

# INSURANCE IP BULLETIN

An Information Bulletin on Intellectual Property activities in the insurance industry

A Publication of - Tom Bakos Consulting, Inc. and Markets, Patents and Alliances, LLC

## **Introduction**

This issue deals with “What is a patent worth?”

In “**Lessons from a First Time Insurance Patent Applicant**”, our guest feature writer, Matt Schoen, describes his experiences building value into his first patent application. Matt and his coinventor’s application successfully issued as a patent and they’ve successfully licensed their patent to a third party.

In “**What Do The Computers Do?**”, we talk about how value can be built into a patent application by making sure you have an “enabling” specification.

In “**What’s a Patent Worth?**” we discuss, generally, various approaches for measuring the value of a patent after it has issued. Often a decision to seek a patent is based only on a gut feeling that the invention must be worth something. The determination actual value is left to the market and, often, the courts to determine.

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Our mission is to provide our readers with useful information on how intellectual property in the insurance industry can be and is being protected – primarily through the use of patents. We will provide a forum in which insurance IP leaders can share the challenges they have faced and the solutions they have developed for incorporating patents into their corporate culture.

Please use the FEEDBACK link above to provide us with your comments or suggestions. Use QUESTIONS for any inquiries. To be added to the Insurance IP Bulletin e-mail distribution list, click on ADD ME. To be removed from our distribution list, click on REMOVE ME.

Thanks,  
Tom Bakos & Mark Nowotarski

## **Reminders**

***Conference on Intellectual Property Rights Protection for Financial Service Companies  
May 11 – 12, NY, NY***

The *Institute for International Research* will be presenting the inaugural *Intellectual Property Rights Protection for Financial Services Conference - Strategies for building patent portfolios and managing IP risk* on **May 11 to 12, 2005** at the **Flatotel International**, New York, NY.

**Corporate attorneys** who attend will be better prepared to face the new risks posed by the proliferation of patents in the financial services industry. 15 CLE or CPE credits will be available to participants.

For information and registration go to <http://www.iirusa.com/iprights/> or call the IIR at (888) 670-8200.

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**Readers of the Insurance IP Bulletin are eligible for a 25% discount on registration. Use priority code XUIPB if you register online, or U1962XUIPB if you register by phone.**

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## *ACORD Meeting to Offer Session on Patents and Insurance Standards May 22 – 24, Walt Disney World, FL*

ACORD and LOMA will present a session on *Insurance Patents and Insurance Standards* at their upcoming *Insurance Systems Forum* on **May 22 - 24, 2005** at the **Walt Disney World Dolphin Hotel, Lake Buena Vista, Florida**. The session will be on Monday, May 23 from 10:45 – 11:45 am.

CIOs and their staff that attend the session will be better prepared to face the complex issues posed by patents in the standards setting process. For more information and registration go to <http://acordlomaforum.org/2005/index.aspx> or call ACORD at (845) 620-1700 ext. 506.

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## *IIR Meeting on Retirement Income Products to Offer Session on Patents June 22 – 24, Boston MA*

The **Institute for International Research** will be presenting the inaugural *Symposium on Managing Retirement Income* on **June 22 -24, 2005** at the **Hyatt Regency, Boston MA**.

Product developers who attend will be better prepared to increase the value of their innovative offerings by protecting them with patents. For information and registration go to <http://www.iirusa.com/retirement/income/> or call the IIR at (888) 670-8200.

## **Feature Article**

### ***Lessons from a First Time Insurance Patent Applicant***

By: **Matt Schoen**, President **MB Schoen & Associates, Inc.**, [mbschoen@coliaudit.com](mailto:mbschoen@coliaudit.com)

There are a number of challenges any inventor faces when pursuing a patent application, especially with one's first application. The hurdles appear more daunting still when you are a small firm. In obtaining our first patent, however, we have learned several important lessons which we hope will make your experience more productive. These lessons are:

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- Take time up front to learn a few underlying concepts, principles and terms of patent law.
- Engage an experienced patent lawyer or agent with expertise in your area – irrespective of the higher cost.
- Read a good overview book on intellectual property

***Take time up front to learn a few underlying concepts,  
principles and terms of patent law***

One of the first things my co-inventor and I confronted after engaging our exceptionally experienced patent attorney, was the culture shock accompanying any sudden immersion in a foreign language. Not only did we struggle to understand the arcane patent terminology flowing endlessly from him, but he, in turn, had to become familiar with the equally unfathomable jargon of our world – i.e. insurance products and qualified pensions. There were multiple occasions when either my co-inventor or I failed to understand our attorney's detailed instruction, not once, not twice, but several times. This involved hours or even days of misguided work on our part that ultimately missed the mark. This was a mutually frustrating experience to say the least. And things could have been worse had our attorney not shared a deep understanding of the computer science fundamental to our invention and had he not had prior experience with insurance related patents.

