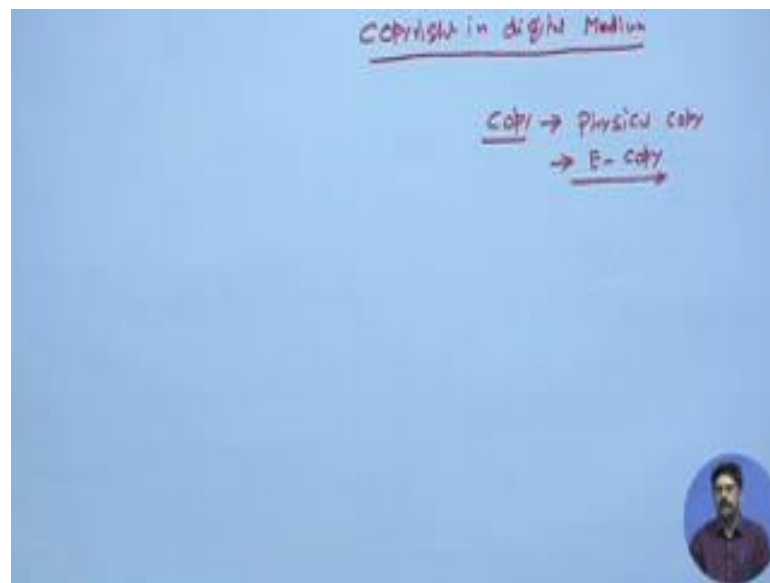


**Introduction on Intellectual Property to Engineers and Technologists**  
**Prof. T. K Bandyopadhyay**  
**Department of Metallurgical and Materials Engineering**  
**And**  
**Rajiv Gandhi School of Intellectual Property Law**  
**Indian Institute of Technology, Kharagpur**

**Lecture – 20**  
**Copyright in Digital Media**

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So, now, will discuss about copyright issues in digital medium when I discussed about the copy part, copy, you understood, the copy can be made by means of physical copy. Now, electronic media has made us, to make a copy called, we are considering the e-copy. So, right of the copyright owners, is not restricted with reference to the physical copy. It is rights also come in the form of e-copy or electronic copy, or sometime you call physical copy, and say copy on electronic media. Just like say, if I ask that, you are storing some article, in your PC that is storing on hard disk and you are browsing some article on internet that is two part. So, one is called temporary storing sometime you call temporary recording, something is stored on ram, and something is stored on permanent device, that is the hard disk, ok?

So, considering that part, just like say, understood that internet or electronic media has make the world or copyright owners or copyright work, more vulnerable to copy, or reproduce. So on that context, the copyright on digital media, digital medium, we have

chosen that topics. Copyright on digital medium, you have heard about that Indian copyright amendment, considering that digital medium and it is need, and you know digital millennium Copyright Act, you, world, WCT copyright of phonographic treaty, WCT, those kinds of treaties. And that lead to the amendment of Copyright Act, in respect of India also. So, considering all those aspects, we are putting, taking the topics, is copyright in digital medium.

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- ✓ ISSUES RELATED TO DIGITAL CONTENT, DATABASE, SOCIAL MEDIA
- ✓ P2P SHARING AND COPYRIGHT INFRINGEMENT
- ✓ MANAGEMENT AND ADMINISTRATION
- ✓ TAKE DOWN NOTICE
- ✓ ANTI-CIRCUMVENTING PROVISION: IT STATES THAT: "ANY PERSON WHO CIRCUMVENTS AN EFFECTIVE TECHNOLOGICAL MEASURE APPLIED FOR THE PURPOSE OF PROTECTING ANY OF THE RIGHTS CONFERRED BY THIS ACT, WITH THE INTENTION OF INFRINGING SUCH RIGHTS, SHALL BE PUNISHABLE WITH IMPRISONMENT WHICH MAY EXTEND TO TWO YEARS AND SHALL ALSO BE LIABLE TO FINE"
- ✓ SAFE HARBOR:
- ✓ ON-LINE COPYRIGHT INFRINGEMENT

So, what are the different issues that, what I, I to mention is that issues related to the digital content or digital copies, databases social media just like say, now a days social networking sights, similarly Google, YouTube kinds of situation. And similarly another part you are coming for copyright context the copy left doctrine just like say, or another part is coming up open source licensing, although that, their cooperate issues are limited, licensing issues are more, there is a business tools.

