

ACS SYMPOSIUM SERIES 1055

# Special Topics in Intellectual Property



**Patents**

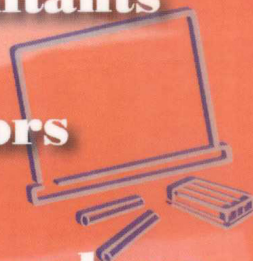


**Lawyers**

**Consultants**

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**Educators**



**Searchers**

**Copyrights**



**Intellectual  
Property Specialists**

**Librarians**



EDITED BY

**Andrea Twiss-Brooks**

ACS SYMPOSIUM SERIES **1055**

# **Special Topics in Intellectual Property**

**Andrea Twiss-Brooks, Editor**  
*University of Chicago*



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# Foreword

The ACS Symposium Series was first published in 1974 to provide a mechanism for publishing symposia quickly in book form. The purpose of the series is to publish timely, comprehensive books developed from the ACS sponsored symposia based on current scientific research. Occasionally, books are developed from symposia sponsored by other organizations when the topic is of keen interest to the chemistry audience.

Before agreeing to publish a book, the proposed table of contents is reviewed for appropriate and comprehensive coverage and for interest to the audience. Some papers may be excluded to better focus the book; others may be added to provide comprehensiveness. When appropriate, overview or introductory chapters are added. Drafts of chapters are peer-reviewed prior to final acceptance or rejection, and manuscripts are prepared in camera-ready format.

As a rule, only original research papers and original review papers are included in the volumes. Verbatim reproductions of previous published papers are not accepted.

**ACS Books Department**

# Preface

This book is about the combined fields of Intellectual Property and Information Science. At this crossroads are lawyers, educators, intellectual property specialists, searchers, librarians, consultants, etc., each requiring a lengthy list of skills necessary for the job. The results of the work they do is used for business and legal decisions across many sectors of our society, including industry, academia, government, and non-profits, to name a few. This book originated from the American Chemical Society (ACS) Symposium entitled “IP to IP: Intellectual Property for Information Professionals”, presented in Washington DC on August 19<sup>th</sup>, 2009. It was organized to highlight the various specialty training, education needed to work in this field, and my role as organizer lead me to bring these presenters together, targeted towards *Information Scientists learning about Intellectual Property*. Traditional education sources such as universities are represented, and are specialty offerings from the pharmaceutical sector and the United States Patent and Trademark Office (USPTO).

The original six sessions from the Symposium are included in this text as separate chapters:

Education and Certification of Patent Information Professionals in Europe;  
The PERI Patent Information Course; Law Librarianship: Exploring  
current trends in the 21<sup>st</sup> century; The USPTO: Education of the Inventor  
Community; Copyright Basics; Recent Developments in Patent Reform

Additional chapters and content have been added to more fully develop this text. Although this Symposium captured several intellectual property topics with current information for mid-2009, this content should still prove to be a valuable resource to the reader in future years.

This material has been published with the sincere hope that it will be a resource to students or others looking to take the next step into intellectual property as a new career choice.

This book would not have been possible without the dedication and effort of our editor, Ms. Andrea Twiss-Brooks. Additionally, we would like to thank each of our authors for their expertise and contributions to this project.

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## **Chapter 1**

# **Special Topics in Intellectual Property and Information: An Introduction**

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Most professionals working in the Intellectual Property (IP) field will have a unique story and will have traveled a different career path. Along these different paths, they will have been inspired and educated, or have been advanced in their IP career in various ways. The purpose of this book is to provide both education on certain topics of interest and training information for those both beginning their information careers and pursuing continuing education pathways in Intellectual Property areas. Although many people associate Intellectual Property with lawyers, there are a variety of other professionals working in the field, and this book details many topics of interest to them.

The topic of this book is really an intersection of two fields, Intellectual Property and Information Science.

