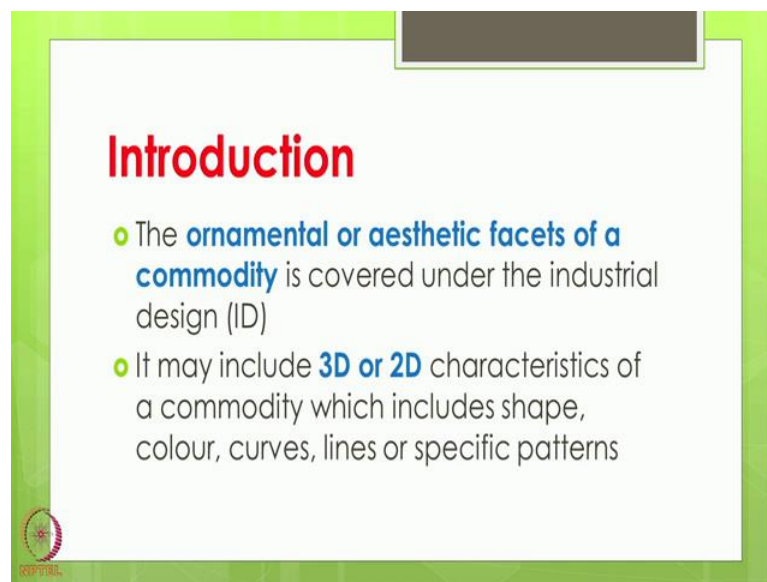


Economics of IPR
Prof. Nalin Bharti
Department of Humanities and Social Science
Indian Institute of Technology, Patna

Module – 02
Lecture – 05
Economics of industrial design

As a part of the Economics of Intellectual Property Right this lecture is the last lecture to understand what Economics of industrial design is and how this is different from other intellectual property rights.

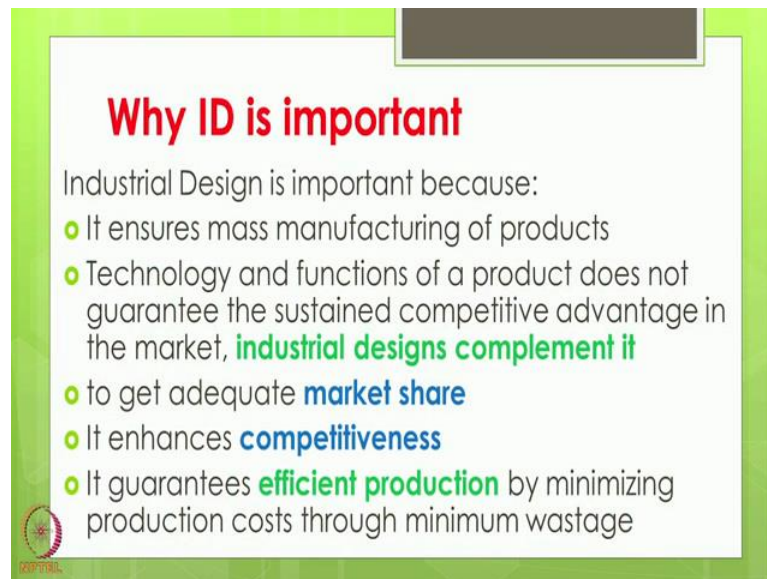
(Refer Slide Time: 00:49)



So, let me begin with what is basically the industrial design. Industrial design considered as an ornamental or aesthetic facets of a commodity which is covered under the umbrella of industrial design it may include 3D or 2D characteristics of a commodity which includes shape, color, curves, lines or a specific patterns.

So, in general we can say that industrial design are basically the shape colors, sketch lines, curves and some of the patterns which is mainly used before producing any product to the market especially in the industrial sector.

(Refer Slide Time: 01:40)