So, issues related to digital content or databases, there is a important parameters just like say, what will happen to the copyright work, if it is something stored in an, or copyright electronic medium, it is easy to copy, then. So, understood that, this information copyright owners and social networking sites, two context, they are using the copyright protected work, they are using the copyrighted work, they are not heard of the situation how much they can use, how much copyrighted work they can use. So, that different issues are incoming in respect of copyright in a electronic domain specifically internet

domain and we also have to, there is a also business motive, for running the social media or social networking sites in respect of copyrighted work.

So, considering that part, what way we will create a provision that way that, we can create business out of the copyrighted work through by means of social networking sites and also ISPs, internet services provider. By virtue of that, we can spread the knowledge with reference to the copyright work making it easily available or accessible to the public and on the one, other context, you have to protect the rights or interest of the authors and owners. So, this is, coming up within the purview of digital media and copyright. So, digital millennium copyright act. So, there say, how can you make a balance between that right, and how can you create business out of that ok.

So, considering that aspect the digital copyright in digital medium, they are. So, there issues are coming up management and administration, how the in copyright part, will be managed and administers in digital media. What can be considered infringement in the digital medium context? And how that can be managed properly, for business purposes of the social networking site. So, here the different terms have come up just like say, circumventing, anti circumventing, what you try to mention on that part. Now, the copyright work also can be protected in a digital context, by means of some technological means, some time you call encrypting or wall mark kinds of situation, some security keys or some algorithm is designed. So, these are the technological measures, the copyright owners can adopt in respect of digital in, in respect of copyright in a digital medium, understood? He can use some technical protection measures for to protect the copyright work in the digital, the digital medium, why? So, understood, just like say, he wants copyright protection of that class of work and he is taking some technological measures to protect that work.

Now, say somebody is circumventing that technological measure, whether he will be liable for copyright infringement or not? And see understanding say. So, just like say, example, he created a barrier for infringer to enter on that domain; then somebody is violating that. So, just like a anti-circumventing provision, it states that, any person who circumvent an effective technological measure applied for the purpose of protecting any of the rights conferred by this act, with the intention of infringing such right, shall be punishable with imprisonment which may extend to 2 years and shall also be liable to fine, that I am telling with the reference to US part. So, that one part is. So, provisions

states that, any person who circumvents, that circumvent means, the technological encrypt or decrypt, or say some fire wall they have created those are technological measures, adopted for what? Purpose, on adopted measure applied for purpose of protecting. So, in internet domain in electronic domains, they some cases, you find out, just like a Google books. So, Google books also, may protected by means of some technological barriers. So, it cannot be downloadable.

So, they are adopting some technological measures, to prevent somebody to make or download or copy those books, in respect of, respect of his copyright. Now somebody break that algorithm, and try to download that book. So, he is adopting, anti circumventing. So, he is adopting an anti-circumventive means, to break his technological part. So, in that case, he will be liable for copyright infringement that is deferring within the purview of DMC, digital millennium Copyright Act. So, here also Indian Copyright Act recent amendment also suggested anti circumventing provision. Then another part I should know, about take down notice. So, some cases ISPs, or social networking sites, is, keeping some copyright protected work, or say some qualitative work, then if they, have been solved a notice for take down. So, they have to remove that copyrighted work.

So, take down notice is another importance term in respect of copyright in digital medium. So, similarly, Safe Harbor, provisions have been created for the online service provider or ISPs, specifically including social networking site. So, understood, they are now, Safe Harbor means, let us say sometime we consider that dock, where the ship say, ship is on the harbor, ship or dock even they where the ship stays for a longer time, you can consider that is the safer site for the ship. So, that is called Safe Harbor, similarly, though Safe Harbor provision just like a where, they will be considered, safe.


