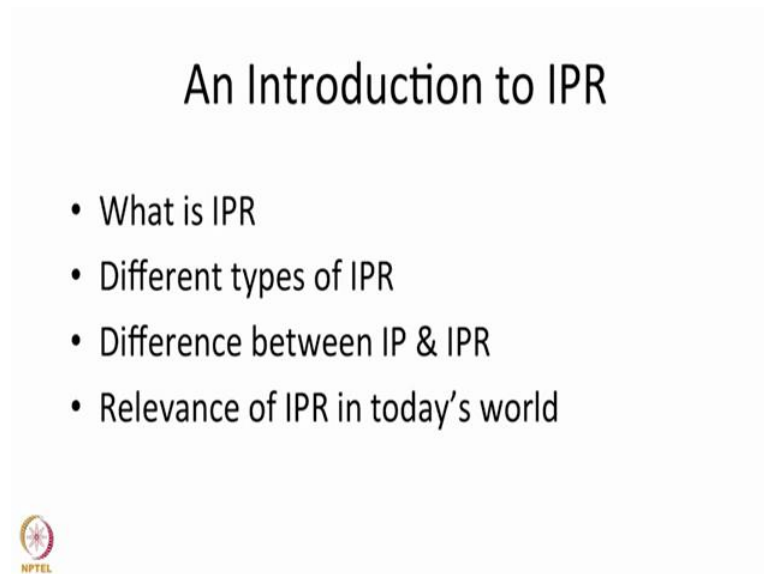


**Introduction to Research**  
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**Lecture – 01**  
**Intellectual Property Rights**

An Introduction to Intellectual Property Rights.

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In this lecture, we will be looking at some of the fundamental principles that govern intellectual property rights. We will be looking at what is intellectual property and looking at the individual things that constitute intellectual property rights. We will also be looking at the difference between intellectual property - that is IP, and how that stands different from IPR, which is intellectual property rights. For this, we will have to first look at what rights are. What do we mean when we say rights? And we will have to also look at the concept of property. Then, we will have to explain what we understand by the term intellectual. Now, when we do these things, we will find that it is possible for us to identify certain fundamental things as characteristic of an intellectual property right. After that exercises is done, we may try to give a definition to intellectual property rights. And I must tell you that there is no universal definition on intellectual property rights as of now.


Then, we will look at the types of intellectual property rights; **the list**, there is a long list;

it is a growing list, in fact. We would try to bring out the need for intellectual property rights in today's world. And we will conclude with the relevance of intellectual property rights in the modern world.

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## What is intellectual property (IP)?

- IP may include original ideas; research results; critical business information
- IP emanates from human creative labour
- IP is different from 'real property'
- Real property is tangible, has defined boundaries



What is an intellectual property? Intellectual property relates to original ideas, results that emanate from research, and generally, it covers some kind of critical business information. Intellectual property refers to that set of property that emanates from human creative labour. Now, when we mention intellectual property, we are specifically trying to define intellectual property as that is distinct from real property; for example, land or a laptop or a pen - these are instances of property that exist in the real world; you can touch and feel them; they are tangible; you can feel them; there are borders to it; there is no perceivable dispute with regards to where the contours of these properties are. A land is defined by its boundaries; a pen is an object that exists in time and space. So, we do not have problems in ascertaining the boundaries of this property; whereas, when we come to intellectual property, we do have certain issues as to understanding the outer limits or the boundaries or the private space of intellectual property.

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## What is intellectual property (IP)?

- There are different kinds of IPR, for e.g., inventions are protected by **patents**
- Literary works are protected by **copyright**
- IP is different from IPR



Now, intellectual property specifically refers to things that emanate from human creative labour. Intellectual property manifests itself in various forms; for instance, if you look at, **if you look at**, invention, an invention is an intellectual property which can be protected by a patent, which is an intellectual property right; a literary work, a book or the work that is written or expressed in words could be an intellectual property, which can be protected by an intellectual property right - that is copyright. So, there is a distinction between intellectual property or the rights of property that manifest in certain creations made by human beings and the right that protects these manifestations.

