Intellectual Property Prof. Feroz Ali Department of Higher Education Indian Institute of Technology, Madras

Lecture – 21 Patents in India

(Refer Slide Time: 00:13)

Introduction to IPR

- IPR as a group of rights
 - Creative labour
 - Confer exclusivity to right holder
 - Exclusive rights to make, sell, etc.
- Real Property v. Intellectual Property

In the case of Patent Rights, you need to go through a process of registration.

(Refer Slide Time: 00:15)

Patent Rights

- Patent Prosecution
 - File patent application
 - Scrutinize application
 - Patent Grant
- Patent Enforcement
 - Prevent infringement
 - Courts



Now, the process of registration starts with a person filing a patent application before the patent office and the patent office scrutinizing the application for certain checks and later on, the patent office granting this application into a granted patent, this process the application goes from formal application and it materializes into a grant is what we call patent prosecution. Once the patent is granted, then the enforcement of a patent which refers to steps taken by the patent holder to ensure that the patent is not violated, the right in the patent is not violated by others which is what we refer to as infringement.

The enforcement part happens before the courts. So, the patent office or the intellectual property office, the task of the intellectual property office is to scrutinize the patent application and grant a patent, whereas, the courts or a judicial system is entrusted with the task of enforcing them. So, if there is an infringement of a patent, the patent holder will have to file an infringement suit before the courts.

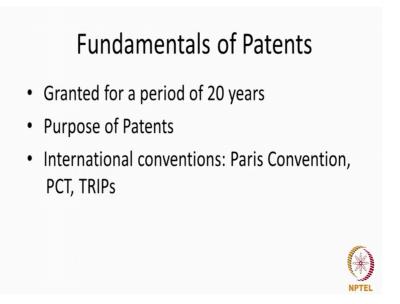
(Refer Slide Time: 01:31)



Fundamentals of Patents; patents offer an exclusive monopoly right. This right is conferred by the government and it is for a period of 20 years from the date of application. The exclusive right pertains to the right to make sell, use, offer for sale or import the invention. The exclusive right is actually a right to exclude others.

So, there you have a right to exclude others from making, selling, using, offering for sale or for importing the invention that is covered by the patent. Patents are territorial, in the sense that if the Indian patent office grants a patent, it is not enforceable in Sri Lanka or Bangladesh or Pakistan or any of the neighboring countries. So, patents are granted by the local patent offices and because they are granted by the local patent offices, the territory of it their operation are also limited to the jurisdiction of those offices. So, an Indian patent can only be enforced within the boundaries of India.

(Refer Slide Time: 02:37)



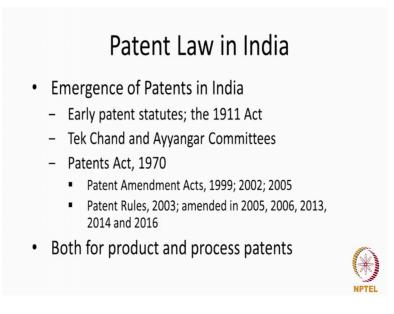
They are granted for a period of 20 years. Patent serve different purposes. Now, the object of a patent or the grant of a patent could be to identify area and technology and to do further work.

So, filing a patent gives the patent t or the patent owner, the right to work in a particular sphere to the exclusion of others. So, whatever products that can come out of that technological area can now be carved as a right by the patent holder. Patents are also seen as instruments that can incentivize innovation by offering a limited monopoly for the inventor. The patent system actually incentivizes people to take risky tasks like spending time, effort and money in developing inventions.

In a world without patents, it would be very difficult for people to invest time and resources in coming up with new inventions. In a world where there are no patents if a person comes out with an invention, there is all likelihood that a competitor could steal it or copy it and enter the market.

So, patents grant a protection for people who would invest time and effort in creating new things. As we mentioned, we derived this regime through certain international conventions like the Paris convention, the trips agreement which stands for trade related aspects of intellectual property rights which is a part of the WTO, the world trade organization and also we have some arrangements between countries to facilitate patent filing internationally like the Patent Cooperation Treaty, the PCT.

