

Mind to Market: A Cautionary Tale

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The excitement of discovery and invention is unusual in the academic setting. The opportunity of applying for a patent related to one's teaching is not something that is discussed in professional school. However, with the innovation now required to meet the needs of students at a distance and the use of technology, it might be a valuable asset. The focus of this article is to bring to the educator's attention the value of protecting one's intellectual property. The development of pedagogical tools needed in today's learning environment may be eligible for a patent. This is an overview about the patent process and copyright law to prevent mistakes that can stop the process. It is possible to violate the process before you are even aware that you might be able to secure a patent.

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Educators immersed in finding the “perfect” way to deliver content to their students do not always look at what they are developing through the lens of commercialism. One does not realize that the dedication to the scholarship of teaching and learning might transform a pedagogical concept into a marketable endeavor. Therefore, it is imperative that the educator protect themselves and their intellectual property. Hence, the question to ask oneself is “does this invention need a patent?” Other questions will follow: what is a patent? what does one have to prove to get one? how is a patent decided and awarded?

All of these are important questions and understandable if you invent a new widget or discover a new medication. But ambiguity arises when the new invention is related to technology created in order to meet a pedagogical need. This cautionary tale stems from this type of situation. A dilemma arose when a differential diagnosis class that was taught on-site with an activity that involved standardized patients was also going to be offered in a distance learning format. The faculty wanted to make sure that the students learning at a distance had a similar experience. This led to the invention of an interactive case study (ICS). This ICS utilized an approach that was new and had excellent results (Colella & Beery 2014) resulting in a substantial Advanced Nursing Education (ANE) Health Resources and Services Administration (HRSA) grant. A provisional patent was applied for and received and then the work to secure a patent was completed. The day before the submission of all of the information, the lawyer working on the case literally stumbled upon a web interview with the author, explaining the ICS in detail. This

would not have been a problem if it had been given while the provisional patent was in place but it was outside of the very specific window by a matter of days and therefore the ICS could not be considered for a patent. This was very disappointing but a vow was made at that moment to prevent this from happening to others. Therefore, a general discussion of the patent process and copyright will be discussed but seeking out a patent attorney is the best idea.

Some Universities have in place resources for their faculty to ask the patent questions and then give support though the process but many do not. There is literature available that looks at the types of universities that apply for patents (Owen-Smith & Powel 2001) and the structure a university might have in place to assist faculty. There is also debate about whether there is value in securing a patent but the focus of this discussion is to alert educators that the process of applying for a patent should begin when the idea first comes to mind.

Patent process

A patent is granted to inventors by the federal government, pursuant to its power under Article 1, Section 8, Clause 8 of the U.S. Constitution, that permits them to exclude others from making, using, or selling an invention for a definite, or restricted period of time (“Patents”). A patent issued by the United States Patent and Trademark office (USPTO) assists owners in protecting the rights to inventions and the innovative process (USPTO, 2012).

Patents have been on the rise and have more than doubled from 1990-2010 (Eckert & Langinier, 2013). There are several reasons for the increase but patent growth in the United States has focused primarily on electrical, electronics, computing, and scientific instruments (“United States Patent”). Protecting intellectual property (IP) is an important component from the personal view, but it is also important to the economy and for bringing improvements to the public.

Patents, trademarks and copyrights are the principal means used to establish ownership of inventions and creative ideas, which can then provide a legal foundation for the creator (Intellectual Properties and the US economy 2012) in case of any dispute over ownership. The responsibility for proving this ownership rests with the inventor and it is these steps that must be carefully thought-out from the beginning. When thinking about a patent a few questions must be asked:

Does the idea qualify for a patent?

Is this already in the public domain?

Is there more than one application for this idea?

Has this idea been discussed publicly?