Now, for us to understand the concept of intellectual property better, we need to understand what these words stand for. Now intellectual property and intellectual property rights, that is IP and IPR, are in most places used interchangeably, and there is nothing wrong with that, because many a times when we talk about intellectual property we also want to cover or encompass the corresponding rights, but for the purpose this lecture, we will try to explain the independent ingredients that constitute intellectual property rights.

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## Meaning of 'right' in IPR

- What is a 'right':

“A **legal entitlement** which is **recognized** and can be **protected** and the **violation** of which is deemed as '**unlawful**' and leaves the right-holder with a **remedy**.”



Now, **let's** start with the right part of it. What do we mean when we say we have a right? A right refers to a legal entitlement, something which you are entitled to get legally. It **is** something that can be justified, that can be a recognized, and that can be protected, the violation of which is deemed as unlawful, and the violation of which leaves the person whose right is violated with a remedy.

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## Meaning of 'right' in IPR

- Rights can be used in 2 ways:
  - as a liberty (gives the right-holder freedom to do certain acts)
  - as a licence (right to do something because someone has given you the consent)



Rights can be used in two broad senses: it could be used in the sense of a liberty, your ability or freedom to do something; it could also be used in the sense of a license, you are

right to do something, because somebody has given **a** consent or somebody has been allowed to do certain things.

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## Meaning of 'right' in IPR

- Certain rights manifest are inherent in a human being (Eg: human rights, right to vote, right to privacy), while certain rights manifest themselves outside human beings (Eg: rights in property)
- A right must be recognized by law.
- Rights can be **general** i.e. claimed by every citizen (e.g. right to protection by the State) or **exclusive** i.e. the right-holder can stop others from doing certain acts without his consent (e.g. right to property)



Rights may express itself inherently in a human being like what we say about human rights: your right to vote, **your** right to privacy - these are things which are inherent in a human being. There are also rights that manifest in things beyond the human being were in, for example, property. So, we have a set of rights that manifest in a human being because of his character of being a human being - those who are what we called inherent rights; and we also have rights that express on things, because human beings **can** possess own transferred things; in that sense rights are created by the law. In fact, you need a legal recognition for something to be regarded as a right. Rights can be of a general nature which are shared by people like the right of protection a citizen expects from the government, is a general right, **legal right** which every citizen can claim and every citizen will get; whereas there are certain rights that could be operated or that could be exercised in an exclusive manner. Now, rights offer you... when rights offer you exclusivity, it means that you have a right to stop people from **doing** certain acts; for instance, if you own a property, then you have a right to exclude people from getting into the property or enjoying that property.


If you own a book, you have the right to exclude people from reading that book or from looking into that book or from using that book in anyway. So, exclusive rights are rights

which confer the ability on a person to stop others from doing things without his consent.

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## Meaning of 'right' in IPR

- IPR refers to rights which emanate from IP which are capable of being protected (Eg: copyright, patent).
- Violation of IPR refers to 'infringement'.
- Patent law protects the right to use/make/sell/import the invention.




In that sense, when we talk about rights, when in connection with intellectual property, we are talking about rights that emanate from the intellectual property, which are capable of being protected. For instance, if there is an artistic work, in the form of a book, then the creator of the book or the person who owns the book or who created the book could stop other people from using that book, from making copies of that book, from disseminating information from the book by different ways, because he has an exclusive right over it. In this case, we call that right a copyright. If the exclusive rights vests in an invention, **vests in an invention**, we would call that right a patent right, and the patent right gives a person the liberty to make or manufacture, to sell, to offer for sale, to import, and to use the right in that invention, and any person, who does these things without the consent of the right owner, we would say that person has violated the right of the right owner. A violation of **a** right of a right owner is what is called in intellectual property law as infringement. Infringement technically means trespass; trespass is getting into the property of someone else. So, when you would have read, you would have seen these notices in front of some private property- **trespassers** will be prosecuted; it simply means that if somebody intrudes into the property that is **an** violation of that person's right. You could have civil remedies to trespass, you could also have criminal remedies to trespass.

When trespass happens on an intellectual property, then we call that by the word infringement. Infringement is nothing but trespass into the intellectual property owned by a person. Now this could relate to a set of rights that come out of the intellectual property. As I said, in the case of an invention, patent law protects the right to make, the right to use, the right to sell, the right to offer for sale, and the right to import the invention. So, if there is **a** intrusion into any of these rights vis-à-vis the invention, then we would say that there is an infringement of the intellectual property rights. Now, **that's** a short summary of what rights are.

