

COPYRIGHT LAW AND HOW IT HAS EVOLVED WITH THE RISE OF EMERGING TECHNOLOGIES

AUTHOR – BHANVI JUVEKAR, STUDENT AT UNITEDWORLD SCHOOL OF LAW, KARNAVATI UNIVERSITY

BEST CITATION – BHANVI JUVEKAR, COPYRIGHT LAW AND HOW IT HAS EVOLVED WITH THE RISE OF EMERGING TECHNOLOGIES, *INDIAN JOURNAL OF LEGAL REVIEW (IJLR)*, 4 (1) OF 2024, PG. 84-97, APIS – 3920 – 0001 & ISSN – 2583-2344.

The advent of digital media has radically altered the terrain of content creation, dissemination, and consumption, bringing out a period of unparalleled problems and prospects for copyright legislation. Although digital technologies have made it easier to share creative works worldwide, they have also brought numerous challenges to the conventional system of copyright protection.

The main obstacle presented by digital media is the effortless reproduction and distribution of content without the consent of those who possess the rights. Unlike tangible copies of works, which are limited by logistical limitations and manufacturing expenses, digital files can be easily replicated and distributed across different web platforms, typically with little effort and cost. This dynamic has resulted in widespread internet piracy, as people and organisations take advantage of digital technologies to violate the exclusive rights of copyright owners, thereby diminishing the economic worth of creative works.¹¹³

The widespread distribution of copyrighted content without proper authorization or remuneration to rights holders has been assisted by the expansion of peer-to-peer (P2P) file-sharing networks, streaming services, and social media platforms.¹¹⁴ Users have the ability to effortlessly upload, download, and distribute copyrighted content, such as music, movies, books, and software, without following the usual distribution channels.¹¹⁵ This activity undermines the market for authorised copies. This situation

not only hinders producers from receiving their proper earnings but also weakens the motivation for investing in new creative projects, therefore suppressing innovation and cultural variety.¹¹⁶

The swift rate of technological advancement presents substantial obstacles to the enforcement of sections of the Copyright Act in the digital domain. Advanced hacking techniques have successfully bypassed digital rights management (DRM) technologies, which were originally created to regulate access to and usage of intellectual materials.¹¹⁷ As a result, these mechanisms have been ineffective in preventing unauthorised copying and distribution. Furthermore, the internet's lack of borders and the ability to remain anonymous on online platforms provide challenges in identifying and prosecuting individuals who violate laws, especially those operating in regions with weak enforcement systems or contradicting legal norms.¹¹⁸

The notion of fair use, which permits the restricted utilisation of copyrighted information for activities like criticism, commentary, parody, and education, has become more disputed in the era of digital technology. The widespread

¹¹³ TC James, Indian Copyright Law and Digital Technologies <https://docs.manupatra.in/newslines/articles/Upload/040BB5AA-DE9A-4895-AA66-C82590E7BFF2.pdf> accessed 18 March 2024.

¹¹⁴ "Peer-to-Peer File Sharing and Copyright Infringement" (University of Maryland, Baltimore) <https://www.umaryland.edu/cits/it-security-and-compliance/higher-education-security-standards/peer-to-peer-file-sharing-and-copyright-infringement/#:~:text=The%20use%20of%20P2P%20networks,it%20to%20a%20P2P%20network>. accessed 19 March 2024

¹¹⁵ *ibid*

¹¹⁶ *ibid*

¹¹⁷ Kumar NV, "Digital Rights Management and Intellectual Property Protection" (Social Science Research Network, January 1, 2012) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2030762 accessed 19 March 2024

¹¹⁸ *ibid*

production of content by users and the culture of remixing have caused a lack of distinction between original works and derivative products. This has resulted in legal conflicts on the extent and relevance of fair use exceptions. Courts in jurisdictions, including the United States, have struggled to find a balance between the rights of copyright owners and the interests of users and the public in accessing and reusing digital property.

The phenomenon of globalisation and its impact on jurisdictional boundaries pose distinctive issues for the enforcement of copyright in the digital media realm. This is due to the fact that copyright infringement can take place simultaneously in numerous jurisdictions, without being confined by physical borders.¹¹⁹ These issues prompt inquiries about the suitability of copyright laws, the implementation of judgements across borders, and the organisation of global initiatives to address online piracy and infringement. Furthermore, variations in legal norms and methods of enforcement across nations can give rise to loopholes and gaps in enforcement, enabling those who violate laws to avoid accountability and take advantage of legal uncertainties for their own gain.¹²⁰

The rise of digital media poses a complex and varied challenge to copyright law, eroding the fundamental principles of exclusivity, control, and compensation that form the basis of artists' and rights holders' rights. To tackle these difficulties, a well-coordinated and multi-stakeholder approach is needed. This approach should involve making changes to laws, developing new technologies, implementing effective enforcement tactics, and fostering international collaboration. These efforts are necessary to maintain the effectiveness and reliability of copyright protection in this age.

¹¹⁹ "The Globalisation of Intellectual Property Rights: Four Learned Lessons and Four Theses | Global Policy Journal" <https://www.globalpolicyjournal.com/articles/international-law-and-human-rights/globalisation-intellectual-property-rights-four-learned-> accessed 12 February 2024

¹²⁰ *ibid*

1.1 Rise of Digital Media and its impact on the music industry globally: the MP3 wave

A paradigm shift occurred in the music industry at the onset of the twenty-first century.¹²¹ Unbeknownst to them, numerous individuals became part of this movement. There was no need for anyone to hold signs or physically leave their workstations to take part in this (at that time) revolution; instead, individuals walked down the street in protest. Countless individuals from over the globe took part in this transnational and borderless revolution, disregarding state regulations. Literally, this revolution was initiated by the people through the use of a computer mouse. In the current era of quickly progressing technology and communication, the world is becoming increasingly interconnected and compact.¹²²

The Internet has fundamentally transformed the way information is exchanged, thanks to the widespread availability of information and the dominance of Internet technology as the primary means of communication.¹²³

