

## Effective Approaches to Tackle Digital Piracy in the Media and Entertainment Industry

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### Abstract

This case study explores the pervasive issue of digital piracy within the media and entertainment industry, analyzing its impact on revenue, intellectual property rights, and consumer behavior. With the rise of online platforms and easy access to pirated content, creators and distributors face significant challenges in safeguarding their work. This paper examines various approaches that industry stakeholders have adopted to mitigate the effects of piracy, including technological innovations, legal frameworks, and consumer education. By assessing the effectiveness of these strategies, the research aims to provide insights into best practices and recommend comprehensive solutions that balance accessibility and protection for content creators. A doctrinal methodology was adopted in carrying out this research. This involves both library and desk research. A detailed and comprehensive review of statutes, case laws, conventions, text books, journals, articles, conference papers, internet and other legal literature has been made. Also, the methodology adopted in this research is descriptive and analytical because the work evaluated the current state of digital piracy in the media and entertainment industry and suggests best practices to tackle the issue. By using Canada and the United States of America as case studies, this research contributes to the ongoing discourse on how to foster a sustainable media ecosystem while addressing the challenges posed by digital piracy.

### 1.1. Introduction

Digital piracy also known as online piracy is a plague that poses a significant threat to the media and entertainment industry. It is defined as the unauthorized copying and distribution of protected works through the Internet (Panethiere, 2005, p. 11). Given the rise in technological advancement, the ease at which people can enjoy music, movies, or TV shows has improved tremendously. However, it has exacerbated the problem of copyright infringement. With high-speed internet access, improved compression technology, and an increasing number of tech-savvy computer users, the ability to illegally access and share copyrighted work online has exploded and will continue to do so. The media and entertainment industry loses billions of dollars every year due to copyright infringement (Justia, 2022). Illegal digital content is now easier to obtain than ever before through websites, apps, and social media. The advent of MP3s and peer-to-peer file-sharing has completely changed the internet music landscape (Colangelo, 2022, p. 895). Stream-ripping services (the most common type of music piracy in Canada) allow users of licensed streaming services, such as YouTube, to convert streams into unauthorized audio downloads which allows them to save and replay the content freely without any royalties being paid to the rights holders (International Intellectual Property Alliance, 2021, p. 128). Pirates usually crack movies and set up streaming sites where users can view copyrighted content for free (Jonhson, 2021). Cyberlocker sites like Uptobox, Mixdrop, and Rapidgator are common methods of illegally accessing recorded music (International Intellectual Property Alliance, 2021, p. 130). Unfortunately, pirate operator sites provide unrestricted access to audiovisual content stolen from a pay TV operator and accessible via illicit devices and apps (Interpol, 2022). The pertinent question is, what strategies should the media and entertainment industry employ to combat this menace? To effectively minimize digital piracy, the media, and entertainment industry should sue the infringing parties in court, adopt the notice and notice regime, and employ blockchain technology.

## 1.2. Definition of Copyright

The World Intellectual Property Organization defines copyright, or author's rights, as the legal rights that creators possess regarding their literary and artistic works (World Intellectual Property Organization, n.d).

In Canada, Copyright is governed by the *Copyright Act* (RSC 1985, c.C-42). It arises automatically whenever an original idea is given a concrete expression; hence, there is no need to register works of art to obtain copyright protection in Canada (Pritchard et.al., 2019, p. 320).

In Canada, copyright lasts throughout the lifetime of the author and expires 70 years after the death of the author before it enters the public domain (*Copyright Act*, s. 6). Similarly, copyright protection has been extended to 70 years in the United States and in certain European countries like the United Kingdom (Pritchard et.al., 2019, p. 320). Copyright owners, therefore, have the right to produce, reproduce, perform, or publish any translation of the work, communicate to the public, present, and license these rights to another person (*Copyright Act*, s. 3(1)).