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## Meaning of 'property' in IPR

- Property is a form of **regulation**
- Property can be of 2 kinds: public and private
- Public property is property which is held in common (also known as 'the commons'), whereas, private property is owned by an individual.



Now, let us look at what we mean by the word property. Now, we just had a short understanding of what we mean by right. Property is a form of regulation, and when it comes to intellectual property we are talking about a form of regulation of creations that come out of the mind. Property can be either public property or private property - these are two broad classifications of property.

For instance, public property **is** something which is held in common; what you called the commons, and private property is something which a person holds for himself individually.

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## Meaning of 'property' in IPR

- Real property (land) has **physical boundaries** & can be distinguished from the property of another
- The owner of land & its boundaries can be ascertained from the property deed.



Now, to understand the concept of property, we need to take the analogy of land or landed property. Any landed property exists in time and space. You could go to a particular location and analyze or look at the land, and see **it's** boundaries, and you will get a fair understanding of the limits of that land - where is the land, what are the boundaries of the land, where are the boundaries of the neighbor's land, and where it is, where is the path way that leads to the land - all these things can be ascertained in the physical world. So, property is something that we understand as - especially private property - we understand it as something that can be differentiated from other's property and something which is capable of being distinguished from other's property. And this hall mark of property - that it can be distinguish from other's property - comes from the limits of the property.

In the case of the land, we call them the boundaries of the land. The boundaries can be ascertained physically by going to the location and measuring it or looking at it; if the boundaries are protected and it gives a much clearer view of what is the extent of the land. Land can be measured; it can be ascertained in numbers; we can compute **it** and we can say what the extent of the land is. Land is also - the title in a land - also manifests itself in a piece of a document what is or what we call the deed or the sale deed by which a land is conveyed from one person to another. In a sale deed, typically, you would find towards the end of the sale deed, a portion of the sale deed - what we called the schedule - the schedule normally has the description of the land, the extent of it, and also the



boundaries of it. As I said, in the case of a land, you can doubly be sure: **you can** be sure by looking at the document, where the boundaries of the land are; you could also go and look into the property deed or the title deed and see what **are** the boundaries of the land. So, two ways to check it: one you could look physically and check the boundaries or you could look at the title deed and look for the boundaries of the property.

Intellectual property does not exist in time and space like real property. As I said, because intellectual property deals with creations of the mind like an invention or an idea or an expression of an idea, we need to have some form by which we can ascertain the limits of property. When a person comes up with an invention, the invention could be improvement in an internal combustion engine - that could be an invention; the improvement rests inside the engine; it is not possible for a person who sees the engine from outside to ascertain where the invention is or which part of the improvement actually makes the engine better, unless it is described in detail, in writing, it will be very hard for a person to understand the improvement in the engine, unless he analyzes it or he breaks it down or he reverse engineers it, it will be very hard for that person to understand where the contribution is with regard to that particular invention. So, though there is an improvement that the inventor has made with regard to the internal combustion engine, it will be very difficult for people to ascertain where that improvement **is** unless the inventor himself tells the world as to what was the contribution that he made.

In patent law, every invention needs to be described in writing. The descriptive part of the invention is contained in a document what we call the patents specification. And the patents specification, much like the land deed, would convey the details about the property and would end with something what we call the claims. The claims will **demarcate** the boundaries of the intellectual property when it comes to a patent right. So, you could look at a patent specification and the last portion or the concluding portion of a patents specification is what we call a claim or many claims; it could be **a** multiple claims or it could be a single claim. And these claims when you read will give you an understanding of what are the boundaries of the property, what are the limits of the property. By property we understand as something that can be processed and something that can be transferred. We also understand property as something that has boundaries, which makes it possible for you to distinguish your property from another person's

property.