(Refer Slide Time: 04:35)



As we mentioned before, the patents act in India came as a British import. The Britishers when they were ruling the country, they had brought in the patents act of 1911 which was largely the British act itself, but soon after independence, it was felt that because patents are tried tied closely to the development of a nation, it was felt that India required it is own patent law.

So, post-Independence, there were two committees led by experts the Tek Chand committee and the Ayyangar committee which were established to study whether the existing patent regime which was a 1911 Act suited the national interest and more particularly at the stage in which India was a newly independent country and trying to make it is place firm in the global economy and it was found by both the committees that the patent act as it existed does not favor, local and national development. So, there was a proposal by the Tek Chand Committee followed by the Ayyangar Committee to revise

the patent laws. And the 1970 act which is the present act that we have came as an exercise that was suggested by taking all the measures the committees had suggested.

So, the 1970 act for the first time, it removed product protection for medicines. Earlier the 1911 Act had offered product protection for product patents what we called product patents for pharmaceutical and drugs, pharmaceuticals and drugs. Now, this was removed by the 1970 act. The 1970 act also made some substantial teen changes in on the term of the patent the term of a patent was 14 years and the term of a patent for a food medicine or drug was a shorter period. It would vary between five to seven years and they were also host of provisions on compulsory licensing which was introduced by the 1970 act. The 1970 act was after India became member of the world trade organization in 1995, the act came to me amended three times, in 1999, in 2002 and in 2005. These were all amendments that brought the act in compliance with the trips agreement of the WTO.

The trips agreement being an international agreement, it brought a common standard on various things; for instance that trips agreement brought in and the trips agreement was actually a product of close to 8 years of negotiations between the member countries. It brought a common standard that the term of a patent shall be 20 years from the date of application. India earlier had a 14 year period for inventions in general and a shorter period for patents inventions pertaining to food drug and medicine.

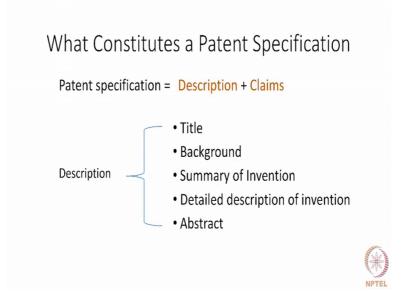
Now this had to be changed. So, apart from this, the fact that the Indian patent regime did not grant product patents for drugs and pharmaceuticals was also to be done away with. So, the Indian patent system went through a series of amendments to the patents act in 1999, followed in 2002 and later on in 2005. These three sets of amendment brought the Indian law in complete compliance with the trips obligations.

Soon after amending the act, the rules were also amended. Now, the rules are subsidiary to the act, they perform they are what we call delegated legislation, the central government has the power to make the rules, whereas, the acts have to be acts that are passed and both the houses of the parliament.

So, we had a substantial turnover in 2003, where new rules were frame. These rules were amended in 2005, 2006, in 2013, 2014 and lately in 2016. So, with the amendment of the patents act in 2005, we now offer product and process patents irrespective of the

technology. Earlier, there was a distinction that product patents need not be granted for drugs and pharmaceuticals, now that is gone. So, the two kinds of patents broadly that can be granted under the Indian patents act are either for a product or for a process.

```
(Refer Slide Time: 09:07)
```



So, the patent specification includes the description and the claims. So, the descriptive part along with the claims is what we call or refer to as the patent specification. Now, the description itself has many parts; it has a title, it has a background, summary, detailed description, abstract and drawings also become a part of the detailed description.

So, this tells us that the description comprises of various parts. The title there is a statutory requirement up on the title, background and summary are requirements which are regarded as a part of the descriptive part to which we will now turn our attention.

To Whom is the Patent Addressed to

 "Patent specifications are curious documents in that they are written by a group of experts (patent agents), embody the rights of a group of creative people (inventors), are addressed to a hypothetical group of skilled persons (persons skilled in the art), and may, if the case so demands, be interpreted and constructed by a legally trained group of persons (examiners and judges)."

- The Law of Patents, LexisNexis, 2007

• Person skilled in the art—hypothetical construct

• Section 10(1) "...shall describe the invention.."

