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Intellectual Property, Insurance and Business Method Patents

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Author's Note: This is a condensed version of a presentation given at the 2002 Society of Actuaries Meeting in Boston. The views expressed here are those of the writer, and do not necessarily represent the views of Mintz Levin Cohn Ferris Glousky & Popeo PC, or its clients. The information provided is for informational purposes only and is not to be considered legal advice. If you have questions, please contact your attorney.

Intellectual Property is a blanket term describing areas of the law that deal with protection of property which "springs from the mind." This article is a very brief introduction into intellectual property, and a view of how patents may be applied to insurance products.

Why is intellectual property important? In our society, technology is

advancing in leaps and bounds. The business world, including the insurance business, is no different. New product development requires investment of manpower and capital, and there is always a need to make sure that the fruits of product development efforts go as far and as long as possible to maximize return on investment. Hence, protection for new products is essential; without protection, new products may be reverse engineered or knocked off freely, in a sense doing the competition's work. Your competitors are doing the same thing, so it makes good business sense to consider protecting your products wherever you can.

Types of Intellectual Property

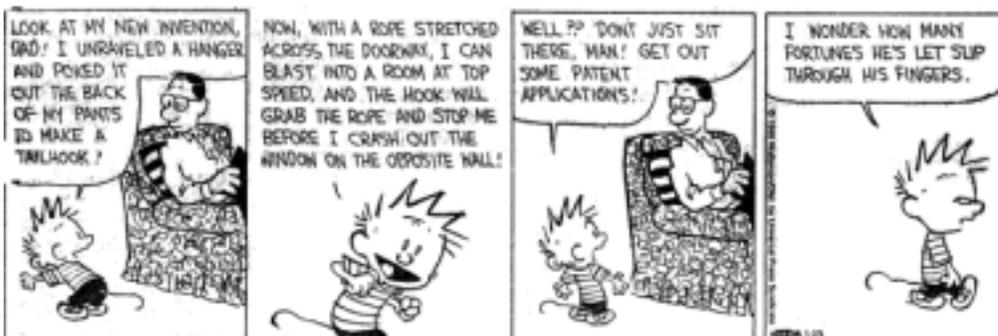
There are several types of intellectual property (we'll focus our discussion on patents, though.) The main ones are:

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To obtain a patent in the United States, there are a number of requirements.

- **Patents**
Patents protect the ideas themselves, not just their expression. Patentable subject matter is “any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereof.”
- **Copyrights**
Copyrights protect the expression of the idea rather than the underlying idea itself. Copyrights cover the artistic aspect of recorded works like plays, books and software. Copyright protection covers copying of a *substantial* portion of the work (so, independent creation of a new work is not covered.) The copyright holder has the right to allow others to make copies, prepare derivative works (*e.g.*, a movie adaptation of a book), distribute, sell, rent, lease or lend copies or perform or display the work, *e.g.*, movies, plays or paintings.
- **Trademarks**
Trademarks identify the source of the goods or services, rather than the goods or services themselves. A trademark is any word, name, symbol, device (or combination) that one uses, in commerce, to identify and distinguish their goods from goods made or sold by others. In fact, if a mark becomes the common identifier for the goods or services, the mark becomes generic and the protection is lost. The trademark (or service mark) is designed to generate good will to the supplier.
- **Trade Secrets**
Trade secrets are similar to patents in the type of material covered, *e.g.*, the ideas themselves, but they only last so

long as the material or concept is secret. A trade secret is a formula, pattern, device or compilation of information used in business that gives one an opportunity to get a “leg up” on competitors who don’t know the trade secret or use it. Trade secrets can be of potentially unlimited duration (think of the secret formula for Coca-Cola), but their essence is secrecy—once a trade secret is revealed, you cannot get it back.

Patents are a property right granted by the government, which gives the patent holder the right to exclude others from making, selling or using the invention claimed in the patent. The most typical kind of patents are utility patents, which last 20 years from the earliest patent filing date. Utility patents cover anything having an actual use, such as machines, processes/methods or compositions of matter (pharmaceuticals, materials, etc.).

Other types of patents include design patents, which cover ornamental product designs, and plant patents, for distinct and new varieties of plants that have been invented or discovered and asexually reproduced.

To obtain a patent in the United States, there are a number of requirements. **Novelty** is the first requirement. The most important novelty requirements are as follows. Your invention is novel, and you can get a patent, *if* someone has not patented your invention before you; it’s **not** known or used by others in the U.S. or described in a publication anywhere. Also, the invention is novel if *you* have **not** (more than one year prior to your patent filing) patented the invention, described it in a publication anywhere or put it into public use or on sale in this country. (The invention has to also be yours, not someone else’s.)

The second requirement is **utility**. This one is simple; the invention must have some

useful purpose. The invention must not be **obvious** to one of ordinary skill in the art to which the invention pertains; there has to be some “inventive step” that’s more than a minor change or tweak. Lastly, your patent application must disclose the **best mode** for carrying out the invention. Once you file your patent application, an examiner does a search of the “prior art” (*i.e.*, all the relevant technology prior to your invention) and reviews the application to determine if it meets the statutory requirements. If it does, you get a patent.