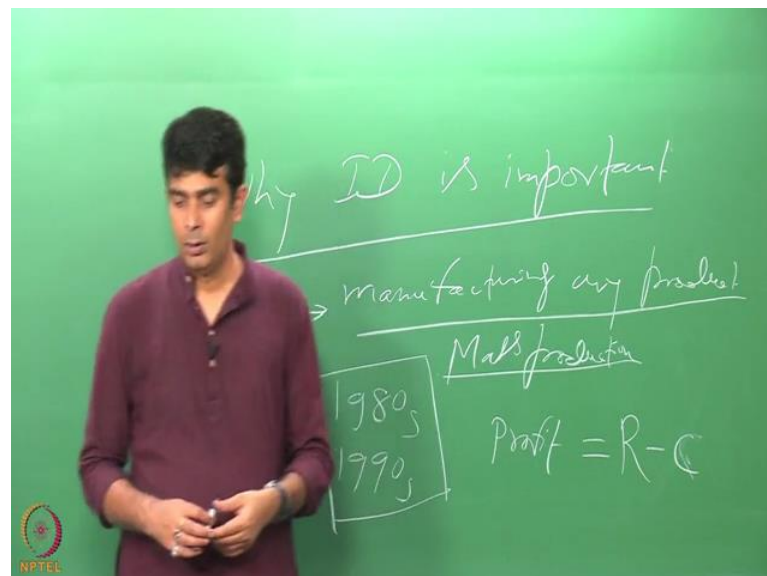
Why ID is important

Industrial Design is important because:

- It ensures mass manufacturing of products
- Technology and functions of a product does not guarantee the sustained competitive advantage in the market, **industrial designs complement it**
- to get adequate **market share**
- It enhances **competitiveness**
- It guarantees **efficient production** by minimizing production costs through minimum wastage

NPTEL

(Refer Slide Time: 01:45)



Why ID is important

→ manufacturing any product

Mass production

1980s
1990s

Profit = R - C

NPTEL

So, why industrial design is important? When we have this question that why ID is important, if you have this question that why ID is important. We have few things in our mind that, first of all before manufacturing any product, manufacturing any product it is indeed important to have the industrial design. Why? Because for the mass production for the mass manufacturing of the product it is indeed important to design the product before launching the product in the market.

And why it is important? Because today whether it is electronic (Refer Time: 02:35) or whether it is furniture's or some of the office materials, office furniture's or may be the textile or any other industry which needs certain patterns certain sketch certain drawing without that it is not so easy for convincing the customers in the market because you have to compete with the adjusting product available in the market. And for competing with those products you have to have a predesigned or all preplanned way to compete with other manufactures available in the market. So this is the first point that industrial design helps in manufacturing any product especially for any product for the mass production, mass production.

Because today when we produce something we do not produce something especially, the big companies, multinational companies if they really launch a product do not launch a product if a 'Car' is manufactured, a 'Car' is not manufactured for a small domestic market today we do consider the international customers available in the market outside the country. So, industrial design a good industrial design is convincing the customers and challenging other producers available in the market. So, it really important one of the important intellectual property right which really carry the growth of the industry, really carry the growth of a manufacturer not only to the domestic market, but to the international market.

The second point which is equally important is technology and function of products does not guarantee the sustained competitive advantage in the market. So, what technology we are using what type of functions we are performing to launch a product, to produce a product it is not the technology which is very important, but it is the technology which is added with the industrial design component before launching, before producing the product.

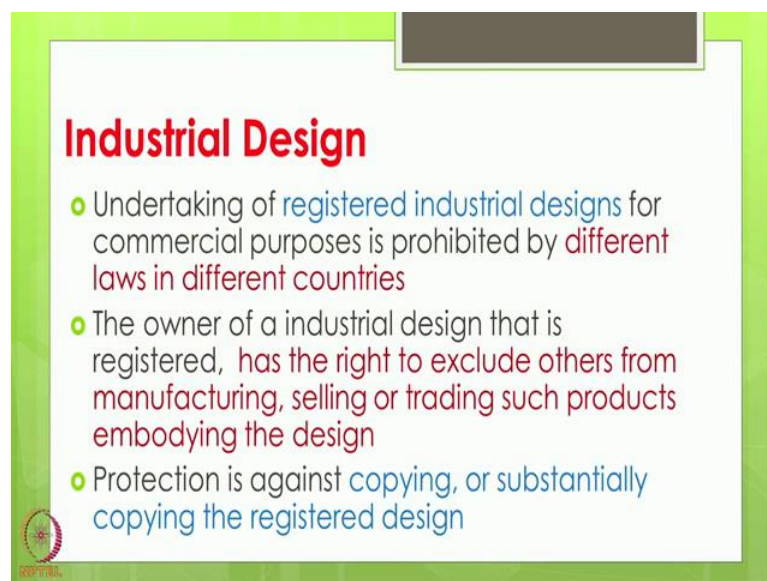
So, the industrial design is the key to solve many problems related to the production, many problem related to the marketization of the product and we cannot really say that if you have a market share for a product, suppose during 1980's that or during 1990's that would have been the share for the similar form incoming 20 years, because you have to have a new industrial design in your hand then only you will be able to really grow ahead because you are not alone the producer able in the market, but there are other large

number of producers in each sector market is really imperfective compete market. And in that case you have to have a very a small sense of security with you because more your insecure more your running your industrial design on a very faster scale you will certainly have more important role to play in the global market.