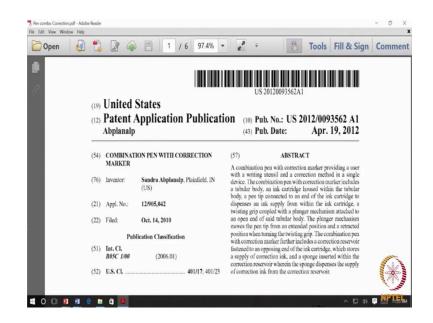
To whom is the patent address to? The patent is addressed to a variety of people. Now, I had mentioned this when I wrote my first book in 2007. Patent specifications are curious documents in that they are written by a group of experts patent agents, embody the rights of a group of creative people inventors, are addressed to a hypothetical group of skill persons whom we call the person skilled in the art and may if the case so demands be interpreted and constructed by a legally trained group of persons, examiners and judges.

Now, you can see that patent specifications are not addressed to one set of people and you could add many more to this group, you can have angel investors who are interested in looking at a startup which has a patent, you could add consultants who would value intellectual property intellectual property value verse, you could have financial people who want to gauge a particular intellectual property before advancing a loan or before giving making some kind of an investment into the company.

So, you could have a whole lot of people who could be interested in a patent specification but technically, the patent specification is addressed to a person skilled in the art whose which is a hypothetical construct because a person skilled in the art at times could be a group of people, it could also be a group of people working in different parts, it could be a group of people who have different skills which are brought together only for the purposes of interpreting a patent specification.

So, it is a hypothetical construct because if the invention combines technology from three fields, then you will have to assemble hypothetically that is you do not actually do that assemble a group of people who will have taken a skills from all the three fields of technology. So, it is from that perspective that the patent is constructed.

(Refer Slide Time: 12:15)



Now, what you have here is patent that is filed before the United States patent office. We are using this as an example because these are the published patent applications and for the sake of illustration, the patents published by the United States patent office are much more descriptive and it is easier to understand the various parts of the specification, following this we will also be showing you an Indian application so that you can understand it is by and large the same, but the formatting in which the patent specification is done by the US patent office is much more easier to understand and it has all the details in one place.

So, you will find these numbers next to United States 1912, then there is 1043 all in brackets 54, 76. Now, these are universal codes which are used by patent officers regardless of the office in which the patent is granted. So, code 76 will be for the inventors name, code 22 will be for the date on which it is filed, then, code 57 will be for the abstract. The advantage of these codes is that regardless of in what language the patent is written. Now a Japanese patent will be written in Japanese language. So, for the

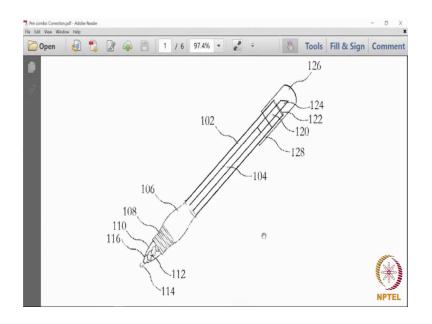
Chinese patent in the Chinese language, European patents could be in French, it could be in English.

So, you find that because there are patents are written in different languages, these universal quotes helps us to navigate these documents even if it is in a foreign language for us at least to understand what is there, I mean if with regard to numbers publication date 43, you quickly see the code and you will know that that is the publication date. So, the universal codes are used in different specifications by different patent officers but the code the numbers tend to remain the same. Now, and this is what is known as bibliographical detail. Bibliographical detail will give you the details about what are the bibliographical details about the patent; the inventors name, application number, the date on which it was filed, the classification, the title, patent office in which it is filed, you will also see a barcode which is for administrative purposes, the US office has also given a barcode.

Now, you find the abstract also the abstract as we had just seen in form 2 comes after the signature and date in the Indian form 2, it comes after, but here it is presented in a different way. The abstract is presented up front. Now, the abstract describes a combination bit with correction markup providing a user with a writing utensil and a correction method in a single device and it further describes what the abstract is. Now, the abstract we had seen has a particular function.