- Intellectual property – tangible products of the human mind and intelligence entitled to the legal status of personal property, especially works protected by copyright, inventions that have been patented, and registered trademarks. An idea is considered the intellectual property of its creator only after it has been recorded or made manifest in specific form (1).
- Information Science – investigates the properties and behavior of information, how it is transferred from one mind to another, and optimal means for making that transfer, in both natural and artificial systems (2).

Currently there are no certifications or particular requirements to work in the Intellectual Property arena. The development of a particular certification for patent searchers is described in a subsequent chapter, “Education and Certification of Patent Information Professionals in Europe”. Also of interest, subjects interviewed in the last chapter, “Interviews with Professionals in the Field” describe the varied training they undertook to reach their respective positions.

Accredited library and information science programs across the country offer specialty courses, including an variety of topics that include IP, however the depth of these topics vary. The nature of graduate coursework does not lend itself to rapidly changing course offerings. A few key current issues have been addressed in this book; however, monitoring recent developments in these issues does represent a challenge.

Specialists, attorneys, searchers, consultants and others working in the areas of Intellectual Property and Information play critical roles in their respective organizations. The results of their work are used for business and legal decisions by the firms, universities, governments, and other organizations which employ them. The IP and Information fields are important because of the direct impact of these decisions, and the value the employers place on them. This book intends to identify the skills needed by professionals in this field, plus explore related topics of interest.

## **Scope and Limitations**

The following subjects are covered:

1. Information seeking behaviors by legal professionals.
2. Novel approaches to educating the inventor community by the USPTO website.
3. Basic information concerning trademarks and copyright IP.
4. Specialty training course, offered by PERI
5. Certification of patent searchers currently underway in Europe.
6. Careers in Intellectual Property and Information, plus interviews with professionals in the field.
7. Continuous learning opportunities available.

Because of the scope of the original symposium, and the focus of this book, issues dealing with customer service, databases, and database coverage are not covered.

Additional resources, especially those concerning continuous learning, are covered in subsequent chapters, including professional associations, meetings & conferences, publishers, blogs, and discussion groups.

## **References**

1. Reitz, J. M. *Dictionary for Library and Information Science*; Libraries Unlimited: Westport, CT, 2004.



2. Shuman, B. A. *Foundations and Issues in Library and Information Science*; Libraries Unlimited: Englewood, CO, 1992.



## Chapter 2

# Copyright in the Information Age

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For centuries, librarians and other information professionals such as those who work in museums, archives, and other information centers have grappled with the legal and ethical considerations that affect the creation, organization, dissemination and use of information. Libraries and information centers typically house collections of copyrighted materials that may potentially pose legal consequences for libraries and library users. Whether the issue is monitoring the amount of photocopies made in a public library or the potential copyright infringement of providing articles for course reserves in a university library; librarians find themselves in the position of balancing the needs of the user with the rights of the creator. With the information explosion of the 21st century, copyright law presents even greater challenges for information professionals. The Internet and the digital revolution have changed the interpretation of copyright law in order to provide the greatest protection for creators' works. This chapter offers a discussion on copyright in this ever-changing age of information.

## Introduction

Marshall McLuhan (*1*) speculated that society is shaped by the way we communicate rather than by what we are communicating. In other words the focus should be placed on the *medium* and not the content of communication.

With the development of the Internet, Web 2.0 technologies and the semantic web, it is difficult to dispute McLuhan's theory. The Information Age—defined as a time when there is an unprecedented access and transmission of information. It is characterized by the use of computers and technology. This phenomenon

has broadened the global communications landscape and has transformed modern society. Copyright Law has new meaning in the information age. No longer are print resources the sole medium for obtaining information. Digital formats are available to the public in just about every genre conceived.

This poses considerable challenges for creators of information who want to share their inventions with society, and yet, do not want their rights infringed upon. Meanwhile, information professionals who work at public institutions like libraries, archives and museums must balance the rights of the creator with the right of the public to have access to information.