So, to get the adequate market share industrial design as I have said that, industrial design is complimenting the technology which a firm is having. So, it is really making us more active more prompt to have the to grab the better place in the market, it enhances the competitiveness because more you have the designs with you, more you have the industrial designs with you, more you have the sketch and pattern with you or you are really able to compete with those firms who are not really which is not really considering the new patterns new designs before launching products.

So, it guarantees basically ID is giving you the guarantee of to a form that efficient production by minimizing production cost to minimum wastage. So, if you do not have plant, if you do not have plant designed for your product you might be in there are condition to lose your revenue because you might be having huge cost to pay in the market because as we know that profit is nothing, profit is nothing except revenue minus the cost so if you are cost is in exceeding because of the poor design you might not be able to get the profit because might your cost may be equal to the revenue, your cost may be higher than the revenue and then in that case your profit will certainly differ.

(Refer Slide Time: 07:45)



Industrial Design

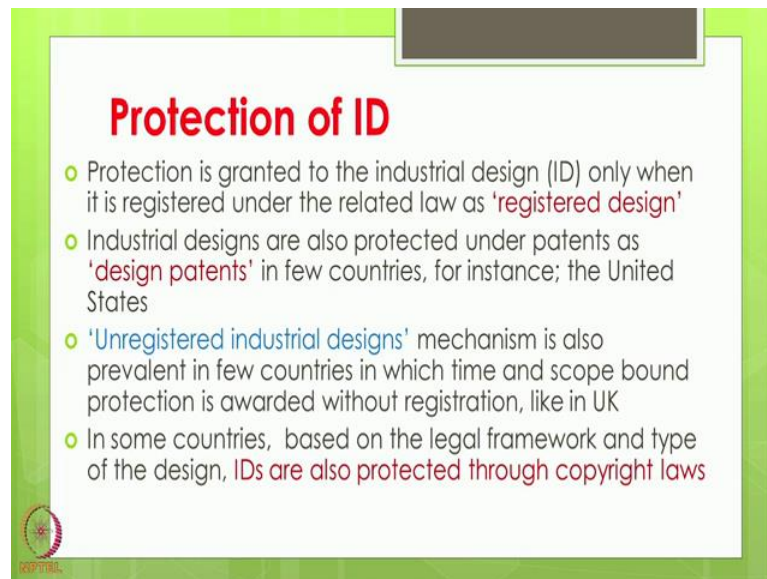
- Undertaking of registered industrial designs for commercial purposes is prohibited by different laws in different countries
- The owner of a industrial design that is registered, has the right to exclude others from manufacturing, selling or trading such products embodying the design
- Protection is against copying, or substantially copying the registered design

Copyright

Industrial Design has that is one of the intellectual property right which has to be registered for commercial purpose if prohibited by different laws in different countries it is one of the restricted intellectual property which is not if it is registered, industrial design is registered others are prohibited not to huge such designs. So, the owner of industrial design that is registered has the right to exclude others from manufacturing selling or trading such products with the similar design. So, the owner is like patent, the owner is also having an exclusive right to control the entire pattern and design in their hand and other forms any part of the world is really considered not to be included in the production mechanism which is or the production system which this particular form is really having due to their industrial design.

So, the protection is against copying. So, the protection available to the industrial design by a form which has the registered industrial design is basically protects that particular form from copying or substantially copying the registered design. So, even the partial copying is not allowed even if the firm is produced with the similar designs that is not at all accepted by the by the by the form and in that case industrial design protection is one of the important tool for the intellectual property rights.

(Refer Slide Time: 09:24)



Protection of ID

- Protection is granted to the industrial design (ID) only when it is registered under the related law as 'registered design'
- Industrial designs are also protected under patents as 'design patents' in few countries, for instance; the United States
- 'Unregistered industrial designs' mechanism is also prevalent in few countries in which time and scope bound protection is awarded without registration, like in UK
- In some countries, based on the legal framework and type of the design, IDs are also protected through copyright laws

So, protection is granted to the industrial design only when it is registered under the related laws as 'registered design'. So, industrial designs are also protected under patents as 'design patents' in some of the countries for instance in united states it comes under the patents act

So, 'Unregistered industrial design' mechanism is also prevalent in few countries in which time and the scope bound protection is awarded without registrations like in united United Kingdom. So, one of the 'Unregistered industrial design' mechanism is adopted in United Kingdom which prevents in it is also prevalent in few countries in which time and scope bound protection is awarded without registration. So, for some time only the in industrial designs or registered after that firm each allow to copy or a firm is allowed to get license or to get involved in adopting those designs in some countries based on the legal framework and type of the design industrial designs are also protected through copy right law.