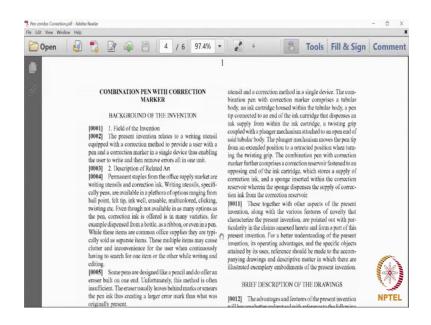
We saw that in rule 13, we had seen rule 13, 7 a and b what are the functions of the abstract? Now, abstract the world over perform similar function they describe the invention and it is a concise summary and they indicate the technical field to which the invention belongs, it describes the technical advancement principal use of the invention and if it is a chemical substance, it also may contain a chemical formula. So, this is the abstract. Now, let us see what else is contained in the patent specification.

(Refer Slide Time: 15:47)



For most mechanical devices, you will find drawings now here is a drawing. Now, the drawing will figure first, this is a further drawing, figure 1 and you find that there is a figure 2 and all the drawings will be cross referenced.

(Refer Slide Time: 16:06)



Now, we come to the patent itself. Now, the written part, you will find that there is a title combination pen width correction marker. Now you can note this number US 20120093562A1 and you can search it on Google, google dot com slash patents which is the patent database search for provided by Google or you could go to the US patent

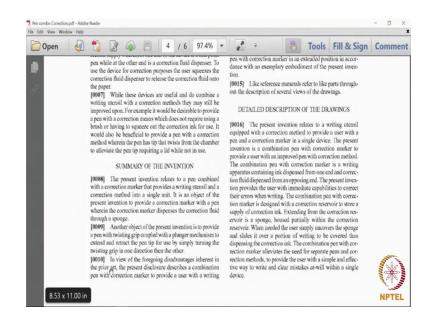
office website and you can search for these numbers and the numbers will throw up these documents. So, if you want to search any other patent, you could go to google dot com slash patents and you could write the title of the invention or the if you have the claim, then you can write the claim, there is an advanced search feature. So, it will throw it will give you these documents. So, now, here you will find that there is a title combination pen with correction marker. Now, the first section of the specification will be a descriptive section.

So, if you have to classify the specification into two parts; you will just say the specification comprises of two parts; the descriptive part and the claim. So, the descriptive part has various subheadings. So, the descriptive part and we had already seen that the patent specification shall start with the title they shall be an abstract, they shall be a descriptive part, then they say there shall be claims and then they shall be the signature I mean we saw that in the form, form 2.

Now, the background of the invention may start with the field of the invention, the field of the invention will tell you to what field of technology does the invention belong to. Then, it may also have a heading called description of related art because inventions are never created in abstract. There is always a prior knowledge or a prior art or a relevant art for the invention, they could be description of prior art. The description of prior art could be general statements as you can find here or it could be specific statements like referring to an earlier patent or referring to a patent number or to a scientific article or a research publication.

So, description of the related art could be through reference or it could also be through a general way as it is described here.

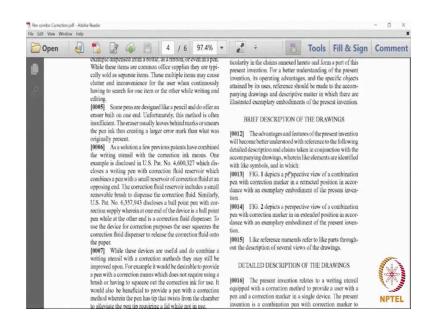
(Refer Slide Time: 18:41)



So, you find some background given then, you have the summary of the invention. So, till para 7, what was described was and you can see here US patent number 635943. So, that is a description to an earlier existing invention, what we call a prior art. So, prior art references can be, you find another description to a patent number here 4600327, again an existing invention which is related to this. So, you could have a broad description of the prior art without specific references or you could also have specific references of prior art which have already been patented as you can see here.