Enhancements such as online commerce, chat rooms, and customised web sites have been implemented. However, the type of online information transmission being considered here is peer-to-peer shareware. Due to technical progress, individuals are now able to share music files with anyone who is connected to the internet, which promotes copyright infringements and hinders record labels from receiving compensation.¹²⁴

A single term, Napster, symbolised the increase in online copyright infringement that occurred as a result of the technological advancements

¹²¹ "The MP3 Revolution: Getting With It" (July 18, 1999) <https://archive.nytimes.com/www.nytimes.com/library/tech/99/07/biztech/articles/18mp3-strauss.html> accessed 19 January 2024

¹²² *ibid*

¹²³ James Gletler, The Digital Music Revolution and Consumers https://www.mit.edu/~gletler/resume/undergrad/tc215_The_Digital_Music_Revolution_and_Consumers.pdf accessed 12 January 2024

¹²⁴ "Peer-to-Peer File Sharing and Copyright Infringement" (University of Maryland, Baltimore) <https://www.umaryland.edu/cits/it-security-and-compliance/higher-education-security-standards/peer-to-peer-file-sharing-and-copyright-infringement/#:~:text=The%20use%20of%20P2P%20networks,it%20to%20a%20P2P%20network.> accessed 19 March 2024

in the 21st century.¹²⁵ Each day, a multitude of individuals joined the Napster revolution effortlessly by clicking a single button on their computer mouse.

Napster.com, a well-known website that was first accessible on the Internet in a slightly modified form, provided the opportunity for unrestricted peer-to-peer music file sharing.¹²⁶ Using this platform, authorised individuals could instantly exchange MP3 music files with each other in a manner that was both anonymous and free of cost for individual users. By utilising Napster, users have the ability to exchange musical recordings stored in the MP3 file format, which is a technique that compresses digital audio data.

The MP3 file sharing format facilitates better sharing by compressing the file size, enabling faster and more effortless transfer. In addition, MP3s can be replicated numerous times without any degradation in the quality of the duplicate. To streamline the sharing of these music files, the Napster system included a complimentary software named "Music Share" on its website. Thanks to the application, users were able to connect their computers to a centralised network of servers that were overseen by Napster. In addition, they were able to establish communication with supplementary software that was created and upheld by Napster on its computer servers. Users could acquire the complimentary.¹²⁷

Music Share software, which was essential for utilising the Napster programme, upon registering for the service. This was achieved by acquiring the programme through the act of downloading it from the internet¹²⁸:

"Napster stay[ed] involved in the entire download process to ensure that the

distribution and copying of the selected recording [was] complete. In the event a download [was] interrupted ... Napster automatically [located] the same recording from another Napster user and resume[d] the download."

Napster's programme operated in an automated manner during the full process of individuals exchanging music with each other. As a result, there were no human agents responsible for overseeing the screening of the transactions and data. Similar to many other online businesses that seem to be "free," Napster realised that its user base could become more valuable. Eyeballs represent the aggregate count of Internet users who are exposed to adverts on the websites they visit. Because Napster was a free service, it did not generate any direct money from its consumers.¹²⁹ Consequently, it was imperative for the organisation to acquire clients. Napster was able to earn adequate revenue to sustain its operations due to advertisers paying based on the number of website visitors that potentially viewed the advertisements.

The documents obtained from Napster executives not only disclosed the company's profitability forecast but also indicated that their intention to increase their user base was linked to a deliberate network effect. If Napster were to become indispensable to system users, more individuals would be inclined to join the service due to its increasing popularity.

The "network effect" is the notion that as more individuals join a system, such as a music platform, the value of the system increases for all users due to the greater availability of music. At a specific juncture, Napster planned to implement a charge for music sharing, a practice that users would feel obliged to agree to due to their reliance on the service.¹³⁰

¹²⁵ Patrick Mooney, Napster and its Effects on the Music Industry: An Empirical Analysis (2010) Journal of Social Sciences 6 (3) <https://thescipub.com/pdf/jssp.2010.303.309.pdf> accessed 8 January 2024

¹²⁶ *ibid*

¹²⁷ Abbie Woelfel, The Napster Phenomenon: Turning the Music Industry Upside Down https://www.uwlax.edu/globalassets/offices-services/urc/jur-online/pdf/2001/a_woelfel.pdf accessed 18 March 2024

¹²⁸ Nair S, "A&M Records, Inc. v. Napster Inc." (IP Matters, September 26, 2022) <https://www.theipmatters.com/post/a-m-records-inc-v-napster-inc> accessed 19 March 2024

¹²⁹ *ibid*

¹³⁰ Sanjana, "An Overview on A&M Records, Inc. v. Napster Inc." (IPLF, September 30, 2021) <https://www.ipandlegalfilings.com/scrutinizing-the-nuances-of-the-napster-case/> accessed 20 March 2024

The Napster programme offered users many functionalities to facilitate the exchange of music, ideas, and events over the Internet. Users were required to agree to the terms outlined in Napster's user agreement in order to access these features. Users were explicitly notified from the outset that if they were discovered to have engaged in the exchange or distribution of unauthorised music over the system, Napster would expel them from the network. Nevertheless, numerous users managed to exploit Napster in an illicit manner without facing any consequences from the server. Despite being banned from the system, it was not challenging to acquire access again using a new (pseudonymous) account.

The court considered the following points to analyse copyright law with respect to the Napster programme¹³¹:

Direct infringement

The Circuit Court concurred with the trial court's finding that Napster users were likely involved in the direct violation of the plaintiffs' copyrights.