## 1.3. Requirements for Copyright Protection

To benefit from copyright protection, a work must be **original, fixed, and connected** to Canada.

a) **Originality:** This is a fundamental concept in copyright law because it defines the work to which copyright is attached and the scope of protection it receives (Craig, 2005, p. 425). Section 5(1) of the *Copyright Act* provides that copyright protects **original** literary, dramatic, musical, and artistic work. Original work is work that is not copied from any other source but derived through the exercise of the author's skill and judgment. In *CCH Canadian Limited v Law Society of Upper Canada*, [2004] 1 SCR 339, the Supreme Court of Canada in a unanimous decision defined originality as the need for an author to exhibit skill and judgment in the creation of their work. Essentially, originality demands that the work results from intellectual effort rather than being a mere mechanical task.

b) **Fixation:** Copyright is limited to the expression of a work that is fixed in a tangible medium of expression such as recording a work on a tape or a computer hard drive, writing a work on paper, etc (University of Michigan Library, 2023). Thus, spontaneous moments in time like a choreography move, and unrecorded broadcasts are not protected. In Canada, the Exchequer court established the fixation requirement in the case of *Canadian Admiral Corporation Ltd v Rediffusion Inc*, [1954] 20 CPR 75 at para 28 where it was held that for copyright to exist in a work, it must be expressed in some tangible form that is identifiable and has a certain degree of permanence. The writer opines that the aim of this requirement is to add certainty to the law.

c) **Author's connection to Canada:** The author must be a citizen or resident of Canada or any other treaty country (Berne Convention, World Intellectual Property Organization Copyright Treaty, or Universal Copyright Convention country) on the date of making the work (Marks & Clerk, 2022). The signing of the Berne Convention for the Protection of Literary and Artistic Works in 1886 marked an international watershed moment, launching the modern system of international author rights protection. (Ricketson, 2018, p. 3). Article 3 of the Berne Convention states that the Convention's protections apply to authors who are either nationals of a member country or non-nationals who reside habitually in one of those countries. It also covers works that are first published or simultaneously published within 30 days in a member or signatory country. This implies that foreign authors have the same rights and privileges in respect of copyrighted material as local authors in any signatory country. Canada joined the Berne Convention as a British

colony in 1886 (Bannerman, 2009), while the United States became a party in 1989 (Cornell Law School, 2021). At present, there are 181 parties to the Berne Convention (Copyright House, 2009). The international protection of authors' rights, which underpins the above-mentioned international treaties, is critical because it will help reduce the copying of foreign works under the mistaken belief that the author is not normally connected to Canada.

#### **1.4. Common Forms of Digital Piracy**

##### **1.4.1. Napster**

On June 1, 1999, two teenagers in the United States of America launched "Napster," a music-sharing online platform that allowed millions of music fans around the world to download the latest musical releases for free (Dan, 2018). This digital file sharing lasted from June 1999 until shut down by a court order on July 2001 (Dan, 2018).

In the case of *A&M Records, Inc. v. Napster, Inc.*, 114 F. Supp.2d 896 (2000), the court ruled against Napster by issuing an injunction to stop file sharing despite Napster presenting a "fair use" type of defense and an argument based on "Free Speech" (the First Amendment).

##### **1.4.2. MP3 Player**

Not unrelated to the Napster software is the digital music format known as Motion Picture Experts Group Audio Layer 3 or MP3 which undermines copyright law (Colangelo, 2022, p. 895). MP3s replaced the analog technology of sound recording and are therefore completely digital and not bound to any physical medium.

MP3s employ a method of file compression called the "perceptual audio coding" method (Colangelo, 2022, p. 895). The perceptual audio coding technique's goal is to produce a decoded bit stream that sounds exactly (or as close as possible) to the original audio while maintaining a high compression ratio (Sinha et al. p. 2). Digital compression technology facilitates the storage of audio recordings in a digital format that requires less memory and can be uploaded and downloaded via the Internet (Newton, 2001). With MP3, a 32 MB song on a CD is compressed to approximately 3MB (Brain, 2021). A compressed MP3 file can be downloaded in about 5 minutes, whereas an uncompressed music file can take up to two hours to download or transfer to another user on the Internet using a 56 kbs modem (Colangelo, 2002, p. 894).

It is indisputable that the small size of MP3 files and high internet speed combined with the available file-sharing technology makes it easy and inexpensive for users to search for and copy digital music over the internet.