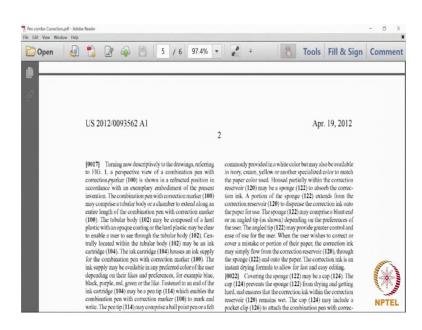
Now, para 7 ends with the state of the prior art, what is that existed before this invention came into being. Now, summary of the invention we will talk about the invention the present invention relates to a pen so and so. Now, it will describe various objects, now you can see that it is an object of the present invention another object and in view of the foregoing this advantages inherent in the prior art. So, the prior art we understand the prior art to have certain disadvantages and we can understand that this invention overcame those disadvantages. So, the summary of the invention will have the objectives and the problem that was solved, problem as in the problem in the prior art that was solved. Now, following the summary of the image, there is a brief description of the drawings.

(Refer Slide Time: 20:10)



Now, you saw a figure 1 and 2, now figure 1 is explained, here figure 2 is explained here. This is a description of the drawing, in words they are all perspective view. So, perspective view drawing there are cross section view drawing split view drawing blow up. There are different kinds of drawings that can be that can accompany a patent. Here, you have the perspective view drawing. Now, following the description of drawing, the next heading will be detailed description of the drawing. Now, in the detailed description, you will actually tell how the device is constructed, what are the parts, how the parts work with each other. This is the detailed description.

(Refer Slide Time: 20:58)



Now, in the detail description, you are going to find these numbers correction marker in bracket 100, correction mark and 100, tubular body 102. Now, if you go back to the drawing, all these parts were marked in the drawing 100, the correction mark and 100. Now, the in the drawing they are not described, I mean they are not explained in the drawing that is a requirement in patent law. You cannot have written statements or written descriptions in the drawing. The drawing can only be number unless it is a flow diagram. If it is a flow diagram and we saw that in rule 13, the only place where you can have words within a drawing is in the case of a flow diagram; other than that, the drawings will only bear numbers.

So, because these numbers are there, then you have a detailed description of the drawings, the drawings will actually cross refer those numbers what we just saw here. So, these are all the cross references; tubular body is 102. Wherever tubular body is repeated, you repeat the number, in cartridge is 104, pen tip is 114 and so on.

(Refer Slide Time: 22:07)

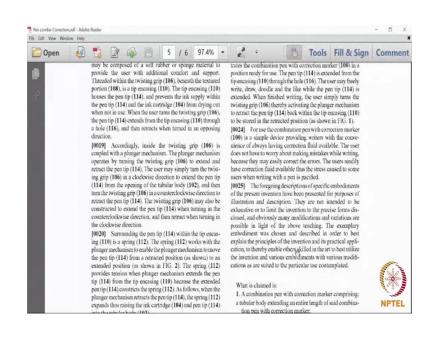
🗁 Open	iaw Help	-	2	4	自	5	/ 6	97.4	% •	2	÷	1	35	Tools	Fill	& Sign	Comme
		may co entire le (100). plastic plastic plastic to enal trally l cartridd for the cartridd for the black, k ink sup depend black, k ink care combin way b includ tip pen (0018) may b includ tip (111 contoi correte may b providd providd Thread potion houses the per	mprise a ength o. The tub withan or withan or ength or the tub ele a use occuted withan equilation of the period aution property of the period aution property of the period Attack of the period attack of the period attack of the period attack of the period attack of the period attack of the period attack of the period atta	a tubular of the cor opaque copaque (1) to see the second opaque (1) the second opaque (1	action period action period poly of the poly of the poly of the poly of the poly of the poly of the poly of the poly of the poly of the cartridge the poly of the	a chaml a pen w may be the habit r body r body preference wike. Fasa to the full orrectic deference wike. Fasa to tip (11) m mark the twi at a port of the twi at at a port of the twi at at a port of	ber to e ith come compred plasti alar boo (102) 1 houses on mark erred cc es, for terned to houses on mark erred cc es, for terned to houses tion clc s where combine e two string g tion clc s where combine e two he to pomfort h, benea he tip o the in he tip o the et wist r spong montri the et wist cc cossing g the et houses s where combine to cossing g the cossing g the cossing g the cossing g the cossing g the cossing g the cossing co	stend aloo ection m ussed of a a mask of the stendard state of the stendard manual state of the stendard state of the manual state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t	ag an urker hard clear Cen- ink pply The user slue, f the user slue, f the s the a felt 102) may ppn with 1063 port. ured 1106 port. ured 1006 port. ured 1	correctifier or an an at the user. The or an an at the user. The or an an at the user. The order of the order	an reservor for use. gled tip (1) The angle tips for the angle tips for the angle tips for the angle tips (120) ray (120) pryving for Coverin p) prevents (120) ray (120) ray (1	vir (120) ti fle spongarding and spongardin	o disper ge (122) depend 2) depend 2) may pp 4) depend 4) depend 4	c (122) exite the correct of the	tection initiates and the second seco	k outo di ces of ovland meter on ink ki si an bis bis bis bis bis bis bis bis bis bis	NPTEL