So, we find here that few countries are putting industrial design as a part of patent system few countries are putting industrial design as 'Unregistered industrial design' framing a very time bound and it is scope oriented industrial design system and few county considered as considered it as one of the intellectual property related to the copy right.

(Refer Slide Time: 11:10)

Protection of ID: International Agreements	
Agreements	Description
1 The Paris Convention(1883)	the first international convention which discusses the concept of industrial property and its protection including general standards of protection for industrial designs
2 The Hague Agreement (1925)	provides a mechanism for registering a ID and thereby getting protection in several member countries by filing one application with the International Bureau of WIPO
3 TRIPs (1995)	TRIPs provide for minimum norms and standards for different categories of IPRs including Industrial Designs

So, there are different agreements related to the industrial design. So, the first agreement is, The Paris Convention, 1883 this was the first international conventions that is discussed the concept of industrial property and it is protection including general standards of protection for industrial designs. So, we find at it is not a very new phenomena it is a very old phenomena and the Hague Agreement in 1925 also provided a mechanism for registering a registering an industrial design and there by getting protection in several member countries by filling one application with the international bureau of WIPO and then the TRIPs 1995 which is more recent it also provided for the minimum norms and standards for different categories of intellectual property rights including industrial designs. So, we find that all these agreements from 1883 to 1995 is excepting industrial design as one of the intellectual property rights and provides some guidelines rules loss related to industrial designs protection.

(Refer Slide Time: 12:25)



Issues in Industrial Design

- Right to industrial design is territorial
- Meaning that rights conferred are limited to a particular country or a region in which the protection is given
- Currently, no international or global rights to IDs prevail
- Usually, separate application for registration in each country is required in which industrial design protection is needed



So, but there are certain issues related to industrial design like the issues some of the issues related to the trade mark and copy right and some of the cases we have discussed in past right to industrial design is territorial the point is, industrial design is not the registered industrial design which will apply for entire world because we find that in some of the country it is related to the copy right in some of the country it is related to the patent. So, it is not the intellectual property which is globally accepted as registered industrial design, but country to country, territory to territory we find that a different set of laws and rules are there to protect industrial design.

So, it means that rights confirmed or limited to a particular country or a region in which the protection is given. So, currently no international or global rights to international industrial designs prevail. So, usually separate applications for registration in each country are required in which industrial design protection is needed. So, if a firm wants to get industrial design registered in India they have to have different separate applications compared to a form which wants to register industrial design in UK. So, it is not like copyright that you have the ownership of a book a copyright material in one country and that is applicable for your copyright on that book to any part of the world. So, like copy right industrial designs are not really global in nature.

(Refer Slide Time: 14:09)



Issues in ID

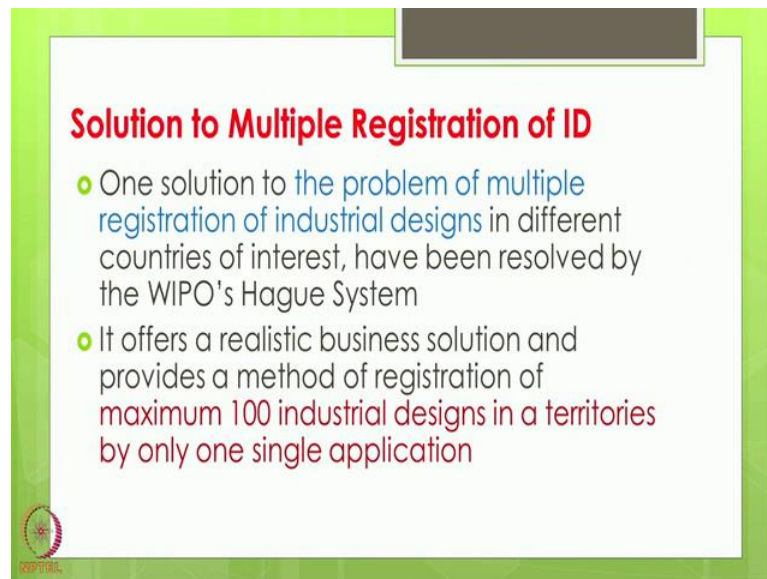
- Industrial designs are protected to encourage innovative industries by setting up **exclusive rights in new industrial designs**
- Lacking such rights protection create problem of **free-riders**
- It can easily be duplicated and copied of the development of others
- Due to, **no substantial costs (in R&D) incurred in copying the products might be undervalued and sold at very cheap price in market**, hampering and damaging the sale of genuine products