##### **1.4.3. Peer-to-Peer File Sharing Network (P2P)**

Peer-to-Peer file sharing has grown dramatically in recent times. According to Frostburg State University, "P2P is often used to illegally download and distribute copyrighted material, including music, movies, software, and games" (Frostburg State University, 2022). Users who lawfully purchase music and movies online can easily violate the law with P2P networks because their files are shared without their knowledge (Frostburg State University, 2022). Installing P2P file-sharing software exposes your files inadvertently to millions of other users because the technology allows computers running compatible P2P programs to form a network without the need for a server (Congress of the United States Congressional Budget Office, 2004, p. 18).

Undoubtedly, P2P networks allow for unauthorized file sharing and are a major source of copyright infringement concerns (Guo, 2016). Also, malware can be inadvertently obtained through P2P file-sharing.

#### **1.4.4. Stream-Ripping Services**

These are services such as Netflix, Amazon Music, Crave, Spotify, YouTube, Roku, Apple TV, Crackle, Vudu, Tik Tok, Disney+, Discovery+, and various sports streaming services that offer music and video online (Hertz, 2023).

Stream-ripping services constitute another type of digital piracy. It involves extracting a track from a streaming platform before converting it into a downloadable file that the user can use offline for an indeterminate period and access it without returning to the streaming service (Allen, 2020). Alan Cross stated in the February 12, 2023, Global news that, “dozens of websites, software, and apps that offer streaming services are finding an eager market in Canada” (Cross, 2023).

According to a 2017 study, 28% of American adults and 61% of adults aged 18 to 29 said that online streaming services were their primary way of watching television (Rai, 2021, p. 47). An additional report was published following a three-year comparison of United Kingdom streaming trends from October 2016 to October 2019, which was updated in September 2020. The report shows that streaming services account for the largest proportion of all music piracy in the United Kingdom, accounting for 80.2% of the top 50 sites for music piracy (Rai, 2021, p. 47).

Based on the foregoing, it is evident that streaming services are increasing exponentially leaving users with an overwhelming number of options. There are numerous websites, software, and mobile apps available to carry out such ripping by delivering pirated content online.

### **1.5. Combatting Digital Piracy in the Media and Entertainment Industry**

Having examined the various forms of digital piracy, it is pertinent to analyze the different ways of dealing with the issue.

#### **1.5.1. Suing the Infringing Parties in Court**

The Media and Entertainment industry has been actively taking or threatening to take legal action against those who violate their copyright. Although going after individual pirates is difficult and expensive, the industry has had phenomenal success in lawsuits against companies operating file-sharing networks, forcing most of them to shut down, sell, or go bankrupt.

In *Cinar Corporation v Robinson*, 2013 SCC 73, the Supreme Court of Canada held as follows: “Canadian law protects the exclusive right of copyright owners to reproduce or to authorize the reproduction of their works. Unauthorized reproduction of a substantial part of an original work is a copyright violation, and the copyright owner may seek various legal remedies”.

In *Rogers Media Inc. v. John Doe 1*, 2022 FC 775, the plaintiff media company applied for an interlocutory injunction requiring the third-party respondents, Canadian Internet service providers (ISPs), to block pirated broadcasts of live National Hockey League (NHL) broadcasts. The Federal Court issued a dynamic site-blocking order preventing access to streaming servers that display the infringing content.

In *A&M Records, Inc. v. Napster, Inc.*, 114 F. Supp.2d 896 (2000), the recording industry sued Napster for copyright infringement. After being notified of the location of infringing material, the district court ordered Napster to police its system and block access to it. Napster's service was shut down in July 2001 because it was unable to do so. Bertelsmann later purchased it, and it filed for bankruptcy protection (Yu, 2002, p. 3).

*UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F. Supp. 2d 349 (S.D.N.Y. 2000) was a case involving the unauthorized copying of copyrighted materials on the Internet which was decided by the United States District Court for the Southern District of New York. The company MP3.com took advantage of the unauthorized copying of music from various compact discs to launch a service that allowed users to access their private music collections from anywhere in the world. This business model was found to be in violation of US copyright law.

Apart from civil proceedings, criminal proceedings can be instituted by the crown before a provincial criminal court. Section 42(1) of the *Copyright Act* outlines several criminal offences. They include infringement involving the sale, rental, distribution, exhibition, possession, importation, or exportation of copyrighted materials, and indictments can result in fines of not more than \$1,000,000 or imprisonment for a term not exceeding five years or both. A summary conviction can result in a fine of not more than \$25,000, imprisonment for a term of not more than six months, or both.