Take a pen, for instance; the pen has a boundary in time and space, and the fact that pens are possessed by people, we **don't** have title disputes with regard to ownership of pens. Assume a scenario where you and your friend have a small tussle with an ownership of a pen. How are we going to settle this ownership dispute? Now, if your friend is smart enough, he could just pull up his pen, just open it up and say, you know, I had written my name somewhere discretely. He could show that and he could get away with **it**. He could say that is one way to prove ownership, you had given, put in a secret mark. The other way to prove ownership is mere possession; you could say that I have been possessing this for a long time, this is my pen. So, **it's** hard to make a claim. Now, if your friend wants to really make a claim, he would come up with something called a bill showing that this pen is actually mine, because I purchased this for consideration. He could produce **a** bill. Now, that may put you in a back step, on the back foot; you may wonder whether he has a better title than you.

Now, you could further circumvent that by saying that no, this bill is fabricated or the bill does not correspond to this pen. Now, all these things are disputes with regard to title on the ownership of a pen. Now, eventually, let us assume that you convince your friend on the ownership of your pen. You could have complete possession, and once you clear it off, then you could have complete possession on ownership of the pen.

Now disputes with regard to property are normally settled in this way. You could either show possession for a long period, uninterrupted period of time, or you could bring evidence of title - a bill or a receipt or something of a similar nature - to show that or the fact that you received it as a gift from someone else. You could show evidences by which you can claim title to a particular piece of property. Intellectual property because it is not readily discernible, because the rights **don't** manifest itself in time and space, on a tangible form. We find it difficult to settle disputes on intellectual property rights.

When it comes to patent, that is why we have a requirement of every invention to be expressed in writing, disclosed in great detail, differentiating itself with every other invention that went before it, which is close to it or proximate to it, and then, explaining the contribution made by the inventor with regard to what has gone before; what has gone before is generally referred to by a term called the prior art, and then,

demonstrating what is the inventive contribution that he made. All this is done in the patent specification, and after the inventor distinguishes his invention from what has gone before, he claims as something to be his own property; that is what it is contained, as I said, in the concluding part of the patent specification, what we call the claims.

The claims are actually for what the protection is granted. The protection in a patent is confined to what is mention in the claims and not what is mentioned in the descriptive part of the patents specification. **Now** so, the proof of the existence of intellectual property, if it is a patent, if it is an invention, then we would look at the patents specification - the document that encompass it. Now, you may be wondering - so, is it easy to get an intellectual property right? I just need to put everything in writing; **that's** not the case. If you put everything in writing, there is a scrutiny that is done by the patent office; in India, it is done by the Indian Patent office and only when you pass the tests that the Indian patent office will subject your written description to, will you be granted a patent, which will give you a title and a protection for a limited period of time, provided you keep it alive by paying the required fees.

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## Meaning of 'intellectual' in IPR

- 'Intellectual' refers to 'products that come out of our intellect'
- Intellect is our ability to think and understand ideas
- An idea is a product of careful thinking



Now, we just saw what we mean by the term rights and what we mean by the term property. Now, **let's** take the intellectual part of intellectual property rights. When we mean intellectual, we refer to things that are coming out of our intellect; for instance, products that come out of our intellect. By being intellectual we refer to our ability to

think and understand things; sometimes these things are complicated<sup>d</sup>. So, it is the ability to think and understand ideas, sometimes which some of those ideas could be complicated ideas. So, an idea is something that comes out of a mental effort. We could also say that an idea is a product of a careful thinking.

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## Meaning of 'intellectual' in IPR

- Inventions are products of creative human labour.
- Intellectual effort cannot be perceived by others.
- Intellectual effort is special to the inventor and cannot be attributed to machines.



Now, all these things, creativeness that is inherent in human beings, creativity that comes out of an intellectual effort, and idea that comes from constant thinking or careful thinking - these things is what we refer to as intellectual, in the context of intellectual property rights.

Intellectual property rights are descriptive of the character of the things that it protects; for instance, when we say patents protect inventions, the intellectual property rights<sup>s</sup> - that is patents - they protect the intellectual property - that is invention. We refer to the invention as something that comes out of creative human labour. An invention, it could be a serendipitous invention, but never the less we attribute <sup>it</sup> as a product of the intellect. Now, if we need to understand intellectual property, how it can manifest, we could have the example of a carpenter creating a chair. Now, if you get a... just imagine a carpenter who is creating a chair out of wood. He saws the wood, cuts them into pieces, then he aligns them, he could do the... and he could construct an entire chair without even having any drawing with him, without even putting pen on paper or even without even making others feel that there is some kind of an intellectual effort that is coming out

of him. What a person gets to see when a carpenter is actually making a chair is the fact that he is involved in human labour; what we call physical labour.