Fair use defence

The Circuit court agreed with the district court's analysis of how people use the Napster system. They also supported the district court's assessment of three specific fair uses claimed by Napster: sampling, which allows users to make temporary copies of a work before buying it; "space-shifting, where users listen to a sound recording on Napster that they already own in CD format"; and the legal distribution of recordings by both new and established artists. The court initially examined these four characteristics at a conceptual level, focusing on the system as a whole. The District Court's decision that downloading an MP3 is not transformative under the purpose and character of use criteria was agreed upon. It was also acknowledged that Napster did not directly gain monetarily from consumers' downloads (i.e., charge for the service), "repeated and exploitative copying of

copyrighted works, even if the copies are not offered for sale" could be considered a commercial use.¹³²

1. The court upheld the district court's conclusion that creative works, such as the songs in question, are more crucial for protecting copyright than non-creative works, so giving the plaintiffs an advantage based on the second criterion.
2. The potential for legally protecting the act of batch copying of a work was considered, with time-shifting being mentioned as an illustration.
3. Ultimately, the Ninth Circuit concurred with the district court's ruling that the extensive and indiscriminate dissemination of the plaintiff's music had a detrimental impact on the CD sales market and posed a threat to the record industry's prospects in digital platforms.

The court then turned to the three uses Napster identified as fair use in the conduct of its users¹³³:

- a. Sampling involves users creating temporary copies of a work to try it out before buying it. The District Court considered this a commercial use, even if the user eventually purchases the work. Sampling was deemed to A&M Records, Inc. v Napster Inc. (2001)¹³⁴ not be a fair use, because the "samples" were in fact permanent and complete copies of the desired media.
- b. Space-shifting occurs when users listen to a sound recording on Napster that they already own on a CD. The District Court determined that the analyses used in previous cases like Sony¹³⁵ and RIAA v. Diamond Multimedia didn't apply here because in those cases, the

¹³² "The Napster Controversy | RIAA vs. Napster | Free Management Articles | Free Management Case Studies" <https://www.icmindia.org/free%20resources/casestudies/napster-controversy-1.htm> accessed 13 march 2024

¹³³ A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001)

¹³⁴ A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001)

¹³⁵ Sony Corp. v. Universal Studios, 464 U.S. 417 (1984)

¹³¹ A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001)

"shifting" didn't involve or enable distribution. The space-shifting argument did not succeed because, while the shift to a digital format may have been a personal storage use, it was accompanied by making the file available to the rest of the system's users.¹³⁶

- c. The District Court allowed for the authorized sharing of music by both emerging and established artists on the Napster system, which they determined was not a violation and could continue. This also included features like chat rooms and other non-sharing aspects of Napster.

On the other hand, the court decided that the Napster owners could monitor and regulate the illegal actions of users, and therefore were obligated to take action. The Ninth Circuit agreed with this evaluation, stating that the plaintiffs were likely to prove that Napster didn't have a defensible fair use defence. Contributory infringement is the legal responsibility that can be placed on an individual or organisation who intentionally aids or enables the violation of another person's intellectual property rights. In order to establish contributory infringement, the plaintiff must prove that the defendant had knowledge of the infringement (in this case, that Napster was aware of its users unlawfully sharing copyrighted materials across its network) and that the defendant actively aided in facilitating such infringement.¹³⁷

The District Court concluded that the law does not need knowledge of specific instances of copyright infringement, and therefore disregarded Napster's argument that their inability to distinguish between infringing and non-infringing files meant they were unaware of copyright infringement. The Ninth Circuit upheld this determination, recognising that Napster

had "consciousness, both explicit and implicit, of direct violation."

Furthermore, the Ninth Circuit concluded that Napster was not eligible for legal protection based on the precedent established in the Sony Corp. of America v. Universal City Studios, Inc. case, sometimes referred to as "the Betamax case", because of the decision made in A&M Records, Inc. v Napster Inc. (2001). The main reason for this was that Napster possessed "concrete and explicit awareness of direct infringement."

"The decision had four key conclusions as given below:

- A. First, the Ninth Circuit acknowledged that it could not impute sufficient knowledge to Napster "merely because peer-to-peer file sharing technology may be used to infringe plaintiffs' copyrights." Paraphrased Sony into its own words, the Ninth Circuit explained that if a defendant "made and sold equipment capable of both infringing and substantial non-infringing uses," that fact alone—i.e., "evidence that such machines could be and were used to infringe plaintiffs' copyrighted television shows" – would not be sufficient grounds to impute constructive knowledge to defendants.
- B. The Court also assumed that Napster's software is "capable of commercially significant non-infringing uses." This analysis differed from the District Court's, which allowed "capable of" to be limited to the concrete uses that Napster alleged were actually underway.
- C. Nevertheless, the Ninth Circuit found that, "Regardless of the number of Napster's infringing versus non-infringing uses", the question could be resolved on the basis of whether "Napster knew or had reason to know of its users' infringement of plaintiffs' copyrights."
- D. The Ninth Circuit accepted that Napster has actual knowledge that specific

¹³⁶ Recording Industry Ass'n of America v. Diamond Multimedia Systems, Inc. <https://cyber.harvard.edu/property00/MP3/rio.html> accessed 19 March 2024

¹³⁷ *ibid*

infringing material is available using its system, that it could block access to the system by suppliers of the infringing material, and that it failed to remove the material.”

The music industry was appalled by Napster, although it also demonstrated the potential benefits of digital distribution.

One of the most crucial advantages is the capacity to engage directly with an individual customer, eliminating the inconvenience and cost associated with a physical distribution network.¹³⁸ The music industry recognised the significance of PC and Internet technology as crucial marketing tools for recording artists and labels. Label websites can also serve as a platform for promoting new releases, providing music samples, and facilitating easy access to an artist's previous works.¹³⁹ Despite the perception that the business is committed to traditional revenue sources, it has been experimenting with various pay-per-download and online subscription services.