The MP3.com and Napster litigation, as many commentators noted, marked the end of the Wild West era (Yu, 2002, p. 3). The site blocking order in the *Rogers Media case* could have far-reaching implications. The plaintiffs may seek additional injunctions for future National Hockey League seasons, and other copyright holders appear likely to seek similar injunctions (Naudie et al., 2022). While the injunction was tailored to the facts at hand, the Court's reasoning provides a legal framework and guideposts that will aid other copyright holders in the future when seeking dynamic website-blocking injunctions (Naudie et al., 2022). From the foregoing, copyright industries seem to be victorious. Evidentially, dynamic injunction will significantly reduce digital piracy and illegal use of licensed content and services as it offers a new remedy for copyright holders and media producers to prevent access to infringing content over the internet.

Although litigation has proved to be a potent way of minimizing digital piracy, there is an argument that the central focus is speed, amongst other concerns. Harel's argument implies that while litigation is always a much slower process that occurs after the event, removing content from the internet as soon as possible is the best way to deter pirates and drive consumers to legal alternatives (Harel, 2022). Furthermore, Newton has aptly noted that "court cases are not consistent in finding liability and therefore have not produced a clear doctrinal rule" (Newton, p. 140). In a similar vein, Ackerman reported that Clayton Noble, co-chair of the Business Software Alliance observed that, while the fight against copyright infringement is undoubtedly worthwhile, litigation alone will not suffice to prevent content piracy (Ackerman, 2011). But these arguments are flawed because copyright litigation is aimed at decreasing online copyright infringement, with the hope that strict enforcement of copyright laws will prevent users from sharing files online, thereby, reducing the number of online file sharers significantly. Instituting a lawsuit against infringing parties is a step in the right direction as it will act as a deterrence to others who wish to engage in similar acts.

### 1.5.2. Notice and Notice Regime

The Notice and Notice Regime constitutes the final stage in the implementation of the Canadian *Copyright Modernization Act* (S.C. 2012, c. 20) which was enacted to address the challenges and opportunities posed by the Internet, align Canadian copyright law with international standards, and clarify Internet Service Providers (ISPs) liability for copyright infringement, among other things (Freedman et al., 2014).

In 2014, the Canadian Government stated that “Notice and Notice regime is a Canadian made solution that legally requires Internet intermediaries, such as Internet Service Providers and website hosts, to take certain actions once they receive a notice of alleged violation from a copyright owner” (Government of Canada, 2014). ISPs and hosts are specifically required to forward notices sent by copyright holders to users whose Internet address has been identified as the source of possible infringement and once the notice has been sent, the intermediary must inform the copyright owner (Government of Canada, 2014).

Section 41.25 (2) of the *Copyright Modernization Act* clearly specifies the form and content of this notice. Thus, it must be in writing and state the claimant's name and address, identify the work or other subject matter to which the claimed infringement relates and the claimant's interest or right to the subject matter, as well as specify the infringement that is claimed, the date and time of the alleged infringement, and the electronic location associated with the incident. Section 41.26 of the Act provides that if the Internet service provider fails to forward the notice electronically, it must explain the reason for the failure to do so or face penalties of up to \$10,000. Internet service providers must also keep subscriber information for six months (or 12 months if court proceedings are launched).

As a result, the system has proven effective in raising public awareness about copyright, while protecting Internet subscribers' identities, providing legal certainty to Internet providers, and leaving potential legal actions to the courts (Geist, 2014). Thus, the notices are not intended to impose fines or damages, but rather to serve as educational tools to raise awareness of alleged copyright infringements and discourage such illegal acts like downloading music or movies without authorization on the file-sharing system.

In 2011, Rogers Communications Inc. informed the House of Commons Committee that 67 percent of notice recipients do not repeat infringing activity after one notice and 89 percent cease allegedly infringing activity after a second notice (Geist, 2011). These figures are very similar to those obtained by the Entertainment Software Association of Canada, which discovered that 71% of notice recipients did not re-upload an infringing file to BitTorrent systems (Geist, 2011). Furthermore, in 2006, Business Software Association sent out about 60,000 “notice and notice” e-mails to Canadian Internet users and told CBC News that this approach has been most effective (CBC News, 2007). Similarly, Professor Gregory Hagen argues that the success of the Notice and Notice system is indicated by the fact that copyright owners have rarely if ever, taken the next step by filing legal actions in Canadian courts against file sharers (Berkeley Technology Law Journal, 2014).