The mental labour is not discernible, though it is there, but at the end of the product, when the product gets done, you will be able to see a beautifully crafted chair, where you may not be able to discern the mental effort that went in, but while you were watching him, you were able to ascertain the physical effort that he has put. Intellectual covers that mental element; it would also cover skills that come out of that mental element; it sometimes hard to segregate the physical and the mental element, because when there is a particular move or a skill that comes out of the carpenter's hand, it is a combination of certain physical skills and mental skills. So, it's very hard for us to cut and say the physical part is different from the mental part, but for us to understand this concept better, though we saw the carpenter exercising physical effort and physical labour, we were not able to see the process that went in conceiving the chair and in putting the chair together, which went in his mind.

Similarly, when we see an author writing a book, what we see him do is putting the pen on paper, and you see him laboriously doing that days and days together, till his book is done. This sight that we see could be the same of all the authors, regardless of who it is; it could be an author of a text book, it could be an author of a letter being sent to someone else, it could be an author of a master piece, but the mental effort differs from all these is different and it differs, and the quality that comes out will also differ. So, by intellectual we mean or we are looking at the mental effort or the creative effort which could be a combination of physical and mental skills; we are looking at that part which is special to human beings, if we need to put it that way. So, whenever we talk about the property that comes out of intellectual effort, it is this trait that we are talking about. For instance, we do not say an artist or a tailor uses colorful threads to create an embroidered piece of cloth, the same could be done today by a modern sewing machine; we don't say the work of the sewing machine as something intellectual property, because the intellectual property went in much before, in the creation of the sewing machine which was capable of doing this intricate designs on cloth using colorful thread; whereas, the tailor who did it or the person who actually embroidered a piece of design on a cloth, we would say that, that involved an intellectual effort. So, we distinguish intellectual as something that comes from human beings and not something that comes from machines;

we also distinguish intellectual as something that is special to human beings and not to other beings.

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Now, that we have understanding of these three terms - what rights are, what property is, and what we mean by the term intellectual, we should be in a position to move forward and give a definition for intellectual property rights.

Intellectual property rights generally **protects** applications of idea and information that are of commercial value. Now, this branch - intellectual property rights - generally protects applications of ideas; they **don't** protect ideas per se - this is something which we need to understand; ideas in themselves, by themselves cannot be protected, but applications and expressions of ideas can be protected. Now, the best instance would be or a one illustration would be the genre in literary works; crime fiction, you would have **seen** that almost every novel in crime could either be a who done it or how somebody did something. So, this is the genre, there is a plot, there is an event that happens, and there are a set of characters all looking suspicious, and there is a person who would come to solve that thing, and eventually, there could be some twist in the tale; eventually, the crime is solved **d** or at least the person who reads the novel is given an impression that he was a part of a process of solving something.

Now, this genre has been in existence for a long time. People of different calibers have written crime novels and they all follow the same plot - there is an event which has to be

solved, and somebody solves it, there is a suspicion on the most possible characters, and somebody else turns out to be the person who actually did the crime. So, that is the who done it part, the how he did it part is the - crime is there, and then somebody explains or tells the readers how this crime was done. So, these are the... they could be other ways of it, but it is this genre, this group of fiction, is predictable by its nature, because the setting is always a crime, and there is an explanation of why the crime happened or how the crime happened or who did the crime, but look at the number of the books that have come out of these genre and look at the number of authors; some authors like Agatha Christie, she has written most of her books on this genre and still each book is different; it could be the same idea, it could be the same main character who solves these plots; nevertheless, each idea is expressed in a different form, and because it is expressed in a different form, each idea as it is expressed in a different form can have a separate right.

So, copyright subsists in all the books of Agatha Christie and they cannot be an objection that they are all crime novels or they are all works of fiction. So, they are all the who done it model. In some cases, its a same protagonist to solve these problems. So, that cannot be a reason to say that the idea is the same; as long as the expression is different, you can have different rights subsisting in those ideas. Now, having said that, now we can venture to look at the nature of intellectual property right.