1.2 Important cases that came before the Napster case were important in analysing how emerging technologies posed challenges to traditional copyright law

1.2.1 The Betamax Case

The case of Sony Corp. of America v. Universal City Studios, Inc., (1984), also known as the "Betamax case", is a decision made by the Supreme Court of the United States.¹⁴⁰ The court ruled that making complete personal copies of television shows for the purpose of time shifting does not constitute copyright infringement, but instead falls within the realm of fair use.¹⁴¹

The Court further determined that the producers of domestic video recording devices, such as Betamax or other VCRs, cannot be held

legally responsible for violating copyright laws. The case greatly enhanced the home video market by establishing a legally protected space for the technology. This also greatly improved the entertainment business by facilitating the sale of pre-recorded films.

The copyright case of Sony v. Universal Studios is often regarded as the most renowned among all such instances. Individuals lacking knowledge about copyright are aware that the Sony-Betamax case established the principle that recording television programmes at home using a videotape recorder is considered fair use.¹⁴² Interestingly, even though the Supreme Court agreed to examine the case to decide whether copyright law permitted customers to make personal copies of TV shows at home, most of the justices ended up framing their analysis in a manner that didn't provide a straightforward answer to that question.

However, the court determined that the producer and seller of the copying equipment cannot be held responsible for copyright infringement, even if users occasionally break copyright laws by recording television programmes from the air. The Court determined that home videotaping was deemed permissible due to the authorization of the programmes' copyright owners and the application of fair use principles. Due to the fact that videotape recorders had the potential to be used for both legal and illegal copying, the production and sale of these devices did not make the Sony Corporation legally responsible.

The decision of the Court had a significant legal impact by establishing a universal criterion for deciding whether a device with the ability to copy or record violates copyright law.

Courts have encountered challenges in interpreting how this ruling applies to more recent file sharing technology utilised on personal computers and the Internet.

The primary application of the Betamax technology was its capacity to enable

¹³⁸ Dowling S, "Napster Turns 20: How It Changed the Music Industry" (February 24, 2022) <https://www.bbc.com/culture/article/20190531-napster-turns-20-how-it-changed-the-music-industry> accessed 9 March 2024

¹³⁹ *ibid*

¹⁴⁰ Litman J, "The Story of Sony v. Universal Studios: Mary Poppins Meets the Boston Strangler." (University of Michigan Law School Scholarship Repository) https://repository.law.umich.edu/book_chapters/214/ accessed 12 March 2024

¹⁴¹ *ibid*

¹⁴² Sony Corp. v. Universal Studios, 464 U.S. 417 (1984)

consumers to time-shift network television. Unlike the previous scenario when viewers were obliged to watch a TV show at the network's designated time, Betamax users gained the ability to manipulate the programming schedule according to their preference. The VCR not only enabled consumers to time-shift, but it also made it possible to quickly skip past commercials. Unlike being compelled to endure television advertising, VCR users have the ability to fast forward through them. However, this created a significant clash with the television industry's market, which relies on these advertising.¹⁴³

Sony spearheaded the advancement of Betamax, "a video tape recording format", during the 1970s. Universal Studios, and other members of the film business were apprehensive about this development. Nevertheless, they were aware that the U.S. Congress was nearing the completion of its revisions to U.S. copyright law and would likely be hesitant to implement any further measures to protect the film industry. As a result, the corporations made the decision to initiate legal proceedings against Sony and its distributors in the U.S. District Court for the Central District of California in 1976.¹⁴⁴

They claimed that Sony should bear liability for any copyright infringements perpetrated by buyers of the gadget, as it had the capacity to be utilised for such infringements.

After a two-year period, the District Court issued a verdict in favour of Sony. The decision was based on the understanding that recording for personal, non-commercial use falls under fair use. Furthermore, it was argued that this usage aligns with the First Amendment's goal of promoting public access to freely available information. However, the ruling was partially reversed by the United States Court of Appeals for the Ninth Circuit, which found Sony accountable for contributing to infringement.

In the Sony Corp. of America v Universal City Studios, Inc. (1984) decision, the court ruled that the Betamax could not be classified as a staple product because its main purpose was duplicating.¹⁴⁵ The letter suggested pursuing reparation, legal injunctions to halt the action, and obligatory licences as alternative remedies.

The Court's decision to overturn the Ninth Circuit's favourable ruling for Sony was based on the potential for substantial lawful uses of the technology in question, and the plaintiffs' failure to provide evidence to challenge this possibility. The Court examined the question of whether Sony might be deemed to have "contributed" to copyright infringement.

The statement highlighted the importance of finding a middle ground between safeguarding the copyright holder's reasonable requirement for robust protection of their exclusive rights and ensuring the rights of others to participate in unrelated economic activities without restrictions. As a result, selling copying equipment is akin to selling any other everyday commercial item, and it doesn't amount to contributing to infringement as long as the product is commonly used for authorized and uncontroversial purposes. Indeed, it only requires the capacity to be utilised in meaningful ways without violating any rights.

The current issue is whether the Betamax have the capacity to be utilised in manners that are both economically substantial and do not violate any copyrights. An exemplary usage of the Betamax that clearly satisfies this requirement is the act of privately and non-commercially recording and thereafter playing back content at a later time within one's own residence. The reason for this can be attributed to two factors¹⁴⁶:

"(A) respondents lack the power to prevent other copyright holders from allowing their programmes to be used in this manner, and

¹⁴³ Carey R. Ramos, "The Betamax Case: Accommodating Public Access and Economic Incentive in Copyright Law on JSTOR" (www.jstor.org) <https://www.jstor.org/stable/1228556> accessed 12 March 2024

¹⁴⁴ *ibid*

¹⁴⁵ Sony Corp. v. Universal Studios, 464 U.S. 417 (1984)

¹⁴⁶ "SONY CORPORATION OF AMERICA, et al., Petitioners v. UNIVERSAL CITY STUDIOS, INC., Etc., et al." (LJI / Legal Information Institute) <https://www.law.cornell.edu/supremecourt/text/464/417> accessed 12 March 2024

(B) the factual conclusions of the District Court indicate that even the unauthorised home time-shifting of respondents' programmes is deemed a lawful fair use. If a significant number of individuals who own video tape recorders (VTRs) make copies of televised sports events, religious broadcasts, and educational programmes, and if the owners of those programmes give their approval for this practice, the equipment used for such copying should not be limited solely because some individuals use it to make unauthorised reproductions of copyrighted works."