In *Rogers Communications Inc. v Voltage Pictures, LLC* 2018 SCC 38, the Supreme Court of Canada held as follows: “The notice and notice regime was enacted to serve two complementary purposes: to deter copyright infringement on the internet and to balance the rights of stakeholders including copyright owners, Internet users and Internet intermediaries such as ISPs”.

While the Notice and Notice regime has been successful in deterring illegal downloads from the internet, it has been argued that it does not go as far as American legislation by not requiring ISPs to remove allegedly infringing material (Shift Law, 2014). Instead, it serves as an evidentiary tool, allowing copyright holders to demonstrate that the infringement was intentional - at least if it continues after the notice is received (Shift Law, 2014). Thus, the Notice and Notice Regime is not as effective as the US Notice and Takedown Regime where “Internet-based companies must remove infringing content upon receiving a notice from the copyright holder that their customer infringed copyright” (Chelen, 2023).

Notwithstanding the above criticism, evidence demonstrates that Notice and Notice is effective in countering repeat infringement in Canada. Internet subscribers who receive such notices take it seriously and retrace their steps to avoid attendant legal consequences.

### **1.5.3. Blockchain Technology**

Blockchain-based content can create digital fingerprints or watermarks that detect content leakage and identify copies of digital content (Ivanontech, 2022). The ability to track articles, videos, and songs across multiple social media channels is perhaps the most significant advantage of using blockchain for content publication (Ivanontech, 2022). Pirates would find it extremely difficult to illegally share and profit from media content if the Internet was built on blockchain technology (Reiff, 2021).

Blockchains enable creators to register their works on immutable databases and retain control over their work and the revenue it generates by deciding how and to whom it is licensed (Ivanontech, 2022). Blockchain Internet will make it possible to track unlawful actions via Distributed Ledger Technology (Reiff, 2021). Distributed Ledger Technology is the technology that blockchains are built on, and is a distributed, shared, and encrypted database that stores information in an irreversible and incorruptible manner (Wright, et al., 2015).

Blockchain can provide a solution to digital piracy by enabling creators to register their intellectual property on the blockchain, establishing a permanent record of ownership for assets such as scripts, stories, plotlines, characters, or other creative works. (Cardstack Team, 2022). Blockchain creates a network where all digital music is encrypted and only available to paying customers (Deendayalam, 2022). Additionally, the technology can give each viewer a duplicate of the video that has a unique digital fingerprint that can be used to find the original, illegally downloaded content right away (Tuck, 2022).

While blockchain technology is effective in reducing digital piracy, a writer has noted that the transparency of information stored on a public blockchain can lead to concerns regarding confidentiality and privacy (Pech, 2020, p. 28). However, this writer overlooks the fact that, despite being a public ledger, blockchain allows users to operate under pseudonyms, which helps maintain a significant degree of confidentiality, anonymity, and privacy (Ray, 2018). Additionally,

“a blockchain register may need to comply with the European Union General Data Protection Regulation (GDPR) due to its very broad territorial scope” (Pech, 2020, p. 28). Regardless of the controversies surrounding blockchain technology, it can provide copyright owners with tools to effectively monitor and protect their works. Only users with the necessary decryption keys have access to the data's private details.

## 1.6. Conclusion

The past two decades have witnessed a proliferation of technology which has made it easier to download music, movies, and other copyrighted content. The Media and entertainment industry lose billions of dollars annually due to the illegal activities of pirates. The global outcry over digital piracy has made it a topical issue in various countries of the world. The creation of peer-to-peer protocols, stream-ripping services, cyberlocker sites, and other file-sharing networks have fuelled the embers of digital piracy. Under the anonymity of the internet, unlawful consumption of music and movies has become rampant, but the disadvantages of this practice have only recently become apparent. Collaboration among industry players, including content creators, distributors, and legal authorities, is vital to develop and implement effective strategies. By sharing best practices and resources, the industry can create a united front against piracy, ultimately ensuring a sustainable environment for creativity and innovation.

In conclusion, addressing digital piracy requires ongoing commitment and adaptive strategies that respond to the evolving landscape of technology and consumer behavior. Through a combination of legal, technological, and educational initiatives, the media and entertainment industry can mitigate the impact of piracy and secure its future.