Some of the other issues are industrial designs are protected to encourage innovative industries by setting up exclusive rights in the new industrial designs lacking such rights protection create problem for free riders and unauthorized users it can easily be duplicated and copied of the development done by others due to the no substantial costs in R and D incurred in copying the product might be undervalued and sold at very cheap price in the market.

And it is happening in some of the cases in W T O which we are also going to discuss in coming lectures where we have also included industrial design at one of the dispute which is existing in the world today and we will also try to see that how countries are involved in some disputes related to the industrial design because it is hampering and damaging the a scale of young new producers.


So, if a firm is really developed a refrigerator with their own design and if other firms are trying to copy the copy the design and they are just making money then this is one of the Unauthorized huge and this is done because there (Refer Time: 15:28) substantial cost involved in copying those industrial designs. So, it is so easy for a firm to concentrate on such designs and then those designs are copied and really it really damages the entire sole purpose of the registered forms which has the industrial design registered in their name.

(Refer Slide Time: 15:58)



Solution to Multiple Registration of ID

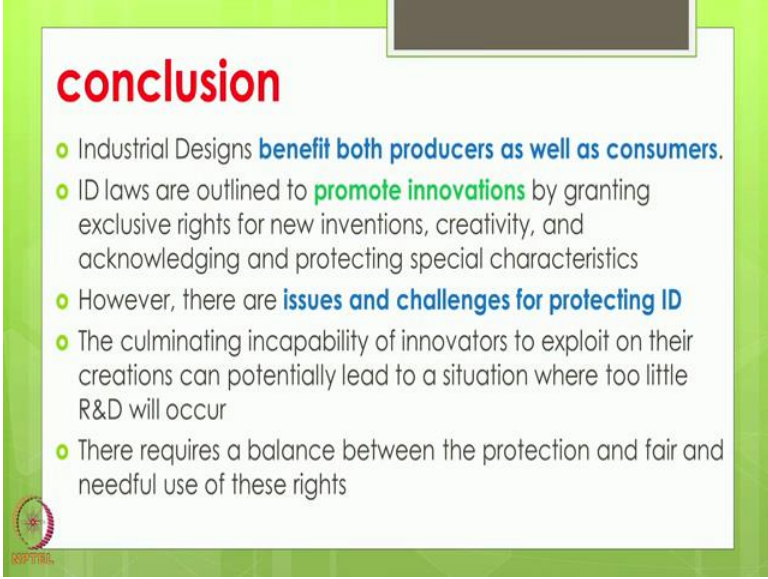
- One solution to the problem of multiple registration of industrial designs in different countries of interest, have been resolved by the WIPO's Hague System
- It offers a realistic business solution and provides a method of registration of maximum 100 industrial designs in a territories by only one single application



So, this particular discussion is giving us the problem that there are multiple registration applications in different country due to the different type of local law some country accept it as a part of patents, some country accept it as part of copy right. So, one solution to the problem of multiple registration of industrial design in different country each of interest has been resolved by the WIPO Hague system.

It offers realistic business solutions and provides a method of registration of maximum 100 industrial designs in a territory by only one single application. So, 100 industrial designs you can collect and then with one single application you can just register all these hundred industrial designs.

(Refer Slide Time: 16:43)



conclusion

- Industrial Designs **benefit both producers as well as consumers.**
- ID laws are outlined to **promote innovations** by granting exclusive rights for new inventions, creativity, and acknowledging and protecting special characteristics
- However, there are **issues and challenges for protecting ID**
- The culminating incapability of innovators to exploit on their creations can potentially lead to a situation where too little R&D will occur
- There requires a balance between the protection and fair and needful use of these rights

Industrial Design like other intellectual property rights it benefit's both producer as well as consumer how it benefit producer because, when a producer is really developing industrial design the producer is keen to develop that industrial design for certain incentives and that incentives is the market share, that incentives are basically the incentives related to the revenue, that incentives is basically the proper decentralization of their resources and in that case they are the form who is really having industrial design in their hand they are they are in the position to control the entire business.