When examining a copyrighted audiovisual work that is aired on television, it is crucial to acknowledge that time-shifting enables consumers to watch the complete work without incurring any expenses. Although the complete work is replicated, this does not weaken the argument for fair usage.

1.2.2 CBS Songs Ltd v Amstrad Consumer Electronics Plc [1988]

A landmark judgement of the United Kingdom which had major implications on traditional copyright law is the case of *CBS v Amstrad*.¹⁴⁷

The dispute revolved around Amstrad's production and distribution of a dual cassette recorder, which facilitated the effortless duplication of music cassettes. CBS Songs Limited, acting on behalf of copyright holders, contended that Amstrad was endorsing or facilitating copyright infringement by producing and marketing these devices, as users were utilising them to create unauthorised duplicates of copyrighted music. The House of Lords determined that Amstrad was not legally responsible for copyright infringement.¹⁴⁸

They concluded that the manufacturer of a device that had the potential to violate copyright laws was not automatically violating copyright laws, as long as there were significant

legitimate applications for the device. The Lords underscored the significance of the manufacturer's intention and determined that Amstrad did not grant permission for the violation of copyright through the production and sale of the twin cassette recorders. This information may have relevance in the ongoing Getty Images litigation.¹⁴⁹

1.2.3 Religious Technology Center v. Netcom case

The Religious Technology Center v. Netcom case is a legal matter heard in a United States district court. It dealt with the responsibility of an Internet service provider, Netcom, for copyright infringement committed by one of its subscribers, Dennis Erlich, who shared copyrighted materials on a "Bulletin Board Service (BBS)". The plaintiff, Religious Technology Center (RTC), argued that Netcom was directly, contributorily, or vicariously liable for copyright infringement.¹⁵⁰

Background:

"RTC holds copyrights in the works of L. Ron Hubbard and sued Netcom, Erlich, and Tom Klemesrud (operator of the BBS) for copyright infringement.

Netcom argued that it was not directly or vicariously liable for copyright infringement, as it did not receive direct financial benefit from the infringement and did not have the right and ability to exercise control over the infringing activity."

Issues:

- Direct infringement: "Whether Netcom directly infringed RTC's copyrights by making copies of the works".
- Contributory infringement: "Whether Netcom was liable for infringement due

¹⁴⁷ CBS Songs Ltd v Amstrad Consumer Electronics Plc [1988] 2 WLR 1191
¹⁴⁸ "C.B.S. SONGS LIMITED & OTHERS V AMSTRAD CONSUMER ELECTRONICS PLC AND ANOR." (Reports of Patent, Design and Trade Mark Cases, January 1, 1988) <https://academic.oup.com/rpc/article-abstract/105/25/567/1571840> accessed 12 March 2024

¹⁴⁹ "CBS Songs Ltd v Amstrad Consumer Electronics Plc [1988] UKHL 15 | Wilmap" (May 12, 1988) <https://wilmap.stanford.edu/entries/cbs-songs-ltd-v-amstrad-consumer-electronics-plc-1988-ukhl-15> accessed 12 March 2024
¹⁵⁰ "Religious Technology Center v. Netcom" (Stanford Copyright and Fair Use Center, January 31, 2023) <https://fairuse.stanford.edu/case/religious-technology-center-v-netcom/#:~:text=Netcom,-Citation%3A%20907%20F&text=Erlich%20was%20charged%20with%20copyright,%2DLine%20Communication%20Services%2C%20Inc.> accessed 13 March 2024

to its knowledge of the infringing activity and its role in facilitating the infringement”.

- Vicarious infringement: “Whether Netcom was liable for infringement because it received direct financial benefit from the infringement”.
- Fair use defence: “Whether Netcom’s copying of the works was protected under the fair use doctrine”.

Decision:

“The court granted a preliminary injunction against Erlich, finding that RTC had shown a prima facie case of direct and contributory infringement.

However, the court denied Netcom’s motion for summary judgment, as there were disputed questions of fact regarding Netcom’s knowledge of infringement and its fair use defences.

The court held that Netcom was not directly or vicariously liable for copyright infringement, as it did not receive direct financial benefit from the infringement and did not have the right and ability to control the infringing activity.

The court also denied RTC’s claims of direct and vicarious infringement, as RTC failed to prove that Netcom received direct financial benefit from the infringing activity or that Netcom had the right and ability to control the infringing activity.”

Reasoning of the court is as follows¹⁵¹:

- a. Direct infringement: “Netcom was not directly liable for copyright infringement because it did not copy the works itself. The court found that Netcom’s copying was not for the purpose of getting to the unprotected idea behind the plaintiffs’ works.”

- b. Contributory infringement: “Netcom was not contributorily liable for copyright infringement because it did not have the right and ability to control the infringing activity. The court found that Netcom’s terms and conditions, to which its subscribers must agree, specify that Netcom reserves the right to take remedial action against subscribers, but this does not give Netcom the right to control its users’ postings before they occur.”

- c. Vicarious infringement: “Netcom was not vicariously liable for copyright infringement because it did not receive a direct financial benefit from the infringing activity. The court found that Netcom’s policy does not necessarily attract copyright infringers to its system, and there was no probative evidence to support the argument that Netcom’s policy results in a direct financial benefit.”

- d. Fair use defence: “Netcom argued that its copying of the works was protected under the fair use doctrine. However, the court found that fair use presents a factual question on which the plaintiffs have at least raised a genuine issue of fact. The court did not find that Netcom’s use was fair as a matter of law.”

As a result of Netcom’s lack of ability and power to control the infringing behaviour as well as its inability to profit directly from the infringement, the court determined that Netcom was not liable for copyright infringement either directly or indirectly. The plaintiffs’ claims of direct and vicarious infringement were similarly rejected by the court because they were unable to establish either that Netcom had the authority to control the infringing conduct or that it directly benefited financially from it.