A lot of this miscommunication could have been avoided if we as inventors had taken time up front to learn a few of the underlying concepts, principles and terms of patent law. These concepts and terms include:

- What constitutes patentable subject matter
- What is the difference between an exclusionary right and an affirmative right
- How do you tell whether or not a provisional patent application will suffice in our particular situation
- What must be filed in a provisional to properly support the subsequent nonprovisional patent application.
- What is meant by “best mode”
- What are “statutory bars” and what are their implications to your patent application.
- What are patent “claims” and how should they be drafted to provide the broadest possible protection, irrespective of what your preferred embodiment may otherwise appear to suggest.

These are but a few of the concepts and terms it is advisable to comprehend in advance.

***Engage an experienced patent lawyer or agent with expertise handling like-subject matter --  
irrespective of the higher cost***

Would you shop for a bargain surgeon if you needed surgery to repair a heart valve? That's how important a good patent attorney/agent can be to a small company. **We looked hard to find a patent attorney/agent who had expertise in our field. Our investment of time and money to get our first patent, while considerably greater than anticipated, has in our experience been well worth it.**

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We are happy to report that we have successfully licensed our invention to a third party ([Corporate Compensation Plans, Inc.](#) - ed.) who is now bringing it to market. They, in turn, have further invested their own time and effort to develop a commercially viable product which has recently been licensed to several major corporations.

While it is impossible to know whether our deep pocket licensees would have run with our intellectual property in the absence of our patent and patent pending, it is reassuring to know that when their IP counsel reviewed our patent, they advised their clients to obtain a license if they wish to tread in our covered markets. This is the fruit of finding the best attorney/agent to meet our needs.

### *Read a good overview book on intellectual property*

Years after toiling through our first patent application, I found an excellent primer on intellectual property law, [Essentials of Intellectual Property](#). While reading through it I realized what a huge difference a little advance knowledge could have made. Many of the important messages and concepts our attorney so patiently imparted to us would have been grasped much more readily had we taken the time to read such a book up front.

Obtaining a first patent can be expensive and time consuming, particularly for a small company. To make it go smoother, however, it is important to:

- Take time up front to learn a few underlying concepts, principles and terms of patent law;
- Engage an experienced patent lawyer or agent with expertise in your area – irrespective of the higher cost; and
- Read a good overview book on intellectual property.

## **Patent — Q & A**

### ***Is it worth getting a patent?***

**Question:** *Is getting a patent really worth anything? That is, are the individuals or companies that have patent rights in the insurance industry actually enforcing them through patent infringement lawsuits?*

**Answer:** In general, insurance business method patents are too new yet to have generated a lot of infringement lawsuits and the licensing and legal activity that surrounds enforcing patents. One notable exception is the patent infringement and theft of trade secret lawsuit that Bancorp Services brought against Hartford Life Insurance Company. The patent owner, Bancorp Services, was paid \$80 million dollars by Hartford to settle the case. Strictly speaking, this was not a pure patent infringement case since another IP issue, violation of a secrecy agreement, was involved. However, the validity of the patent was upheld on appeal so insurance business method patents are clearly enforceable.

The decision to file a patent in the first place (in answer to the first part of the question) is a business decision based on the commercial possibilities of the invention. That is, with some exceptions, there is no

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point in filing a patent and incurring the cost of doing that unless one has a reasonable expectation that his or her invention has commercial value worth protecting. This value is captured by either bringing an exclusive product to market, or licensing the patent to a third party. Insurance products are relatively easy to copy so a patent is probably the only way to retain a right to license use and generate value.