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**THE FOUR SAFE HARBORS PROVIDED BY CONGRESS, IN THE FOLLOWING SUBSECTIONS OF SECTION 512, ARE:**

- (A) TRANSITORY DIGITAL NETWORK COMMUNICATIONS**
- (B) SYSTEM CACHING**
- (C) INFORMATION RESIDING ON SYSTEMS OR NETWORKS AT THE DIRECTION OF USERS**
- (D) INFORMATION LOCATION TOOLS**

**TRANSITORY DIGITAL NETWORK COMMUNICATIONS—A SERVICE PROVIDER SHALL NOT BE LIABLE FOR MONETARY RELIEF, OR, EXCEPT AS PROVIDED IN SUBSECTION (J), FOR INJUNCTIVE OR OTHER EQUITABLE RELIEF, FOR IMPROVEMENT OF COPYRIGHT BY REASON OF THE PROVIDER'S TRANSMISSION, ROUTING, OR PROVIDING CONNECTIONS FOR MATERIAL THROUGH A SYSTEM OR NETWORK CONTROLLED OR OPERATED BY OR FOR THE SERVICE PROVIDER, OR BY REASON OF THE INTERMEDIATE AND TRANSIENT STORAGE OF THAT MATERIAL IN THE COURSE OF SUCH TRANSMISSION, ROUTING, OR PROVIDING CONNECTIONS, IF—**

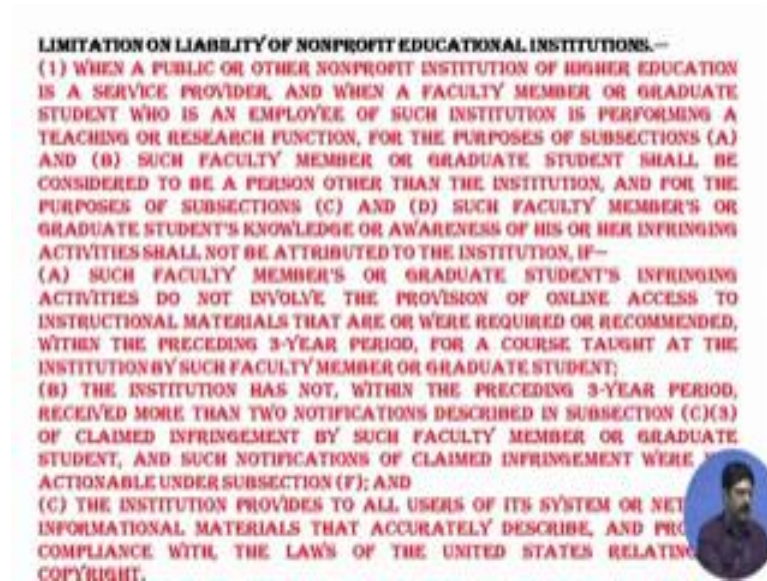
- (1) THE TRANSMISSION OF THE MATERIAL WAS INITIATED BY OR AT THE DIRECTION OF A PERSON OTHER THAN THE SERVICE PROVIDER;**
- (2) THE TRANSMISSION, ROUTING, PROVIDING OF CONNECTIONS, OR STORAGE IS CARRIED OUT THROUGH AN AUTOMATIC TECHNICAL PROCESS WITHOUT SELECTION OF THE MATERIAL BY THE SERVICE PROVIDER;**
- (3) THE SERVICE PROVIDER DOES NOT SELECT THE ELEMENTS OF THE MATERIAL EXCEPT AS AN AUTOMATIC RESPONSE TO THE REQUEST OF ANOTHER PERSON;**
- (4) NO COPY OF THE MATERIAL MADE BY THE SERVICE PROVIDER IN THE COURSE OF SUCH INTERMEDIATE OR TRANSIENT STORAGE IS MAINTAINED ON THE SYSTEM OR NETWORK IN A MANNER USUALLY ACCESSIBLE TO ANYONE OTHER THAN ANTICIPATED RECIPIENTS, AND NO SUCH COPY IS MAINTAINED ON THE SYSTEM OR NETWORK IN A MANNER USUALLY ACCESSIBLE TO SUCH ANTICIPATED RECIPIENTS FOR A LONGER PERIOD THAN REASONABLY NECESSARY FOR THE TRANSMISSION, ROUTING, OR PROVIDING OF CONNECTIONS; AND**
- (5) THE MATERIAL IS TRANSMITTED THROUGH THE SYSTEM OR NETWORK WITHOUT MODIFICATION OF ITS CONTENT.**