The advancement of new technologies has brought about a significant shift in how copyrighted work is shared, transferred, and distributed, prompting investigations into potential copyright infringement. This progress

¹⁵¹ Burcher EA and Hughes AM, “Religious Technology Center v. Netcom On-Line Communications Services, Inc.: The Knowledge Standard for Contributory Copyright Infringement and the Fair Use Doctrine” (UR Scholarship Repository) <https://scholarship.richmond.edu/jolt/vol3/iss1/7/> accessed 13 March 2024

is highlighted by the insufficiency of traditional copyright laws, which frequently lack clear rules on the boundaries of authorship and the classification of copyrighted content. At the same time, present difficulties are made more noticeable by the widespread presence of non-human entities, including artificial intelligence, that are involved in the distribution of copyrighted material. The combination of AI and copyright law is filled with intricate challenges, as it requires a detailed analysis of the legal consequences and ethical considerations that arise when technology advances interact with intellectual property considerations. The following discussion clarifies the significant concerns that arise from the clash between artificial intelligence (AI) and copyright law.¹⁵²

1.3 Copyright and Artificial Intelligence

The generation of content has undergone a remarkable transformation in our world due to the vast potential unleashed by artificial intelligence (AI). In light of the extensive utilisation of AI-generated works, intricate legal issues about authorship, liability, and ownership have emerged. The reciprocal interplay between individuals and artificial intelligence systems has sparked a legal discourse in India, where the prevailing legislation is the Copyright Act of 1957¹⁵³. Who is the genuine creator of AI-generated masterpieces? What is the legal responsibility of the individuals who create or author algorithms? These are some of the questions that are at the forefront of development and its interaction with the law.

Historically, it has been widely accepted that humans possess intelligence and possess the ability to produce original and inventive creations that can be legally protected as intellectual property. This idea is also evident in the lawmakers who have formulated intellectual property laws. Imagine the existence of a machine or programme capable of

comprehending the information it is given, resulting in the creation of an intelligence that is significantly more advanced, precise, and easily accessible to everyone. Why should such high-level intelligence be treated in a distinct manner and not be granted the same privileges as others?¹⁵⁴

1.3.1 Authorship and AI generated work

The Copyright Act of 1957 in India regulates copyright and provides protection to the author or creator of a work. The Act categorises authorship depending on the nature of the work, encompassing literary works, theatrical works, musical works, artistic works, cinematographic films, and sound recordings.¹⁵⁵ According to the Copyright Act:

“The author of a literary or theatrical work is the individual who develops the work and, the individual who generates a literary work using a computer is recognised as the author.”

The Copyright Act does not include any explicit guidelines concerning AI-generated works. However, we can interpret the current provision, Section 2(d)(vi) of the Copyright Act, 1957, which defines “author” as the individual who initiates the creation of the work.¹⁵⁶ This provision can be expansively construed to encompass individuals who furnish the essential data or instructions to an AI system, thereby leading to the generation of computer-generated work.¹⁵⁷ The Copyright Act encompasses copyright ownership and specifies that the author should be the initial proprietor of the copyright in a work. Based on the previously described provisions, the initial copyright holder of an AI-generated work will be considered to be the individual who creates the work by providing input or instructions.¹⁵⁸ Therefore, these sectors acknowledge and value the significant

¹⁵⁴ Raj N, “Legal Implications Of AI-Created Works In India” (Copyright - India, July 28, 2023) <https://www.mondaq.com/india/copyright/1348418/legal-implications-of-ai-created-works-in-india> accessed 13 March 2024

¹⁵⁵ Copyright Act, 1957

¹⁵⁶ *ibid*

¹⁵⁷ Copyright Act 1957, s. 2(d)(vi)

¹⁵⁸ VK Ahuja Artificial Intelligence And Copyright: Issues And Challenges (2020) IJI Law Review <https://ili.ac.in/pdf/vka.pdf> accessed on 12 March 2024

¹⁵² Religious Technology Center v. Netcom On-Line Communication Services, Inc. 923 F. Supp. 1231 (N.D. Cal. 1995)

¹⁵³ Copyright Act, 1957

contributions made by individuals who provide data to AI tools or give them instructions, duly identifying them as the creators of the final outcome.

Ongoing investigations are currently being conducted to explore the potential collaboration between humans and AI systems in co-authoring, due to the substantial impact that the advancement of AI technology has had on the creation of content. Nevertheless, it is crucial to acknowledge that these tools cannot be acknowledged as authors or co-authors in scholarly journals. India utilises legal precedents and the Copyright Act of 1957 as the basis for interpreting copyright law.

These legal precedents emphasise the need that the author of a work must be a human being, and that only human individuals or legal entities who have received copyright transfers are eligible for copyright protection. The conditions of use for AI tools like ChatGPT, explicitly delineating the user's accountability and ownership of the generated content, strengthen this viewpoint. Therefore, even when AI is involved in the process of creating material, the main responsibility and ownership of the work still belong to human creators who develop the content by providing input or instructions to AI.¹⁵⁹

The dynamic nature of AI-generated content may require future deliberations and perhaps revisions to copyright legislation in India. As AI-generated content advances, it becomes increasingly challenging to differentiate between work created by humans and robots, which raises concerns regarding authorship and copyright ownership.¹⁶⁰ Moreover, the widespread use of AI-generated content in business contexts underscores the need to update copyright laws to protect the rights of copyright owners.