## Bibliography

- Ackerman, Peter. “Expert: Litigation Alone Won’t Win the Piracy War.” June 20, 2011, Retrieved on August 7, 2024, from <https://www.innovation-asset.com/blog/expert-litigation-alone-wont-win-the-piracy-war>.
- Allen, Jennifer. “What is Stream Ripping? Illegal Music Downloads Happen all the time.” June 3, 2020, Retrieved on August 25, 2024, from <https://www.lifewire.com/what-is-stream-ripping-4686282>.
- A&M Records, Inc. v. Napster, Inc.*, 114 F. Supp.2d 896 (2000).
- Bannerman, Sara (2009). “Canada and the Berne Convention, 1886-1971.” *Carleton University Research Virtual Environment* Retrieved on September 23, 2024, from <https://curve.carleton.ca/7a272264-6cd1-46d0-a09a-b972a5d9c2db>.
- Berkeley Technology Law Journal. “Canada’s Approach to Intermediary Liability for Copyright Infringement: The Notice and Notice Procedure.” March 02, 2014, Retrieved on August 8, 2024, from <https://btlj.org/2014/03/canadas-approach-to-intermediary-liability-for-copyright-infringement-the-notice-and-notice-procedure>.
- Berne Convention for the Protection of Literary and Artistic Works, 1886, Article 3.
- Brain, Marshall. “How MP3 Files Work.” May 13, 2021, Retrieved on July 25, 2024, from <https://computer.howstuffworks.com/mp3.htm>.
- Canadian Admiral Corporation Ltd v Rediffusion Inc*, [1954] 20 CPR 75 at para 28.
- Cardstack Team. “How Blockchain Technology Can Combat Digital Piracy.” July 6, 2022, Retrieved on August 5, 2024, from <https://medium.com/cardstack/how-blockchain-technology-can-combat-digital-piracy-53fc45ac40eb>.



- CBC News. "E-mail Warnings Deter Canadians from Illegal File Sharing." February 15, 2007, Retrieved on September 7, 2024, from <https://www.cbc.ca/news/e-mail-warnings-deter-canadians-from-illegal-file-sharing-1.689596>.
- CCH Canadian Limited v Law Society of Upper Canada*, [2004] 1 SCR 339.
- Cinar Corporation v Robinson*, 2013 SCC 73.
- Colangelo, Alex (2002). "Copyright Infringement in the Internet Era: The Challenge of MP3s." *Alberta Law Review*, vol. 39(4) 2002 pp. 891-913 at pp. 894-895 Retrieved on June 27, 2024, from <https://albertalawreview.com/index.php/ALR/article/view/1386>.
- Copyright Act (RSC 1985, c.C-42).
- Copyright House (2009). "Berne Convention." Retrieved on August 24, 2024, from <https://copyrighthouse.org/countries-berne-convention>.
- Copyright Modernization Act (S.C. 2012, c. 20).
- Cornell Law School (2021). "Berne Convention." Retrieved on July 25, 2024, from [https://www.law.cornell.edu/wex/berne\\_convention](https://www.law.cornell.edu/wex/berne_convention).
- Craig, Carys. "The Evolution of Originality in Canadian Copyright Law: Authorship, Reward and the Public Interest." *University of Ottawa Law and Technology Journal*, vol. 2, issue 2 (2005) pp. 425-445 at p. 425 Retrieved on August 27, 2024, from [https://digitalcommons.osgoode.yorku.ca/cgi/viewcontent.cgi?referer=&httpsredir=1&article=2409&context=scholarly\\_works](https://digitalcommons.osgoode.yorku.ca/cgi/viewcontent.cgi?referer=&httpsredir=1&article=2409&context=scholarly_works).
- Cross, Alan. "Canadians Still Love to Pirate Music and Video: Report." *Global News* February 12, 2023, Retrieved on September 6, 2024, from <https://globalnews.ca/news/9473995/canada-piracy-music-video>.
- Dan, Major (2018). "December 7, 1999: Whatever Happened to Napster?" Retrieved on August 20, 2024, from <https://www.historyandheadlines.com/december-7-1999-whatever-happened-to-napster>.
- Deendayalam, Arvind. "How Blockchain Can Save Billions for the Media Industry." December 29, 2022, Retrieved on September 9, 2024, from <https://timesofindia.indiatimes.com/blogs/voices/how-blockchain-can-save-billions-for-the-media-industry>.
- Deepen Sinha, Johnston James, Dorward Sean & Quackenbush Schuyler. "The Perceptual Audio Coder." pp. 1-35 at p. 2 May 19, 1997, Retrieved on July 25, 2024, from [https://www.researchgate.net/publication/260301481\\_THE\\_PERCEPTUAL\\_AUDIO\\_CODER\\_PAC/citation/download](https://www.researchgate.net/publication/260301481_THE_PERCEPTUAL_AUDIO_CODER_PAC/citation/download).
- Freedman Bradley & McCrystal Kalie. "Canada's New Notice and Notice Regime for Internet Copyright Infringement." November 03, 2014, Retrieved on September 10, 2024, from <https://www.blg.com/en/insights/2014/11/CANADAS%20NEW%20NOTICE%20AND%20NOTICE%20REGIME%20FOR%20INTERNET%20COPYRIGHT%20INFRINGEMENT>.
- Frostburg State University (2022). "Peer to Peer File Sharing." Retrieved on July 29, 2024, from <https://www.frostburg.edu/information-technology/Security/peer.php>.
- Geist, Michael. "Notice the Difference? New Canadian Internet Copyright Rules for ISPs Set to Launch." December 22, 2014, Retrieved on August 4, 2024, from <https://www.michaelgeist.ca/2014/12/notice-difference-new-canadian-internet-copyright-rules-isps-set-launch>.
- Geist, Michael. "Rogers Provides New Evidence on Effectiveness of Notice-and-Notice System." March 23, 2011, Retrieved on August 22, 2024, from <https://www.michaelgeist.ca/2011/03/effectiveness-of-notice-and-notice>.