So, it is just how so, you when you see these numbers you know you can look back into the drawing and understand which part of the marked drawing is the part that is described here.

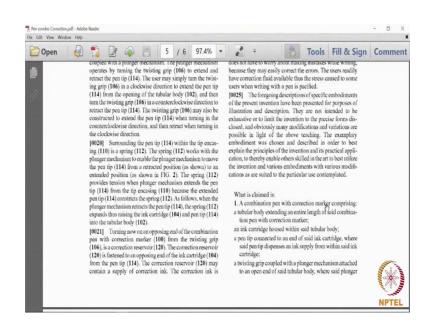
So, tubular body is 102, so on and so forth, you will understand that. Now, this description of the drawing because it is a mechanical invention, there is no illustration required because the description of the drawing itself describes it. Whereas, for a

preparation of a chemical substance, you will find examples or example 1, 2, how this is prepared, the different methods by which it can be prepared and if there is a disadvantage in a particular method that advantage is described. So, illustrations and examples are normally there where there is a method involved in preparing something, say a chemical substance. In this case, you do not find that because this is only a mechanical invention and the descriptive part has described it.

(Refer Slide Time: 23:07)

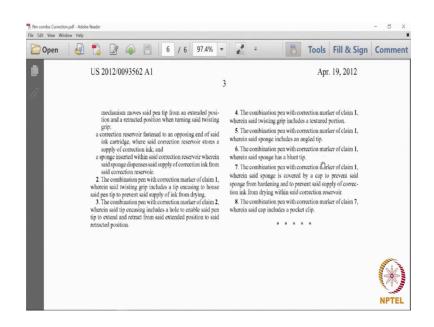


(Refer Slide Time: 23:12)



And finally, you have the claim. The claim in a US patent begins with the statement what is claimed is. In India, it is I claim or we claim; what is claimed a combination pen with correction marker comprising. Now, comprising colon if you can see that now comprising colon allows you to split a sentence into various components, you can see that there are various crosses here ha ending with semicolon and finally, you have and you have the clause ending with a full stop.

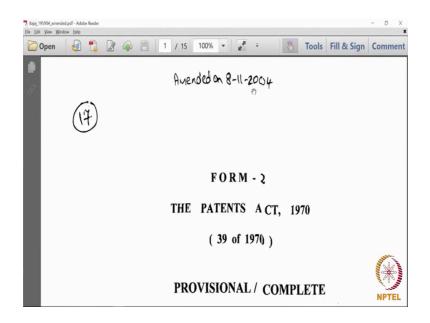
(Refer Slide Time: 23:42)



So, by convention, no matter how complicated, the invention is claims are written in one sentence. It is a convention, it is followed over the world all over the world. So, by convention claims are written in one sentence. Sometimes, if the invention has multiple parts and if the parts interact with each other in a particular way, it takes time for people to understand that. So, that is why you will find that colons and semicolons are used to show that there are different clauses.

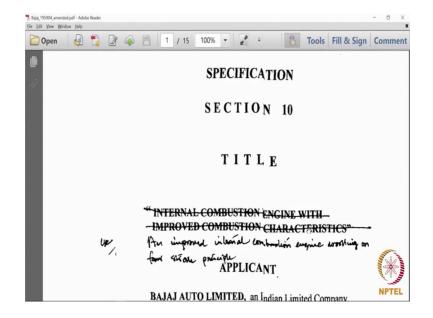
Now, let us look at this is a US application and you saw the structure of the US application. Now, let us look at an Indian application.

