

Chapter 66

Legal Issues Facing Companies with Products in a Digital Format

J. Royce Fichtner
Drake University, USA

Lou Ann Simpson
Drake University, USA

ABSTRACT

Companies that deal in products in a digital format, such as magazines, newspapers, e-books, music, movies, games, or software, face unique legal challenges because they attempt to earn a profit by selling or licensing material that is easily copied and inexpensive to reproduce. This chapter discusses the four general categories of intellectual property law—patents, trade secrets, trademarks, and copyrights—and describes how each applies to products in a digital format. This chapter ends with a brief discussion of the changing societal norms toward copyright infringement for digital products and possible directions for future research.

INTRODUCTION

Digital products are content, multimedia, or software products that are in a digital format when possession is passed to the consumer. Examples include newspaper content, magazine content, e-books, music, movies, games, and all types of software. If the one who creates or develops a digital product cannot profit from his or her work by selling the product to someone else, then there

is little incentive to invest the time and resources to develop new creative works. The framers of the U.S. Constitution recognized the importance of promoting this creative and expressive process and gave Congress the power to “promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive right to their respective writings and discoveries” (U.S. Constitution, Art. I, § 8). The U.S. Congress and the individual state governments have used this power to create a series of intellectual property laws to protect inventive and artistic creativity.

DOI: 10.4018/978-1-4666-2136-7.ch066

Beyond the protections afforded by law, there has always been a second, more practical constraint on the unauthorized reproduction and distribution of creative works. This second constraint can be loosely classified as the technological and mechanical impediments to the physical process of reproducing the creative work (Menell, 2002). Stated more succinctly, unauthorized reproductions are encumbered because it is difficult to produce an identical copy of the original work in an economical fashion. However, recent advances in digital technology have virtually eliminated this constraint for many creative works.

Prior to the late 1980s, many creative works were reproduced using analog technologies. Analog technologies reproduce a creative work by deforming a physical object (such as paper or film) in such a manner to convey an image, audio frequency, or light intensity (Menell, 2002). Analog technology platforms impede unauthorized reproduction and distribution because the second comer must copy the creative work from an existing copy (a process which inevitably results in a work of lesser quality) and reproduce the copied work onto another physical object (which must be purchased or created). Digital technology eliminates both the cost of purchasing the physical media and the innate quality degradations that arise when copying from a physical media. By encoding creative works in binary form, digital computers allow for perfect reproductions across unlimited generations of reproductions (Menell, 2002). Also, because the work may be transmitted without transferring it to a physical media, there is little or no additional cost for each additional copy and such copies can be distributed without cost via the Internet.

Because there are no technological or mechanical impediments to the unauthorized reproduction and distribution of creative works which have been converted into digital products, there is increased pressure to limit such unauthorized reproductions through legal constraints. This chapter will discuss the existing legal constraints by introducing the

four categories of intellectual property law—patents, trade secrets, trademarks, and copyrights. This chapter will describe each category of intellectual property law and describe how these laws apply to products in a digital format. This chapter also includes a brief discussion of the changing societal norms toward copyright infringement of digital products and possible directions for future research.

Patents

A patent is a grant from the U.S. federal government that gives the inventor the exclusive right to make, use, or sell an invention for a limited period of time. A patent holder can prohibit others from using any product that is substantially similar and recover damages from anyone who uses the product without permission. Patents for inventions are valid for twenty years. Design patents (a patent granted on the ornamental design of a functional item) are valid for fourteen years. Once the patent period expires, the invention or design enters the public domain, which means that anyone can produce or sell the invention without paying the prior patent holder.

Unlike some other forms of intellectual property, patent rights do not arise once the invention is created. A patent is only acquired by filing an application and receiving approval from the U.S. Patent and Trademark Office. According to the U.S. Code, the patent application must “contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms to enable any person skilled in the art to which it pertains... to make and use the same” (35 U.S.C. §112). Once approved, the patent owner can earn a profit by making, using, and selling the invention or by selling the patent or by licensing others to use the patent.

Patent holders own the exclusive rights to use and exploit their patents. A party who makes unauthorized use of a patented invention is li-

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/legal-issues-facing-companies-products/71033

Related Content

Philosophy, Past and Present: John Macmurray and Our Future

Eleanor M. Godway (2019). *International Journal of Technoethics* (pp. 1-9).

www.irma-international.org/article/philosophy-past-and-present/216989

Challenges to Intellectual Property Rights from Information and Communication Technologies, Nanotechnologies and Microelectronics

Ahmed Driouchi and Molk Kadiri (2013). *Digital Rights Management: Concepts, Methodologies, Tools, and Applications* (pp. 1474-1492).

www.irma-international.org/chapter/challenges-intellectual-property-rights-information/71042

Presence, Reciprocity and Robotic Mediations: The Case of Autonomous Social Robots

Pericle Salvini (2012). *International Journal of Technoethics* (pp. 9-16).

www.irma-international.org/article/presence-reciprocity-robotic-mediations/67362

Feminism and Copyright in Digital Media

Dan Burk (2005). *Intellectual Property Rights in a Networked World: Theory and Practice* (pp. 161-181).

www.irma-international.org/chapter/feminism-copyright-digital-media/24118

Fairness and Regulation of Violence in Technological Design

Cameron Shelley (2011). *International Journal of Technoethics* (pp. 20-36).

www.irma-international.org/article/fairness-regulation-violence-technological-design/62307