Guo, Yimeei & Luo, Ying. "Copyright Disputes and Resolutions to P2P File-Swapping Application." January 10, 2016, Retrieved on September 25, 2024, from <https://lawexplores.com/copyright-disputes-and-resolutions-to-p2p-file-swapping-application>.

Government of Canada. "Notice and Notice Regime." June 17, 2014, Retrieved on June 8, 2024, from <https://www.canada.ca/en/news/archive/2014/06/notice-notice-regime.html>.

Hertz, Barry. "What are the best Streaming Services in Canada"? March 2, 2023, Retrieved on September 4, 2024, from <https://www.theglobeandmail.com/arts/television/article-best-streaming-service-canada-netflix-amazon-apple>.

International Intellectual Property Alliance (IIPA), 2021 Special 301 Report on Copyright Protection and Enforcement pp. 128 to 143 at pp. 128 & 130 Retrieved on August 11, 2024, from <https://iipa.org/files/uploads/2021/01/2021SPEC301CANADA.pdf>.

Interpol. (2022). "Digital Piracy." Retrieved on July 14, 2024, from <https://www.interpol.int/en/Crimes/Illicit-goods/Shop-safely/Digital-piracy>.

Ivanontech. "How Blockchain Stops Piracy." September 28, 2022, Retrieved on August 20, 2024, from <https://academy.moralis.io/blog/how-blockchain-stops-piracy>.

Jonhson, Dave. "What is Piracy? Here's What You Need to Know About Digital Piracy, and How to Avoid Stolen Digital Content." March 26, 2021, Retrieved on June 6, 2024, from <https://www.businessinsider.com/guides/tech/what-is-piracy>.

Justia. "Piracy in the Entertainment Industry." July 2022 Retrieved on August 16, 2024, from <https://www.justia.com/entertainment-law/piracy-in-the-entertainment-industry>.

Marks & Clerk. "An Update on Copyright in Canada." November 10, 2022, Retrieved on September 10, 2024, from <https://www.marks-clerk.com/insights/articles/copyright-2023-canada>.

Naudie Christopher, Grandpre Vincent, Young Sydney & Czerniawski Maxwell. "Canadian Federal Court Issues Dynamic Website-Blocking Injunction to Combat Unauthorized Hockey Webcasts." June 9, 2022, Retrieved on August 7, 2024, from <https://www.osler.com/en/resources/regulations/2022/canadian-federal-court-issues-dynamic-website-blocking-injunction-to-combat-unauthorized-hockey-web>.