Now, we have analyzed these terms, and these terms have actually thrown up certain traits which we can identify as traits that are common for intellectual property rights. If not common, traits which actually characterize this group of rights. The first thing is that they are protectable by law – thats the first thing; because they could be very valuable information, an idea, which the law does not protect, but when we talk about intellectual property rights, we are talking about a specific right - be it a patent, be it copyright, trade mark, design - there are a list of rights which are granted protection. So, the first thing is that these are enforceable. So, when we say right we mean enforceable; so, thats the first thing. For something to qualify as an intellectual property right it should be enforceable; it should be in the nature of a right, there should be an entitlement - somebody can claim something used on it, and if there is a violation that right, there should be a remedy. So, patents offer protection if there is infringement or violation of a patent there is a remedy; you can stop the person from asking him not to do the thing or you can claim what we call monetary compensation or damages. So, the first thing is they are enforceable.

The second trait is that they are different from normal property. We can use the word intangible; these rights are intangible; you can't touch and feel them, but they manifest in the end product in some way, and because they are intangible, they need to be described by some means. So, the description part has led to various forms of recognizing the descriptive part. In a patent it is described in writing by something called a patent specification, and this patent specification undergoes a process what we call patent prosecution within the patent office, and it emanates as a patent right. This entire process in a very simple language we can call it registration. So, rights they are enforceable and they are capable of being registered. The same is for design; designs can be described and they can be registered. Trademarks; trademarks can be described and they can be registered. Copyrights; copyrights can be described and they can be registered, but because of an international arrangement call the Burn Convention it is not necessary to get a registration of a copyright to enforce it.

Mere publication; you would have seen in many books, there is a copyright notice in the initial pages where the copyright is held by the author or by the publisher. You might find in various websites, in the footer, there is a copyright notice. The fact that you have put a copyright notice, and most likely with an entity's name and the year in which it was published, and the fact that you have published it, is good enough for you to say that you are the owner of the right. So, copyright is the exception where you need not need to register it for enforcing it, but registration, there is a possibility, there is a way in which you can you can register it. So, that is the second part. The first thing about intellectual property rights is that they are enforceable; the second thing, they are capable of being described and concomitantly being registered. So, that is the second part - they can be registered, which brings a whole lot of things. There is an office, there is an authority which analyzes the right and gives and scrutinizes it, and then verifies it with other things, and then grants you a title. So, the process of registration in patent law is called patent prosecution. It happens at the patent office. Only when the written part, that is patent specification, goes through the process of prosecution, does a person get a grant; when we mean by a grant? We mean a title of patent so, enforcement, registration.

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## Common Characteristics of IP

- Can be easily replicated
- Requires intellectual effort for its creation.
- Has commercial value
- Economists view IP as 'public goods':
  - non-rivalrous
  - non-excludable



The third thing about an intellectual property right is the fact that you can easily replicate it. Now, I ask this question - how much **does** it cost Microsoft to come up with the first copy of windows, say windows 7? It will be few million dollars, because you look at their R&D, their investment, their staff salaries, a whole lot of things would have gone into creating the first copy of windows 7. How much does it cost anyone to make another copy of windows 7? Next to nothing. You can just copy it, whatever is there in a CD on to a hard drive or to a pen drive, if it has the capacity to do it. So, the cost of making the second copy is next to nothing.

So, this defines yet another trait of intellectual property right - it is difficult to get the first copy out, but once the first copy is out, it is easily replicable. Now, this is also true for books. Books may take, **an** author may take years to write the book, it does not take much to scan the book and put the copy of the entire pirated book somewhere in the cloud. Similarly, a movie may take months or years of effort to complete, but we hear constantly about pirated versions coming out within just few days of screening of the movie in the theaters. All these things tell us, that though it is hard to create **a** intellectual property, it is easy to replicate. Now this is another trait, that it can be reproduced easily.

Yet another trait which is not common, but nevertheless **it's** a trait, is the fact that it requires effort to create intellectual property. As we said, there is intellectual effort involved in it, but in today's world, in a modern world, sometimes this effort comes from research and development, sometimes. And sometimes, it requires many people coming together to create intellectual property rights, especially when we are talking about

inventions, and today, gone of the days where an inventor could be in his garage and come up with something new. Today, the science and technology has progressed to such a level that most of the inventions - and this is also true about academic writing in science and technology - most of the time they are co-authored; we would very rarely find papers written by a single person. So, this is true for patenting too. Many of the patents are group efforts, done sometimes by teams that are spread across in different countries, they put their efforts together and they come up with an invention. So, they are group efforts. So, the fourth point is the fact that it requires an intellectual effort to create these rights. So, they are creations of the mind, but it requires an effort to create these rights.