1.3.2 Responsibility of Algorithm Developers or Authors

The accountability of algorithm developers or authors with regards to AI-generated content is a crucial consideration within the current legal framework. According to Section 2(d)(vi) of the Copyright Act of 1957, it acknowledges individuals who provide data to AI tools or instruct them as the creators of the resulting material, including content produced by AI. Consequently, these individuals maintain the exclusive rights to this material. Consequently, the person or organisation responsible for generating the work using the AI system is accountable for any challenges that may occur due to the utilisation or distribution of the created information. It is imperative that they implement measures to proactively avoid any violation or encroachment upon the rights of others. The author of an AI work has the ability to transfer or assign the rights, ownership, and liabilities associated with it to another individual or organization.¹⁶¹ Consequently, the new owner, whether they are the designer of the algorithm or another author, may bear the legal obligations and responsibilities that arise from the use or distribution of AI-generated work.

In India, the determination of an author's responsibility for AI-generated works can be made by applying legal statutes, such as the Copyright Act, and fundamental legal principles. Assessing the legal obligation of an author for an AI-generated work in India can be accomplished by examining relevant laws.

1.3.3 The Copyright Act of 1957

The Copyright Act of 1957 in India plays a crucial role in determining the legal responsibility of the author, including the algorithm designer and the AI-generated work's author, in cases of copyright violation. This section provides a compilation of actions that are considered copyright infringements, such as the

¹⁵⁹ Agarwal S and Bhardwaj C, "The Dilemma of Copyright Law and Artificial Intelligence in India" (Social Science Research Network, January 1, 2021) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3818280 accessed 21 March 2024

¹⁶⁰ *ibid*

¹⁶¹ Raj N, "Legal Implications Of AI-Created Works In India" (Copyright - India, July 28, 2023) <https://www.mondaq.com/india/copyright/1348418/legal-implications-of-ai-created-works-in-india> accessed 12 March 2024

unauthorised copying, distribution, or alteration of a copyrighted work. If the person behind AI-generated work participates in copying, reproducing, or distributing those outcomes, they could be held accountable for copyright infringement. The responsibility extends to Algorithm Creators as well. This means that if algorithm creators copy, reproduce, distribute, or use their algorithms in a manner that leads to copyright infringement, they can be held liable for such infringement. However, the determination of liability, whether it falls on the author or the algorithm inventor, will always be contingent upon the specific facts and circumstances of the case, which will be adjudicated by the relevant authorities.¹⁶²

Legal action can be pursued against both the author and the designer of the algorithm who violate copyright by invoking liability under Section 51.¹⁶³ The individual whose copyright has been violated possesses the entitlement to pursue legal actions, such as seeking compensation, court orders, or other forms of redress, in order to safeguard their intellectual property and hold the people responsible for the infringement.

1.4 Interplay of NFTs and Copyright Law

1.4.1 In what way are NFTs defined?

NFTs refer to assets that have undergone a transformation into tokens through the utilisation of blockchain technology. Tokens are allocated distinct identification numbers and metadata, which facilitate their distinction from other tokens. Cryptocurrencies can be categorised as tokens, with a significant differentiation being that two cryptocurrencies of the same blockchain exhibit the attribute of interchangeability, generally known as fungibility. Although two non-fungible tokens (NFTs) derived from the same blockchain may seem identical, they are not interchangeable.

Non-fungible tokens (NFTs) contain a diverse array of assets, such as photographs, movies, music, sports collections, tweets, and signatures, that possess the distinctive characteristic of being able to be acquired or exchanged as NFTs. An important characteristic of these tokens is their exclusive function of representing digital assets, such as artworks, video games, images, and music, rather than functioning as the assets themselves.

1.4.3 What does an NFT acquisition include?

Acquiring an NFT involves obtaining data or a code that indicates to a server that hosts the image or video known as an NFT. In the blockchain, the ownership of an image is not dependent on the image itself, but rather on the precise code or data that refers to it. The attainment of this objective is accomplished through the issuing of a distinct cryptographic key, which functions as a representation of the object.

Ownership of intellectual property in the NFT and protection of consumer rights Understanding the differentiation between a non-fungible token (NFT), which operates solely as a token on a blockchain, and the underlying labour it represents is crucial.

It is crucial to distinguish between the act of creating the Works and owning them, and the act of owning the NFT itself. The ownership of the NFT lies with its creator. In actuality, the person who holds the NFT may not necessarily be the originator of the original creations. However, the act of generating a “non-fungible token (NFT)” representing a piece of work that is already under the ownership of another individual would be considered as the act of appropriating the work, so infringing upon copyright laws. The automated outcome of an NFT transaction does not necessarily result in the transfer of intellectual property rights of the underlying work to buyers. The transaction of NFTs relies on a smart contract. The smart contract encompasses two primary entities, namely the seller and the purchaser, with the

¹⁶² Andres Guadamuz “Artificial Intelligence and Copyright” <https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html> accessed 12 March 2024

¹⁶³ Copyright Act 1957, s. 51

support of intermediaries such as Binance and WazirX. In general, the buyer is provided with a replica of the digital artwork that has undergone appropriate verification through the blockchain ledger. In the absence of explicit transfer of the underlying intellectual property (IP) within the non-fungible token (NFT) by the smart contract, the buyer will exclusively get the NFT without any ownership rights over the intellectual property linked to the underlying works.

The protection of copyright and moral rights of the creator (in this instance, the seller) is ensured under Section 57 of the Copyright Act.¹⁶⁴ Specifically, these rights are distinct and encompass the entitlement to a. assert ownership of the work; and b. demand remuneration for any alterations made to the work or any negative impact on its reputation.¹⁶⁵ Therefore, a significant distinction between obtaining an NFT and obtaining the “original work” is that the copyright of the original does not automatically go to the customer when they buy it. The act of transferring a token alone imparts the ownership rights linked to said token, without inevitably conveying the copyright(s) inherent in the token's creation. Put simply, the individual who created the work maintains genuine ownership, regardless of whether it is replicated in the digital domain.

For example, in the event that a non-fungible token (NFT) symbolising a well-known musical achievement is produced and subsequently traded, the intellectual property (IP) encompassed within the digital token will be handed to the relevant governing bodies and record labels.¹⁶⁶ Moreover, the individual who acquires the non-fungible token (NFT) is strictly forbidden from engaging in commercial licencing, replication, or any other form of alteration.