Newton, Jennifer (2001). "Global Solutions to Prevent Copyright Infringement of Music Over the Internet: The Need to Supplement the WIPO Internet Treaties with Self-Imposed Mandates." pp. 125-155 at p. 140 Retrieved on September 4, 2024, from <https://mckinneylaw.iu.edu/iiclr/pdf/vol12p125.pdf>.

Panethiere, Darrell (2005). "The Persistence of Piracy: The Consequences for Creativity, For culture, and For Sustainable Development." Report Commissioned by UNESCO and presented to the Intergovernmental Committee of the Universal Copyright Convention, Paris, June 2005 pp. 1-45 at p. 11 Retrieved on August 27, 2024, from <https://unesdoc.unesco.org/ark:/48223/pf0000145517>.

Pech, Sebastian. "Copyright Unchained: How Blockchain Technology Can Change the Administration and Distribution of Copyright Protected Works." *Northwestern Journal of Technology and Intellectual Property*, vol. 18, no. 1, 2020, pp. 1-53 at p. 28 Retrieved on July 9, 2024, from <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1338&context=njtip>

Pritchard, Brenda., Vogt, Susan., & Cole, Daniel. *Advertising and Marketing Law in Canada*. LexisNexis, 2019.

Rai, Prabin. "Copyright Laws and Digital Piracy in Music Industries: The Relevance of Traditional Copyright Laws in the Digital Age and How Music Industries Should Cope with the

- Ongoing Piracy Culture.” pp. 1-81 at p. 47 February 2021 Retrieved on August 17, 2024, from <https://www.researchgate.net/publication/349494949>.
- Ray, Shaan. “How Blockchains will Enable Privacy.” March 3, 2018, Retrieved on September 9, 2024, from <https://towardsdatascience.com/how-blockchains-will-enable-privacy-1522a846bf65>.
- Reiff, Nathan. “How Blockchain can Fight Piracy.” October 27, 2021, Retrieved on August 16, 2024, from <https://www.investopedia.com/tech/how-blockchain-can-fight-piracy>.
- Rogers Communications Inc. v Voltage Pictures, LLC* 2018 SCC 38.
- Rogers Media Inc. v. John Doe 1*, 2022 FC 775.
- Ricketson, Sam. “The International Framework for the Protection of Authors: Bendable Boundaries and Immovable Objects” 41 column *J.L & Arts* 341(2018) pp. 1-27 at p. 3 Retrieved on June 23, 2024, from <https://academiccommons.columbia.edu/doi/10.7916/D8224BQD/download>.
- Shift Law. “Canada’s New Notice and Notice Copyright Enforcement Regime.” November 24, 2014, Retrieved on September 8, 2024, from <https://www.shiftlaw.ca/canadas-new-notice-and-notice-copyright-enforcement-regime>.
- Snelling, P.A., & Lopez, F.A (2013). “Digital Piracy: How the Media Industry is Being Transformed.” Retrieved on August 20, 2024, from <https://riunet.upv.es/bitstream/handle/10251/35922/Memoria.pdf?sequence=1>.
- Tele-Direct (Publications) Inc v. American Business Information Inc* (1997), 2 F.C, 22.
- Tuck, Alex. “How Blockchain Can Tackle Piracy in Entertainment.” July 19, 2022, Retrieved on July 18, 2024, from <https://technologymagazine.com/articles/how-blockchain-can-tackle-piracy>.
- UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F. Supp. 2d 349 (S.D.N.Y. 2000).
- University of Michigan Library. “Copyright Basics.” February 20, 2023, Retrieved on August 6, 2024, from <https://guides.lib.umich.edu/copyrightbasics/copyrightability>.
- Wright Aaron & De Filippi Primavera. “Decentralized Blockchain Technology and the Rise of Lex Cryptographia”, pp. 1-58 at p.2, March 10, 2015, Retrieved on September 8, 2024, from <https://ssrn.com/abstract=2580664>.
- Yu, Peter (2002). “Why the Entertainment Industry’s Copyright Fight is Futile?” pp. 1-4 at p. 3 Retrieved on September 6, 2024, from <http://www.peteryu.com/gigalaw0802.pdf>.