(Refer Slide Time: 24:35)



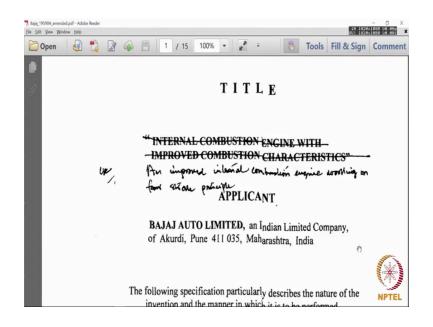
Now, this is how form 2 looks. Now this is an application which was amended or in a particular date, the form there is provisional complete depending on which who you use, you will strike off the other.

(Refer Slide Time: 24:45)



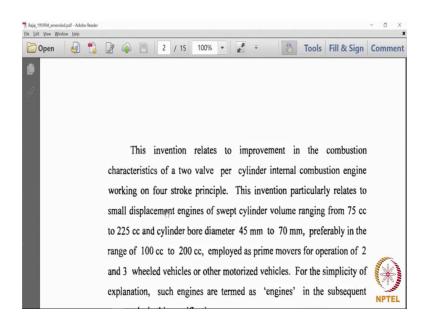
And there is a title, the title was amended. So, you can see that it was struck off and it was written back again and the applicants name is here.

(Refer Slide Time: 24:57)



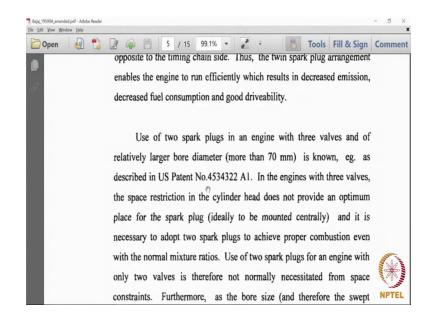
Now, we are using this as an example because this patent resulted in the Bajaj, TVS. dispute which is now pending before the high court at Madras.

(Refer Slide Time: 25:04)



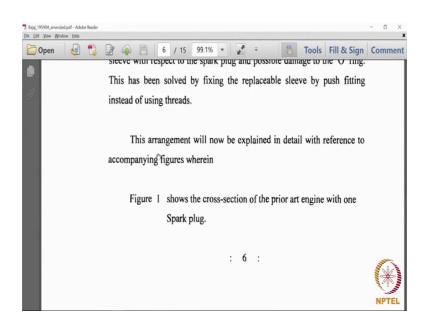
So, it starts with the description, you do not find the headings which you found in the US patent application. It just starts the invention relates to, but we understand the field of invention it, we can understand this to be in a order in a particular order though the subheadings are not here.

(Refer Slide Time: 25:27)



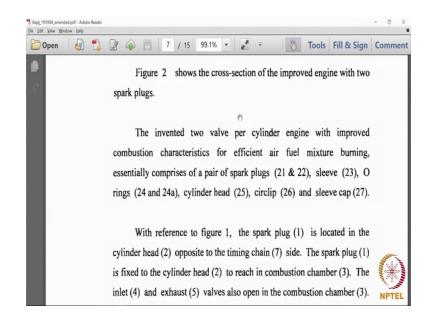
Now it just starts it describes the invention how it works, there is a cross reference to a US patent, you can see that 4534322 and you have figures here.

(Refer Slide Time: 25:37)



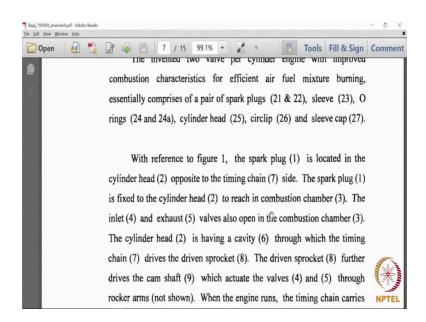
What we saw the brief description of the drawings figure 1 shows figure 2 and there is a detailed description of the drawings. So, what you find in parentheses, in brackets are the parts that are, we do not have the drawing here drawing is in a separate document.