## **Information in the Information Age**

As a term, information is so ubiquitous that individuals do not usually question its meaning or how it is defined. It is found in several disciplinary contexts and is part of the theoretical structure of a variety of fields including, communications, cybernetics, computer science, physics and psychology. As purveyors of information, librarians are especially concerned with understanding how information is characterized especially in this ever-evolving age of technology. In order to understand copyright within the context of this changing information environment, we must first examine and delineate how information is defined.

The most recent contribution to the Library and Information Science (LIS) scholarly literature is Marcia Bates' (2) biologically based theory of information. She contends that, "Information is defined as the pattern of organization of matter and energy. Moreover, it is defined as some pattern of organization of matter and energy that has been given meaning by a living being." (p.1). Donald Case (3) adopts a user-centered approach to defining information. He synthesizes the various definitions espoused by scholars in the field and concludes that regardless of how information is defined, individuals seek information in response to a need in their quest for knowledge. Notwithstanding, the debate over how information is defined in the field of LIS, it is important to note that information and its appropriation, flow, use and control has become central to the organization of society and everyday life experience.

Although a vast array of definitions of information is posited by LIS scholars, the most widely accepted theory of information was conceptualized by Michael Buckland (4). Buckland's tripartite definition, "information-as-thing," information as process, and information as knowledge offers the most practical way of understanding information especially in this age of information. He describes these "things" as tangible objects which include but are not limited to, data, documents and books. These objects described by Buckland, are very much aligned with the eight general categories that are copyright protected under the U.S. Copyright Act: literary works, musical works (including words), dramatic works, pantomimes and choreography, pictorial, graphic and sculptural works, motion pictures and other audiovisual works, sound recordings, and architectural works (5). Understanding how information has been defined provides insight into way it has been changed in this information age.

There are three great information revolutions that have transformed society and culture: Writing, Print, and Electronic (1). Prior to the invention of writing, early human societies stored and transferred information orally through speaking, listening, and remembering. This mode of communication created what is called an oral culture; and a social organization different from the traditions based on the printed word that we know today. However, it was the invention of writing—the first information revolution that enabled the permanent storage and retrieval of tangible information. In this era, the pen was the medium. The earliest written records can be traced back to 3000 bce in Mesopotamia when Sumerian citizens developed the first writing system in order to record financial, political and religious information. Clay tablets known as *cuneiform* and an instrument used to imprint images symbols became the primary means to record written data. As soon as ancient civilizations began making records, a system was needed to store and retrieve records. Rooms in palaces and temples were used for storing important records. These libraries were comprised of thousands of cuneiform tablets stored in large jars and arranged in rows on shelves. The collection was cataloged by an inscribed notation indicating the room where it belonged as well as shelf number. Each room of the library contained different subjects—religion, history, geography, commercial records, etc.

Print—the second information revolution was popularized during the 15<sup>th</sup> century when religious texts were in high demand. Goldsmiths and printers began exploring ways to produce massive volumes of bibles and other texts. However, it was Johannes Gutenberg in 1450 who is credited with inventing the printing press. His creation of a *punch and mold system* allowed for the mass production of interchangeable metal letters that could be combined to produce a page of text. These letters were considered “movable” in that they could be arranged individually to form words. If a letter broke down, it could be replaced. When printing of the copies of one page was finished, the type could be used for the next page. Early printing houses produced the same types of materials that had been created by monks and scribes during the middle ages. This material was printed bibles, books of hours, and other religious and educational texts. The invention of the printing press allowed for the centralization of bible publishing and the expedient dissemination of bibles to the Christian world. The printing press not only significantly increased the number of books produced en mass but it also reduced the number of hours printers spent on constructing them.

Prior inventions of the telephone, radio and the computer paved the way for the electronic age. The invention of the computer during World War II and the subsequent notion of a *networked society* that emerged in the 1980s laid the foundation for the Internet and constitutes the third major information revolution that continue to transform society as we know it today. Arguably, it is this third information revolution that presents the greatest challenges for copyright holders and users of information. Thus far, we have explored the concept of information and how it has evolved in society. We now turn our attention to copyright and its impact on libraries in the information age.

