ul>



Description: now the descriptive part of the patent every specification shall describe the invention, drawing shall be a part of the specification, describe operation use method of performing which shall disclose the best method known to the applicant, and if biological material is there then the deposit under the Budapest treaty within three months from the date of filing the application. These are the requirements that the descriptive part has to satisfy. The background prior art problem solved and contribution made these are the different headings that you normally find in a description which you had already seen in the U S patent that we had shown you.

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## Parts of Specification

Parts	Function
Drawings	<ul style="list-style-type: none"><li>• Shall accompany the specification, separate A4 sheets [R.15]</li><li>• Provisional Specification can have drawings [R.13(4)]</li><li>• Complete Specification can refer to drawings filed in Provisional</li><li>• Dimensions shall not be marked on the drawings</li><li>• No descriptive matter, except in flow diagrams</li></ul>



Drawings they shall accompany the specification they shall be in separate A4 sheets that is a requirement under room 15. The provisional specification can have drawings the complete specification can refer to the drawings filed in the provisioning, dimensions not to be marked shall not be marked in the drawing, no descriptive matter except for flow diagrams we are already mention this.

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### Parts of Specification

Parts	Function
Models and Samples	<ul style="list-style-type: none"> <li>• Controller may insist on Models and Samples</li> <li>• Inventions relating to perpetual motion</li> <li>• Shall not be a part of specification [S.10(3)]</li> </ul>
Claims	<ul style="list-style-type: none"> <li>• Specification shall end with claims [S.10(4)(c)]</li> <li>• Define the scope of the invention</li> <li>• Protection is claimed, what is enforced</li> <li>• 30 pages, 10 claims: No fee [First Schedule, Entry 2, Form 2]</li> <li>• Each claim in addition to 10 charged</li> <li>• In one sentence</li> </ul>



Models and samples in the controller may insist on models and samples models and samples are not mandatory. Invention relating to perpetual motion or the manual says that if somebody claims an invention for perpetual motion the patent office may insist on a working model. The models and samples shall not be a part of a specification, where as drawings are considered to be a part of the specification. So, it is a difference between models and samples and drawings. Claims: the specification shall end with the claims.

As we said the concluding part of the patent specification is the claim, they define the scope of the invention the protection is claimed for what is in the claim, and that is what can be enforced and normally the claims have to be that the minimum number of claims that you can have without paying any extra fee is 10 claims. So, any claim more than 10 will incur our extra fee, and the specification length the descriptive length shall be 30 pages. Each claim in addition of 10 shall be charged the claim by convention is drafted in one sentence we are already seen an example of that.