As far as the consumers are concerns industrial designs are basically for the consumers because, because the producers are trying to really convince the consumers that this particular product which is designed in a very different way is for your benefit and you are having a comparative advantage comparative advantage compared to the other firms which has also developed similar products.

So, it is very much convincing to the consumer and basically industrial designs are not consumer unfriendly, but these are the designs which are basically consumer friendly. So, when industrial designs are being done by the engineers by the by the professionals they do care of the existing products available in the market because they have to compete with other firms available in the market so they do not want to really, really detach the consumers in the entire designing, but they really want to attract the

consumers for the benefit's. So, industrial design laws are outlined to promote innovations by granting exclusive rights for new inventions creativity and acknowledging and protecting a special characteristics.

So, ultimately like patent industrial designs are also for the promoting innovation and the without such promotions without such promoting innovations it is indeed to important to really think really have a new generation of the product we are finding today that smart phones are available in the market, but this smart phone age is the part of the industrial design and circuit's because in due course of time from the six line we have move to the, move to the mobile phone and from mobile phone, we have moved to the smart phone and it is not possible without adding the industrial design by the firms.

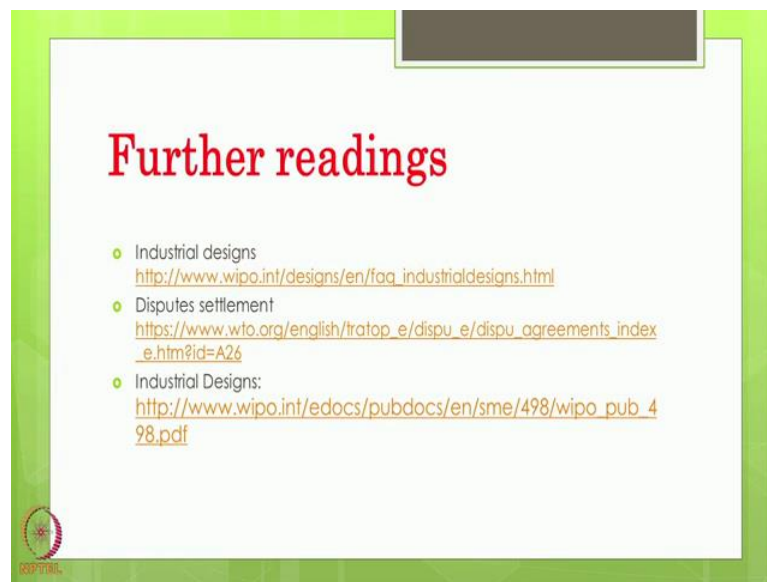
So, firms are keen to design the product and before launching the product before producing the product they are keen to really understand that what consumers are really demanding today, what consumers need today. So, it is industrial design is need based and industrial design is based on the innovations which, which is one of the intellectual property by the firms. However, there are issues and challenges for protecting industrial designs, like we have the challenges to protect patent, we have a challenges for the protection of copyright, trademarks, we have also challenged to protect industrial designs, because industrial designs like, copyright industrial designs are also easy to copy. So, that is why few countries are keeping industrial design as a part of copy right

So, the so culminating in capability of to innovators to exploit, on their creations can potentially lead to the situation where too little research and development will occur. The point is if somebody is really rigid to copy the industrial design for firm is without having much expenditure firm is ready to do it because there is (Refer Time: 20:53) any much cost involving copying of the industrial design like, to copy right or like, the trade mark.

So, cost in terms of cost in terms of monetary cost it is very less, but all depends on what type of protection and fair and needful use of these rights are available in the country so they record, the country required the economy requires a balance between the protection and the and fair and needful use of these rights.

So, if there is a medical instrument, which really saves the country large population of a country in that case 'Industrial Design' may be shared with some of the forms in the needy country, but if 'Industrial Designs', are not really given a better protection system then all these innovations which is promoting a new types of technology, which is promoting new types of product, which is promoting new types of avenues and incentives to the forms are really loosing it is market and competitiveness, because due to this innovations only some of the firms are really leading the market today.

(Refer Slide Time: 22:15)



Some of the links are available which will help you to go reading the details on in industrial designs and I hope entire discussion gives you some idea that how industrial design had a past, and how industrial design is really looking for a future.

Thank you.