## **Copyright and Libraries**

Copyright law stems from the United States Constitution which states that:

**“Congress has 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” (6).**

The U.S. Constitution offers incentives for creators to share their works with society. Moreover, the law affords authors flexibility when deciding how to benefit financially from their work by allowing licensing rights for any and all creations. Protection under copyright is guaranteed under the legal principle codified in the United States Copyright Act of 1790. Amendments were made in 1909 to include the exceptions to copyright protection not included in the original law.

Copyright Infringement was not much of an issue until the emergence of the photocopier during the twentieth century (7). In 1959, the first commercial photocopier revolutionized the document copying industry and permitted the general public to take control of their copying needs (1). Previously, library users would view original journal articles and books, and make handwritten notes, however, with the photocopier machine; individuals now had the ability to make multiple copies for personal use. As a result, exact copies could be made of another's work, which meant that copyright infringement was possible. Furthermore, publishing companies were not enthusiastic about this new development as they could potentially lose significant revenue from book publishing. With just the press of the button, individuals now could make numerous reproductions of an original document and transmit it at minimum cost.

Copying by libraries is covered in Section 108 of the copyright law and permits single copying of materials by libraries and archives under specified circumstances. However, “while the law protects some in-library copying by library patrons, publishers especially journal publishers feel that library copying has been quite detrimental to their business...It is in this area of the interpretation of fair use where much of the tensions exist between copyright holders and libraries” (7).

The invention of the computer also provided benefits for the publishing industry. The distribution of works in digital form allows publishers to reduce costs by minimizing the production of print copies. For instance, each time an electronic file is accessed; a copy of it can be created and transferred to the requesting computer, essentially publishing the document on demand. Electronic publishing has not only provided an option for seekers of information to retrieve information expediently, but it has also created a way for individuals to self-publish. The entire notion of publishing has changed in the information age. Tomas Lipinski questioned at what point is a document published in the information age. He asked, “In the age of the Internet, when does publication occur?” (8).

Individuals have access to information in a diversity of sources and formats that include but are not limited to print, the Internet, musical files, and other digital

media. This media is not only available for public purchase, but they are also generally available and accessible in libraries and other information centers.

As purveyors of information, librarians are generally concerned with providing access to information to users at little or no cost. They are often confronted with the decision of determining the extent to which the creator or publisher of information can control the copying and use of that information by others. Two primary tenets of the copyright law are especially important for information professionals: *The First Sale Doctrine* and the *Doctrine of Fair Use*.

## **The First-Sale Doctrine**

The first-sale doctrine was first established by the United States Supreme Court in 1908 with the *Bobbs-Merrill Co. v. Straus* case and later codified in the Copyright Act of 1976. The doctrine gives permission to the purchaser of a copyrighted work to transfer (i.e., sell or give away) a copy of the copyrighted work without permission once it has been acquired. Originally the legislation applied to copies that had been sold. However, the 1976 law expanded its applicability to any "owner" of a lawfully made copy or phonorecord regardless whether it was first sold. Essentially, content creators receive payment for their work only on the first sale of each copy. This doctrine allows libraries to function in a most basic way---lending resources to users. Initially, this started with books and in today's information age, it has broadened to other media currently found in libraries. Library patrons can now download materials on their laptops, iPods, iPads, smart phones and other technological gadgets. Gigabytes are transferred directly from a subscription database such as ProQuest (that stores scholarly journals) and accessed for personal use. Technically, libraries have not purchased these resources, but rather are licensed to use them to share them with patrons.

## **The Doctrine of Fair Use**

The doctrine of fair use has its genesis in the nineteenth century as an exception to the rules that prohibited uses of copyrighted materials (9). However, courts were in conflict over whether exceptions to the copyright law should be ruled on by courts or if it should be a mandated federal legislation. As a result, Congress amended the Copyright Act in 1976 to reflect the views of the majority of the courts. Section 107 of the 1976 Copyright Act outlines the limitations on exclusive rights: Fair Use:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work. (10)

The Copyright Amendment of 1976 resolved the problem of what constitutes fair use, however, Congress left the application of the doctrine to the interpretation of the courts on a case-by-case basis. Thus, it is still unclear for users of copyrighted materials to know with certainty that they are protected under the fair use doctrine.