By that means, they cannot say other any other unsafe, but they have created a provision for Safe Harbor, means let say where, they can say consider, they are safe. The 4 Safe Harbor provided by the congress, US, congress refers to that, the followings subsections of 512, that, Transitory Digital Network Communication, Transitory Digital Network Communication, transitory means temporary, we understood, digital network communication. System catching is one of the portions, they have mentioned. Information residing on systems or network at the direction of users, here they are keeping in the information on the direction of the user, information it, is location tools, those are the provisions they have created the on the Safe Harbor part.

Similarly, Transitory Digital Network Communications, communications considering that a service provider shall not be liable for monetary relief or except, as provided just like for (Refer Time: 14:50) other that, they have referred for Transitory Digital Network Communications.

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Similarly, they have explained with reference to that system, sketches, and other sorts of elements and limitation on liability in respect of nonprofit educational institutions. They have created a say, if something is nonprofit educational institution, they have created elevated provisions also. So, these are the, say in respect of digital medium, and copyright, or d m c a provisions, have been incorporated, say circumventing or anti circumventing part, Safe Harbor provisions all those things have been come within the purview of digital medium or digital medium Copyright Act.

So, now what are the things is coming up in respect of digital medium and copyrights. So, issues are coming up, that it is digital medium, it is copy, it is easy to copy, something in digital medium. Internet makes the system easiest to communicate, beyond particular territories also. So, that says now internet, or e-commerce or social networking site as an important means of business, important means of business. Now, how that business is allowed to grow? Keeping them some Safe Harbor provisions and also how that, make that copyright protection more stringent in respect of internet or electronic world, keeping that anti-circumventing provisions. So, these are the major elements of the copyright in the digital medium.

Now, I will analyzed, some of the elements of copyright infringement in a digital medium. And also I will analyze the little bit, on the respect of open source software copyright elements. Now, let us say, analyze the case of Baazi dot com, it is also a case

for IT law in respect of copyrights. So, just like say, he had kept from obscene photograph, that is coming by virtue of IT Act, and now whatever way we are discussing earlier, if we consider ( Refer Time :17:48) case, (Refer Time: 17:48) case, just like say, copying, and just like AP to (Refer Time: 17:53) sharing that thing on internet, then the liability is coming up, just like say, you yourself is not committing the infringement, but doing that act, then, that liabilities of the person, who is sharing that components. Just like say, for Googles and YouTube, that take down notice, if they have do sufficient due diligence exercise time to time, for escaping the liability under the secondary copyright infringement.

So, if some pertinent content they are keeping. So, they are taking the share, taking the, facilitating that infringement work. So, immediately, they, if they came across, or somebody they found in or send a notice to them, they have to immediately remove that thing from they are content. So, otherwise they will be liable. So, you know that various cases of Googles and Youtubes in different jurisdiction in respect of copyright infringement. So, just like say, in respect of ISP, how they liable for secondary copyright infringement, these are the issues which with respect of copyrights. So, copyright infringement in digital world, in another area in respect of copyright issues and in a digital medium, you will get series of cases. Similarly the issues of copyright infringement in digital medium is coming up, I will later on analyze in reference to trade marks also by virtue of say linking and framing, if you frame the content of somebody's website, in your website, and that website is also let us say commercial website, then also you will be liable under the copyright infringement.