After those issues have been determined the next step is to determine if the idea, process, or “widget” already holds a patent. This can be done by searching the USPTO website for the relevant cooperative patent classification (CPC), this means seeing under which type of classification the idea falls. The creator must search using a descriptive term that embodies the idea. Determining the essence of the invention into a few descriptive terms can be frustrating and time consuming. Once the type of classification is determined the abstracts must be reviewed for relevancy to determine if there is a match. The purpose is to search if patents already established accomplish what the new concept being proposed does and if so, are they different enough that they justify the application for a patent. These early steps are tedious and if the university has the resources can be done within that department. However, it is up to the inventor to come up with the descriptive terms and be able to state why it warrants a patent. The USPTO has a step by step overview process which can be found at the website

[The United States Patent and Trademark Office "Patent Process Overview"](#), but it looks daunting and it is recommended that you utilize a patent attorney to help you maneuver through the steps.

A provisional patent is often the first stage; this has been in place since 1995 and is designed to provide a lower-cost first patent filing. A provisional patent is not required to have any formal patent claim or declaration (USPTO) and does not include any information disclosure. It allows the term “patent pending” to be used and is protective while allowing the inventor 12 months from the filing to prepare and file a nonprovisional patent. There are no extensions and the nonprovisional patent must be submitted before the deadline. The key component here is that “a public disclosure (e.g. publication, public use, offer for sale) more than one year before the provisional application filing date would preclude patenting in the United states” (USPTO). This is where the problems often arise. An academic setting may be excited about the work or widget and the inventor may be asked to discuss this item in a public forum, for example on a website or in an interview. If this is done before the provisional patent filing date it stops the chance of receiving a patent. This was the author’s issue: an interview on the web occurred three months before the provisional patent was applied for and this came to light only when the final work for the patent had been completed. Since this occurred in a “public setting” it stopped the process from going forward. This is the cautionary tale; this sharing of information occurred before the idea of applying for a patent had even been realized. Exploring the possibility of a patent for one’s work must occur before there is any “public” sharing of information.

If a patent is not available there is the option of securing a copyright. This of course does not have the prestige of a patent but it does afford protection of one’s intellectual property. This

copyright then marks the idea or “widget” as belonging to someone and not able to be used in anyway by another party.

The Copyright

The US copyright office is centralized in the Library of Congress and examines and registers hundreds of thousands of claims for books, music, movies, software, and photographs. In 2011 more than 700,000 registration claims were processed. Copyright law title 17 of the United States code with its multiple chapters and amendments grants protection:

Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories:

- (1) literary works;
- (2) musical works, including any accompanying words;
- (3) dramatic works, including any accompanying music;
- (4) pantomimes and choreographic works;
- (5) pictorial, graphic, and sculptural works;
- (6) motion pictures and other audiovisual works;
- (7) sound recordings; and
- (8) architectural works. (“Overview of the Copyright Office”)

The length of one’s copyright is found in the multiple amendments and is dependent on when it was put into position and with additional qualifiers. For example: “In General. — Copyright in a work created on or after January 1, 1978, subsists from its creation and, except as provided by

the following subsections, endures for a term consisting of the life of the author and 70 years after the author's death" ("Duration of Copyright"). This has many qualifiers as well, but the essence of the copyright is the protection of intellectual property that allows a mark of ownership. Even though ideas are automatically protected by using the copyright mark, one may wish to have registered as well and have a certificate of that registration. This then allows a basis for a lawsuit for infringement of work ("Copyright in General").

To obtain a copyright the steps are fairly simple: it can just require the copyright mark or the copyright can be registered for a fee. A registered copyright takes little time and can be done electronically for certain situations. It can be accessed at [Copyright Registration Portal](#) . If the specifics are not met for electronic filing it can be done by paper and mailed into the office. The steps entail: completion of an application, a payment, and a copy of the work that is being registered. The fee for a copyright varies from \$25.00 to \$400.00 depending on the item type, if it is a group or individual, and the numbers of authors.

Conclusion

The above discussion of the patent and copyright process are meant to provide general guidelines. However, it is recommended that a patent attorney be consulted before deciding on your path. It is suggested that you have a conversation about your idea or widget before any public sharing occurs, no matter how small it may seem. Determining whether there is support for this process in your academic setting and reaching out to an attorney are essential steps but being proactive and learning about the process can help you protect yourself and your ideas.

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