Another trait or something inherent in the nature of intellectual property right is that these rights once they are created, they are valuable; there is commercial value or the fact that these rights can be used in trade and in business makes them valuable.

So, they are capable of being enforced; they can be registered; they can be duplicated, reproduced in many numbers; it involves a effort to create them - a creative effort, sometimes by many people put together; and it has commercial value. Now these are five points which we have tried to cull out which define the nature of the intellectual property.

Economics have also used two more terms to understand intellectual property. They say intellectual property by its nature is non-rivalrous and it's non-excludable. Non-rivalrous means the use of intellectual property by one person, does not cause rivalry or does not take away the enjoyment of the same intellectual property by another person. Now, to understand non-rivalrous nature of intellectual property, let us imagine empty room; an empty which is in the size of a normal class room; you just imagine an empty room; and imagine that you own this empty room; you have complete power over this empty room. Now, if there is a entrepreneurial spirit in you, and you want to make some money with this room, there are multiple ways in which you can use this room to make money. You could rent this room out for a couple of people to sleep, you can have some bunker beds, and you can make some money out of it. And if you want to stretch it a bit more further, you can convert the room into a classroom, by which you can make more people sit than to sleep, and you can make some more money or you can change your enterprise into a different one.

Now, if you get more enterprising, and if you want to get in more people into it, you can remove all furniture and make it into a place where people come and generally socialize with each other for whatever reason - they could eat, they could talk to each other, and if you really want to stretch this forward, you could have some kind of a party where people **don't** mind being at close proximity with each other. Now, these are things which you could do to use or maximize the use of your real property - which is your room. Now, at best and depending on the tolerance level of people, you could cramp in close to hundred people into that room; yes, it gets tough, the air gets hot, ventilation becomes a problem, but still **if** people's tolerance limit is high, you may be able to push in hundred people into a room of a average size.

Now, if you try to put 500 people into that room, they could be police at your door step, because **that's** simply not possible. So, that tells us real property has it is limits on enjoyment. These limits are not there when it comes to intellectual property rights. Imagine a bestselling book, how many people can read that book at one time, yes, the person who is reading it, another person who sitting next to the person is also reading it, yes; they could be a group of people around that person; say, **it's** a new book which has been released for the first time, somebody stood in the queue for twelve hours and got the book; assume it is a very, very popular book; you could have a group of friends would do not mind being pushed around looking into the page and reading it. If you are more creative, you could scan the page, and put it on a computer screen or project it on a computer screen, and a whole lot of people can read it. If you can even stretch it further, you could scan the page, put it on cloud, and anybody who has access to that document could see it, and that could run into millions or as many devices you have you could see that. So, this is a trait of intellectual property which distinguishes it from real property. Real property has limits in enjoyment; there are no limits in enjoying an intellectual property right. This is what we mean by non-rivalrous - use by one does not **take away** the enjoyment by another. So, all the people who crowded around a person who bought a copy of a bestselling book equally enjoy the intellectual property right. They were able to use it without affecting the right or without affecting the enjoyment quotient of the other person to use it at the same time, which would had been different if people were crammed into a room; there are limits to which people can use a room, whereas there are no limits to how an intellectual property can be used. So, this is what is referred as the non-rivalrous nature of intellectual property.

Intellectual property also becomes non-excludable; this is another trait which it has - it is non-excludable. The fact that the intellectual property can be used by some, you cannot stop others from using it. For instance, somebody scans the book and chooses to put it on a live telecast, on youtube. So, what he is doing is, he is just holding a page, and giving sufficient time for people to read the page, then he is moving to the next page and he is just holding it in front of a camera, and he is live streaming this on youtube. So, the book is available for live viewing for any number of people. Now, the fact that he has already put it on youtube, there is no way you can exclude a person who has got access to youtube from enjoying it. So, **there is** once it is put in a way in which others can see it, there is no way you can stop others from or exclude others. So, this is again a trait which intellectual property enjoys. Once a medicine, say **it's** a lifesaving medicine, is out in the market, it possible for the competitors of the manufacturer – who ever manufactured this medicine - to take the medicine, analyze it, and even without going back to the manufacturer, to create a copy of it. So, once it is out, there is no way you can exclude people from taking effect of it or in understanding how that particular thing was done.