(Refer Slide Time: 25:45)



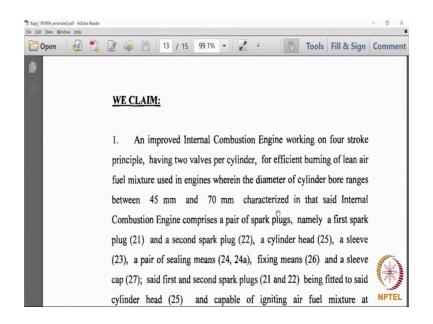
So, the parts that are spark plugs are number 21 and 22, sleeve is number 23, the similar. So, I am just now you will get a picture. What you saw in the US application which had particular subheadings though the Indian application do not have those subheadings, nevertheless they still follow the same scream scheme. So, reference to figure 1.

(Refer Slide Time: 26:14)



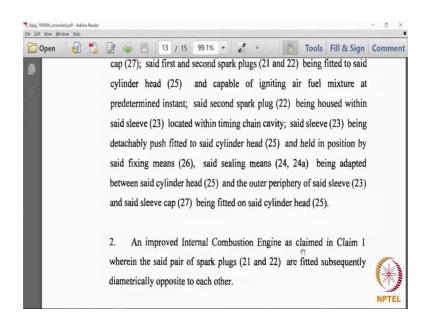
So, this is the detailed description of the drawings and it is done in a similar manner, similar fashion. This is a public document. So, you can go to the patent office website and you could download it if you are interested in reading it.

(Refer Slide Time: 26:35)



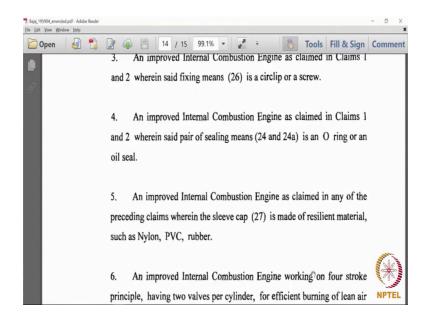
And then, you have some results, test results which they have tabulated, you have the claims finally, we claim. This is the Indian way of doing it we claim and the claim number 1. In India, you will have to mention the numbers of the parts within the claim also. So, the spark plug the number has to be referred.

(Refer Slide Time: 26:48)



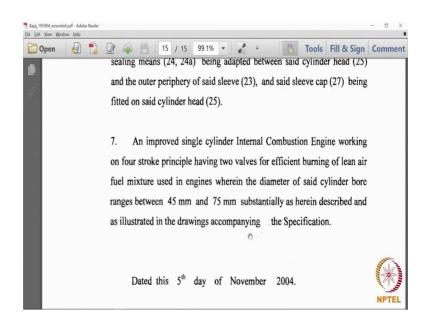
So, that is claim 1, now claim 2 is a dependent claim as claimed in claim 1. So, it refers it back to claim 1, claim 3 is again dependent, claim 4 is again dependent.

(Refer Slide Time: 27:04)

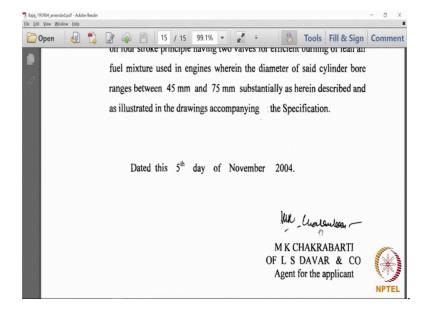


Claim 5 is again dependent because it says an improved internal combustion engine as claimed in any of the preceding claims. So, 1 to 5, it is again dependent; claim 6 as an independent claim, claim 7 is an what we call an Omnibus claim.

(Refer Slide Time: 27:19)



It used to be a prop that Omnibus claims were granted before but now it is not granted the patent office has a manual the patent office manual, the manual clearly says Omnibus claims are no longer granted where they say substantially as herein described and as illustrator then, the drawings are complying the specification it is an omnibus. It is just reiterating what is already covered in the specification.



(Refer Slide Time: 27:46)

So, you have the signature of the agent if the inventor is filing on in his own name, then it will be the inventors name. So, and signature and date which again form 2 had mentioned that it shall end with the date and the signature.