## PATENTS: THE MOTHER LODE OR NUCLEAR WEAPON?

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**Nearly a half century ago Humprhey Bogart starred in the movie The Treasure of the Sierra Madre. In the movie Bogie portrayed an itinerant traveler who uncovered a long lost gold mine in the mountains of Mexico. On the way back to civilization, however, the gold was lost.**

**There is a strong similarity between the character played by Bogie and today's consulting actuaries in the sense that we may be finding the mother lode and then letting it slip between our fingers. While Bogie's prospecting was in territory not owned by anyone, consulting actuaries may be doing their digging in areas that belong to others. It is necessary and probable that we are violating the property rights of others as we seek to solve our clients' problems.**

**When trespassing occurs in the field of intellectual property, the area of law that governs the rights of inventors and creators of financial products and services, it is called infringement. The penalties for infringing on the intellectual property rights of others may involve substantial monetary damages and/or prohibitions against the continued use of the product or service.**

**In some cases being stopped from using a particular piece of intellectual property may be far more important than being assessed monetary damages. For example, if a consulting actuary were to be barred from using a critical computer program, it might result in the consultant losing assignments. Intellectual property can be used to destroy competitors and, therefore, become the ultimate nuclear weapon among consulting actuaries.**

**If a consulting actuary were to develop and patent an important piece of software, the consultant could restrict the use of the software. Licenses would be required by other consultants to use the software. Such a scenario is a very real possibility given that computer programs are patentable. Even the threat of a possible patent infringement might have the desired effect of limiting a rival consultant's use or creation of similar software. Remember, in a nuclear war even getting close to the intended target can be devastating to anyone in the general area.**

To illustrate the impact of patenting software, just imagine that Jim Anderson of Tillinghast had not only invented the concept of universal life in the United States but he had also patented a computer program to calculate reserves and cash values for the product. The patent would not prohibit anyone else from finding another method to calculate reserves and cash values for UL or doing the calculations manually but, as a practical matter, there probably wouldn't have been any option except to license Jim's program.

Consulting actuaries are generally unaware of the potential impact of patents and copyrights. The purpose of this short paper is to acquaint consulting actuaries with patents and copyrights (the two most important forms of intellectual property law effecting consulting actuaries) so that they will become acquainted with both the protections and consequences resulting from violations of intellectual property law rights.

Very briefly, a patent provides protection to an inventor for a time. This period is now 17 years in the U.S. but, under certain circumstances, the period will be extended to 20 years as a result of recent treaties signed by the U.S. During this time no one else can use, make or sell this invention without being licensed by the patentholder. In exchange for the patent the inventor must make the details of the invention known by filing a patent application. Incidentally, patents and copyrights are provided for in the United States Constitution and patents existed in other countries long before the 18th century.

Copyrights protect other forms of expression. Typically, a copyright protects creative expressions including insurance contracts. Consequently, actuaries need to recognize that providing a policy draft for a client by simply copying another company's insurance contract will violate copyright laws if the original policy document has been copyrighted.

Increasingly, insurance related documents that contain any form of creative expression are being copyrighted to limit direct usage by competitors. Copyright infringements, while not usually costly in a monetary sense, can be embarrassingly expensive if, for example, it would result in injunctions against the copier, the destruction of printed materials, cancellation of a marketing program, etc.

Preventing intellectual property law violations by a consulting actuary is neither a simple nor a foolproof process. As much as anything, the process requires an awareness that intellectual property law protects the rights of others and a great usage of common sense.

If a consulting actuary is involved with the development of computer software, which is probably the most likely area of a patent infringement, there is a need to be certain that no similar programs have been patented. The most direct method for patent search is to retain a patent attorney who is skilled in this activity.

The patent search, however, may not be a 100% solution because pending patents will not be revealed during a patent search.

Copyright violations are somewhat easier to prevent. Where there is a © or other similar mark or notice, it is obvious that the document cannot be copied. Since documents can be copyrighted without any copyright notice, it is probably better to assume all documents are copyrighted and to reword all materials presented to clients even though the client has requested that they simply replicate a competitor's existing documents. This may not necessarily be consistent with the client's instructions simply to clone a competitor's product but it is surely a safer approach.

At some point during a consulting actuary's career, the consulting actuary may be fortunate to develop a truly new policy, product, or process. It may be advisable to get this invention patented.

As soon as it is clear that the consultant is onto something new, the same processes should be followed as for any other invention. Inventors are advised to keep notes, including diagrams, of their inventions to establish proof that they were the inventor. The notes should be dated and signed. Having another party's signature and date on the pages further re-enforces the authenticity of the documents and when the invention actually occurred.

Another consideration is whether the consulting actuary, the consulting firm, or the client is the owner of the patent when the product or service was created during an assignment. There is not a single answer to this matter. If the consultant has an employment contract, the handling of inventions may be spelled out. Where there is no employment contract or client agreement specifically addressing patent ownership for work developed while employed by the firm or engaged by a client, common sense is probably the best way to determine who owns the patent.

Incidentally, patents are granted in the name of a person or persons. Then, patents are assigned to a company if that is what is required by agreements.

**Patent rights can easily become the most important asset of a consulting company. The income that could be derived from licensing fees may become the "tail that wags the dog" if a firm is lucky enough to invent a new financial product or service.**

**In summary, intellectual property rights are of direct concern to consulting actuaries. Not only should there be an awareness to prevent intellectual property law infringements, but ownership of intellectual property can become a major asset of a consulting firm.**

**Are patents and other intellectual property the mother lode or a nuclear weapon? It all depends on your point of view. In any case the doctrines and opportunities of intellectual property law can no longer be ignored by consulting actuaries.**