So, framing of some websites content in your website and that using for the communication to the public purposes, means internets definitely, then also you will be liable under copyright infringement, Say similarly providing link in the form of say surface link and deep link, there is also issues with reference to the copyright infringement. If you provide link of another copyright protected website, then also the issues of copyright infringement may come up. So, what are the copyright infringements in respect to digital medium we can thought about, say linking, framing, then let us say, the liability is coming by virtue of secondary copyright infringement, secondary copyright infringement.

So, now the digital medium, one component is the infringement of copyrighted digital medium, another component, you are getting that, how anti circumventing and say further provision the management and the administration of the copyright and digital medium, the design, important parameters. So, now, let us, we have some time. So, let us discuss about that, what is open source software, and copy left doctrines, specifically as it is applicable with reference to that, digital content, just like say. So, just like say, source code open, this is some time you call, another community, just like say, for the development of software, specifically, we are creating this mechanism, a licensing mechanism, and different types of licensing mechanism. Just like say, what way conditions, you will take the software from a particular open source thing; you have to license back that software, to that service provider, under the same terms and conditions.

So, do you think that, the software in the open source part is not coming within the purview of copyright? So, definitely that is copyrighted, but they are not, that is they are using it in different context, in the form of, in the form of different mode of business as a licensing mechanism, they are using for what? For further development, and for further development, now, if I ask that question, if you use some software from open source, and try to create proprietary software out of that, then whether that is come within the purview of copyright protection? That depends upon the situation to situations, that how much you have taken from that particular software and as per norm, that is also came, definitely will be considered as a copyright that that your software code you developing, but you may have to licensed that, the further improvement to that particular open source communities. That as you have, agreed to the terms and conditions of that open source, open source, open source license in terms and conditions, or of that or the terms and condition of the administration of that open source.

So, you have to follow that things follow that things, otherwise, you may be and liable, you may be breaching the terms and conditions, maybe breaching the terms and condition. So, another part in respect of, say digital medium and, and respect of copyright, is a copy left doctrines, we call it, an open source software, in respect of, copy, in respect of software, in that a digital medium, as specifically. So, other various say, the part, we are trying to addressed in this class, specifically, say the issues of copyright challenging, challenge of copyright in the context of digital medium specifically, just like say, that challenge to the copyright owners, challenge for the



enforcing agency, challenge for the say, challenge for that, say challenge for administration and management, for what administration and management for better, better utilization of that copyrighted work.

So, now as we are ending the copyright module in this week, so let us summarize the whole weeks discussion within two three minutes. So, emerging issues that, whatever we discussed now, that copyright and digital media specifically, but whatever we learnt in this week is very important for you, the students, teachers, and users, specifically, basically. So, we learnt about what is copyright, we learnt about what are the different categories of work coming within the purview of copyright, then we learnt about the criteria, that what should meet to get copyright protection, then we learnt about the, the authors and owners, we learnt about the time frame of protection life plus 60 years for the for the literary work, and artistic works. What is artistic works? Just like paintings, sculptures.

We learnt difference between (Refer Time: 26:36) and dramatic work, we learnt about related rights, we learnt about copyright infringement, and fair use. We have not discussed about the copyright protection, in respect of international part, like let us, just learn that part, just like if you, that is international copyright protection is governed by Buoyant Convention, India, is a member of buoyant convention. So, if you create a work in India, or published a work in India, and then your work should be protected in all Buoyant Convention member count or if government creates some reciprocity arrangement for any other country, then your work also will be protected in that country, where India government has make a reciprocal arrangement.

So, international copyright part you understood that, by virtue of this creation or registration or publication in India, your work will be protected in all work convention member country. So, this is International Copyright Regime Buoyant Convention, then there is also there will be different treaties, there is (Refer Time; 27:51), treaties then performance phonographic, phonographic treaties, performance for, these are the treaties that lead to the digital millennium digital, medium Copyright Act protection. So, all those things, you should read very carefully, because we have discussed in a week, almost two semesters subject. So, we have to be say, more thorough about it.

Thank you.