These two traits - non-rivalrous and non-excludable nature - is something that is shared by what economists call public goods. Public goods, by definition, are non-excludable and non-rivalrous. For instance, national security; you cannot exclude people from national security; everybody gets it and you cannot specifically say that national security is only for few people, because **if** a country's boundaries are bordered and everybody inside gets the benefits of it.

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## Definition of IPR

- Rights which protect application/ expression of ideas & information which are of commercial value
- Rights which protect products of human creative labour (E.g.: patents, copyright)
- Inclusive definition given by WIPO
- Patents protect technological inventions



Now, definition of intellectual property right. There is no agreed definition of intellectual property right. We do not have an agreed definition, in fact, as I mentioned, if you look at a dictionary meaning intellectual property rights can be defined as rights that protect applications of ideas and information that are of commercial value - is one definition. The rights that protect the products of creative labour – **it's** another definition. You will find multiple definitions around this and some definitions would actually give you a list of things - it is more like a glossary/grocery list - a list of things that say that these are all intellectual property rights.

For instance, the WIPO, which stands for World Intellectual Property Organization, which is an international organization under the United Nations, which deals with intellectual property rights. The WIPO has a definition on; **it's** an expansive definition or which is more like a glossary/grocery list. It includes many things under the ambit of intellectual property rights. It talks about the things on which the rights are manifested and it also talks about the actual rights.

Now, you will find, in the **WIPO's** definition, that they talk about patents, they talk about copyrights, they talk about trademarks, designs, and similar rights. The problem with the **WIPO's** definition is it does not take care of the new and emerging intellectual property rights. There are some intellectual property rights that are emerging as we speak, it does not take that into factor. Secondly, there is no yard stick by which you can understand

intellectual property rights; it's simply not there. So, we could come up with the definition of intellectual property right either as rights which belong to a particular nature, which protects creative and intellectual products that come out of human labor or you could have a list of things on which an intellectual property right may manifest, and so, the WIPO's definition is a definition which is an inclusive list, and they could be new things that come into the list, but the WIPO definition does not offer, apart from referring to it as products of creative labor, it does not give us anything more for us to have a uniform definition for defining intellectual property rights.

Types of intellectual property rights. Intellectual property rights, there are many different varieties of intellectual property rights, and they are distinguished by the nature of the product on which they manifest or the end products that comes out of human creative effort. When we peg the definition of intellectual property right human creative labor, that itself creates some problems, because we have today something called geographical indications where no human creative effort is technically involved; but nevertheless, when we talk about, when we put the emphasis on human creative labor, we are referring to the origin of intellectual property, because intellectual property originated through copyrights and patents, that was the two initial rights that emerged.

So, there are different types and each type refers to a different category of products. Patents are used for protecting inventions and when we talk about inventions, we are referring to technological inventions.

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## Definition of IPR

- Copyrights protect creative works (e.g. literary & artistic works)
- Designs protect visually appealing works & not their functional aspect
- Trademarks protect works/symbols which act as source indicator of goods/services
- Geographical indicators (GI) protect source of goods
- Trade secrets protect secret information related to trade.



**Copyrights** - Copyrights are used to protect literary and creative works, literary artistic works, sound tracks, videos, cinematography, computer programs, and a whole lot of things.

Designs - Designs are used to protect what can be distinguished by the eye. For instance, the law of designs is different from the law of patents, because designs are not used to protect something that is functional; designs are used to protect something that appeals to the eye, something that is visually appealing to the eye, but does not have a function behind it.

Trademarks. Trademarks are used to protect words, symbols that can be attributed to trade. Geographical **indications** can be used to indicate the origin of certain goods. Trade secrets can be used to protect information relating to trade, which the owner of the information wants to keep as a secret, and there are other intellectual property rights, which we will **discuss in some detail as we go by.**