Since its enactment, several court cases were filed that highlight the complexity of the issue. One case in particular was the first major test of the fair use doctrine in 1984. In *Sony Corp. of America v. Universal Studios*, the Supreme Court ruled on an appeal from a decision from the Ninth Circuit Court of Appeals which held that in-home recordings of a television broadcast was not protected under fair use. Numerous television studios filed suit on Sony to forbid them from selling Betamax video recorders; contending that video recorders violated copyright law by permitting customers who purchased video recorders from Sony to record copyrighted programs. The court overturned the Ninth Circuit's decision, finding that the fair use doctrine protected Betamax users.

This case set a precedent for fair use that has implications for libraries. Prior to the *Sony* decision, fair use implied that copyright laws were for the protection of new authorship. However, the Supreme Court expanded the protection of fair use to anyone making copies of copyrighted materials for their own use. Therefore, users of libraries and other information centers that photocopy materials for their own use are protected under the fair use doctrine.

For information professionals, the doctrine of fair use is the most important limitation on the rights of copyright owners. It protects libraries and other information centers as well as their users from liability when they reproduce copyrighted works for scholarship or educational purposes.

## **Conclusion**

When Copyright law was first proposed in 1790, it would have been difficult to predict the vast technological advances that have occurred in society over the last century. Even since the 1976 Copyright Law, the incessant need for information has warranted a revisiting of the existing law to incorporate advances in technology and to offer greater protection against copyright infringement. The Digital Millennium Copyright Act (DMCA) was enacted in 1998 in an effort to update the laws for the digital age. Digital Rights Management (DRM) enforces restrictions on the use of copyright content. This extended the reach of copyright



protection and arguably limited the liability of the providers of on-line services for copyright infringement by their users.

Copyright continues to be one of the most important challenges facing information professionals in the 21<sup>st</sup> century. The profession considers the matter so important that the American Library Association (ALA) has devoted principle IV of their Code of Ethics to address copyright concerns. The code states that, “We recognize and respect intellectual property rights and advocate balance between the interests of information users and rights holders” (11). While information professionals strive to adhere to this code, it would mean not infringing on a creator’s copyrighted work, but also promoting respect for intellectual property rights among the community of library users. John Barlow (12) theorized that intellectual property laws would need to change to accommodate the ever-changing nature of information long before Web 2.0 was ever conceived. Therefore, it is critical that librarians and society at large stay abreast of the latest developments on copyright law. The American Library Association website: <http://www.ala.org/ala/issuesadvocacy/copyright/index.cfm> (13) is a useful resources for locating current information on how copyright law affects the way libraries provide information to their users. The United States Copyright Office (<http://www.copyright.org>) (14) located at the Library Congress in Washington, DC is the most comprehensive resource for obtaining information on the latest developments on copyright law. The Copyright office provides everything from basic information on how to register your work to the most important legislative provisions relevant to reproduction by librarians and educators.

The Information Age has dramatically transformed the way copyright law has been interpreted. The challenge for librarians is finding balance between the copyright holder and the user in this ever-changing environment. Librarians must be informed on the latest changes on laws and litigation on copyright issues and include themselves in the discussion as well as stay apprised of the diversity of information resources being considered in the copyright law debate. As technology continues to evolve and as information becomes more ubiquitous, librarians must be at the forefront of this debate. After all, information professionals are educated and trained to understand the dynamics of these issues. It is the librarian, not the policy maker or even the creator of the information who is in the best place to connect the user with information in a fair and equitable manner. Intellectual property, regardless of the source or format, should always be considered within the context of its effect on the public’s access to information; thereby, compelling information professionals to always be mindful of their ethical responsibility—providing a balance between the content owner and the user.

## References

1. McLuhan, M.; Powers, B. *The Global Village*; Oxford University Press: New York, 1989.