Business Methods Patents

Business-related patents are not new. Early financial patents were largely paper-related products and methods. As technology advanced, the focus became on inventing and perfecting the complex machinery necessary to carry out the data processing and calculations, like in the patents covering tabulating and compiling of statistical information (punch cards) which formed the basis of the company which would eventually become IBM. As increasingly powerful electro-mechanical devices evolved, to transistors, and then to microprocessors, the focus became less on the hardware than the ways to use the hardware, *i.e.*, software.

But what is a “business method” patent? There are many who associate business methods as those related to automated business data processing technologies, because of press coverage, *i.e.*, the Amazon “One-Click” patent, and in the rapid growth (up until recently) of e-commerce and the Internet. But many insurance-type patent claims would fall into this category as well. Other (non-data processing-related) process claims that might be labeled a “business method” exist, too.

What kind of business-related subject matter can be patented? Mathematical formulae or algorithms are not patentable

subject matter, but a patent claim *containing* a mathematical formula applying the formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect (*e.g.*, transforming or reducing an article to a different state or thing), is patentable subject matter.

Certain types of mathematical subject matter, standing alone, represent nothing more than abstract ideas until reduced to some type of practical application, *i.e.*, a useful, concrete and tangible result. Thus, methods that employ computers to implement an otherwise patentable method are patentable.

However, it was still not widely possible to obtain patents covering methods of doing business, since “business methods” claims were not judged to be proper subject matter for patent protection.

The *State Street Bank* case changed that. *State Street* eliminated the “business methods” exception, and enabled the current wave of business methods patents. In *State Street*, the court held that claims drawn to a method of doing business should be treated like any other process claim. *State Street* involved a data processing system that allows an administrator to monitor and record the financial information flow, and make all the calculations necessary for maintaining a partner fund financial services configuration.

After *State Street*, patent filings for business methods increased dramatically in the U.S. Patent and Trademark Office. Just last year alone, the PTO estimated a 28 percent increase in filings from the previous year. On the flip side, though, the PTO also issued about half as many patents that year than in the previous year. (This was likely due to two things, a combination of the increase in filings and a staffing crunch in the

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Examining group, despite PTO efforts to address that.

One example of an insurance product-related patent can be found in U.S. Patent No. 6,343,272, which relates to a system for analyzing and managing a plurality of specified life insurance policies and annuity contracts on behalf of an insurance carrier. The life insurance policies or annuity contracts depend on stock market performance in that the account value increase is determined as a percentage of the performance of a stock market index, with set caps and floors. The percentage is adjusted according to the yield on fixed rate assets. The system manages the increased risk from participation in the stock market by periodically monitoring assets and liabilities and determining the purchase and sale of stock options and other hedging instruments to cover the risks. The system also provides cash and profit determinations from the life insurance policies and annuity contracts.

What happens when a business methods patent application is examined? The first determination to be made is whether the claimed invention is proper subject matter for a patent, *i.e.*, if it has a practical application and therefore satisfies the utility requirement of 35 U.S.C. §101. The claimed invention as a *whole* must accomplish a practical application; *i.e.*, it must produce a “useful, concrete and tangible result.”

An examiner will review the claims to see if the claimed invention produces a “useful, concrete and tangible result.” If the answer is yes, then the claimed invention has a practical application and satisfies the utility requirement of 35 U.S.C. § 101. Thus, the specification needs to be as complete as possible and clearly identify any practical application for the claimed invention. Also, if the claims consist solely of mathematical operations *without* some claimed practical application, or simply manipulate abstract ideas without some

claimed practical application, they will be judged as not suitable subject matter for patenting. The application is then further examined to see if the claimed invention is novel and inventive.

While business methods patents as we know them today are a relatively recent phenomenon, U.S. patent examiners reviewing them are skilled in their field. According to the PTO, most examiners in this technology area have data processing and computer education or experience. Other educational and business industry work experience fields include banking, securities, business development, marketing analysis, real estate analysis, business consulting, management, sales, insurance, business information systems, and financial analysis. Many examiners also have advanced or multiple degrees, *e.g.*, law, Ph.D., Master’s and MBA.

A Last Word

So, if you have an insurance product or related technology you would like to protect, what’s the best course of action? The best thing to do is to have you and your attorney always consider the whole picture. In some cases a “layered” approach, in *addition* to patenting, may be best. You may want to consider trademark protection for the insurance product itself, copyright protection for protecting underlying source code and trade secret protection (for business practices related to the product that can be kept secret)—or all of these. An experienced IP attorney will be your best guide.

If you are interested in learning more about patents, an excellent and rich source of free information may be found at the U.S. Patent and Trademark Office Web site, <http://www.uspto.gov>. The address for the USPTO’s Business Method Web site is <http://www.uspto.gov/web/menu/pbmethod/>. You can also contact me via e-mail at nptriano@mintz.com. 📧



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