Based on the previous communication, it appears that the buyer has limited access to

the NFT. Within a practical scenario, it is typical for a buyer of a highly esteemed artwork to have the right to claim ownership (bragging rights), display or display it, and maybe participate in future sales. The buyer is prohibited from reproducing or commercialising the artwork using alternative methods, such as putting it on t-shirts or other print media. The identical reasoning may be extended to non-fungible tokens (NFTs) as they fundamentally represent a digital reproduction of a creative output.

Buyer's right to receive profit: The area is witnessing tremendous advancements in emerging models, and on occasion, the buyer may also be granted the right to profit from the investment made in the non-fungible tokens (NFTs). Persons who make investments in non-fungible tokens (NFTs) linked to a musical composition will have the right to receive a share of the royalties generated whenever the music is streamed.¹⁶⁷ Consequently, their primary focus lies in the economic benefits obtained through the utilisation of the song, however they lack ownership of the song's intellectual property rights. This bears similarity to how funds are allocated to mutual funds. The fund distributes gains to you by allocating your cash to a variety of securities. The process of allocating funds for investment purposes does not grant individuals ownership of the underlying securities.

1.4.4 Copyright infringement

Copyright is typically seen as a set of rights, where each right has the possibility of being owned or licenced independently. The bundle encompasses a specific entitlement that relates to the generation of “non-fungible tokens (NFTs)” in relation to copyrighted materials. Thus far, media contracts have not explicitly addressed the authorization to create and distribute “non-fungible tokens (NFTs)”. The current state is experiencing a process of

¹⁶⁴ Copyright Act 1957, s. 52

¹⁶⁵ Adarsh Vijayakumaran, NFTs And Copyright Quandary https://www.jipitec.eu/archive/issues/jipitec-12-5-2021/5497/vijayakumaran_pdf.pdf accessed 13 March 2024

¹⁶⁶ *ibid*

¹⁶⁷ “NFTs, Minting and Copyright: What You Should Know as an Artist” <https://www.rennoco.com/post/nfts-minting-and-copyright-what-you-should-know-as-an-artist> accessed 13 March 2024

change.¹⁶⁸ The stakeholders are presently involved in negotiations aimed at establishing “non-fungible tokens (NFTs)” as a separate and unique entitlement. It would be of great interest to examine the manner in which contemporary contracts are interpreted, namely, the determination of who will be considered eligible for such entitlement. In the given case, it is vital to contemplate whether a streaming platform, having been granted digital rights by a producer, had the requisite authorization to manufacture non-fungible tokens (NFTs). The reason for this is that NFTs can be perceived as being within the scope of digital rights. The result will differ depending on the manner in which the definitions and clauses are constructed.

Therefore, it is crucial to conduct a comprehensive analysis of chain of title documents to determine the assignment of rights to certain entities, thus reducing the potential for legal consequences. The legal dispute over the film Pulp Fiction between Quentin Tarantino and Miramax stands as a significant precedent in this field. In the *Miramax v Quentin Tarantino* case, Miramax attempted to prevent the well-known director from participating in the sale of unique artefacts associated with non-fungible tokens (NFTs) relating to the Pulp Fiction film.¹⁶⁹ Miramax has addressed accusations of copyright and trademark violation, as well as violation of the contract, based on its complete ownership of the film.¹⁷⁰

Copyright infringement can happen at two different levels: firstly, when the creator or seller of the non-fungible token (NFT) unknowingly engages in unauthorised minting or publication without fully understanding their rights, as demonstrated in the case of *Miramax v Quentin*

Tarantino; and secondly, when a buyer unknowingly reproduces and spreads the NFT without authorization.¹⁷¹ In many cases, this can also be considered an inadvertent infringement by buyers who mistakenly view themselves as copyright owners, a belief that is typically unsupported.

1.4.5 Is it possible to hold NFT marketplaces accountable?

In instances of contributory copyright or trademark infringement, NFT marketplaces may face legal responsibility when a user participates in the “sale and creation of an NFT” that is associated to a “copyrighted work” on the platform. Markets possess the capacity to exert their function as intermediaries and pursue safeguarding under section 79 of the Information Technology Act, 2000.¹⁷²

However, one could argue that these marketplaces have a greater obligation to enforce suitable measures to reduce copyright or trademark infringement. The reason for this is that the platform mandates that both the minter and seller have complete ownership rights over the non-fungible token (NFT). Insufficient guarantee of ownership would erode confidence in transactions. The NFT ecosystem relies on the creation of trust in authentic records as its base.

In addition, the platform has significant control over digital inventions and has the capacity to evaluate and supervise the intellectual property associated with them. Furthermore, the platform produces direct revenue through the imposition of petrol taxes (transaction fees) and commissions on each transaction facilitated by the sale of non-fungible tokens (NFTs). Consequently, NFT platforms face difficulties in establishing the safe harbour defence.

¹⁶⁸ Km G, “NFTs And Copyrights” (Copyright - India, March 8, 2023) <https://www.mondaq.com/india/copyright/1211232/nfts-and-copyrights#:~:text=For%20minting%20an%20NFT%2C%20one,to%20an%20infringement%20of%20copyright>. Accessed 12 March 2024

¹⁶⁹ Entertainment L, “Pulp Fiction NFT Lawsuit (Miramax V. Tarantino, Et Al): A Preview Of Coming Attractions” (Forbes, October 4, 2023) <https://www.forbes.com/sites/legalentertainment/2022/07/25/pulp-fiction-nft-lawsuit-miramax-v-tarantino-et-al-a-preview-of-coming-attractions/> accessed on 12 March 2024

¹⁷⁰ Ibid

¹⁷¹ Emily Dieli, TARANTINO V. MIRAMAX: THE RISE OF NFTS AND THEIR COPYRIGHT IMPLICATIONS, Boston College Intellectual Property & Technology Forum

¹⁷² Information Technology Act 2000, s. 79