If patent infringement is believed to have occurred and if a licensing agreement cannot be negotiated, then a patent infringement lawsuit may be necessary. A patent owner shouldn't do anything, however, without first consulting proper legal counsel and making a realistic assessment of the cost, effort and potentially recoverable damages. Patent infringement lawsuits can cost millions of dollars in legal fees and take several years to reach a settlement. There is also the threat of countersuits against the patent owner for things like anticompetitive practices.

Hopefully the insurance industry will quickly learn that patent rights are to be respected. This will minimize the need for expensive and disruptive patent infringement lawsuits.

## **Patent Tech**

### **What Do The Computers Do?**

*The specification (of a patent) shall 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 as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same....*

US Patent Law 35 U.S.C. 112 – 1st paragraph

Strong, valuable and enforceable patents require full, clear and concise written descriptions that enable any person skilled the art to make and use an invention.

It is very tempting to file a patent application as soon as you have an exciting new idea – even before you have fully fleshed out the concept. However, filing a fuzzy patent application can undermine your future ability to get effective patent protection. When such an application gets published, you will have disclosed your idea to the world, but since you haven't actually clearly shown how to implement the idea, you are unlikely to get a strong patent, if you get any patent at all.

Furthermore, you've tipped off your competition. If it's a promising idea, they may solve the practical problems, file their own patent applications with better thought out enabling descriptions of how the invention works and ultimately shut you out of your own market with their much stronger patent portfolio.

Until you know how to implement your idea, it is best to protect it with secrecy agreements. Even with secrecy agreements, you should still use some judgment as to who you tell your idea to in order to minimize the chance that it will be leaked to the public before you are ready to file.

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One way to see if you are ready to file is to answer the question:

*“What do the computers do?”*

Computers are essential to almost every aspect of bringing a new insurance product to market. Computers aren't required to get a patent in the insurance field, but if you can describe what the computers would do to implement your insurance business method process, chances are you can make an enabling description in your patent application.

For example, our guest writer this month, Matt Schoen, and his coinventor, Jean-Philippe Khodara, had an exciting idea for a new type of disability insurance product that would protect 401(k) contributions. They didn't file their patent application, however, until they could describe what their computers did to implement their inventive process. When their patent issued, it mostly covered the computer hardware and software required to administer and price the product. Their patent, US 6,235,176, “Computer Apparatus and Method for Defined Contribution and Profit Sharing Pension and Disability Plan”, has withstood the scrutiny of some very sharp legal counsel hired by their potential licensees. Their patent survived the scrutiny and they successfully concluded a licensing deal.

You must be able to describe how to make and use an invention in order to get a patent on it. A description that does that is “enabling” and should satisfy the requirements of patent law. Until you reach that point, you need to protect your idea with secrecy agreements. A good test to see if you are ready to file a patent application is to see if you can describe what the computers must do in order to bring your new insurance product to market.

## **Patent Value**

### ***What's a Patent Worth?***

A patent on an invention gives the inventor the right to exclude others from making, using, or selling the invention. So, a patent's worth is derived from the value of the invention and, in particular, the value of the exclusive use of the invention. It is important to note that the invention, by itself, can have value. The patent adds value by providing exclusive use. Of course, exclusivity adds nothing if there is no one else who wants to use the invention.

General asset valuation theories fall into three basic categories: *replacement cost*, *market value*, and *income potential*. Evaluating a patent's value using replacement cost theory is nearly impossible since patented inventions are unique and can only be invented once. That is, they cannot be replaced.

Likewise, a market value approach is difficult since the inventor's exclusive rights prevents market competition from being a factor in determining the value of a patent. An inventor's license fee or royalty is driven by economic factors related to the value of the invention to the potential licensee. For example, if the use of the invention can save a manufacturer \$50 per unit, then the value of the patent to that licensee is likely to be less than \$50.

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Income theory approaches can rely on reasonable royalties based on assumed production over the useful life of the patented technology. The present value of the expected royalties could be the value of the patent. The useful life of a patent is limited by the 20 year term of a typical patent. But, also consider that one of the reasons inventors are given exclusive rights is to encourage them to reveal to others how their inventions work. The purpose of that is to encourage others to improve the invention or stimulate others to find even better solutions. If that happens the useful life of a patented invention can be much less than 20 years.

Certainly the value of a patent depends on some extent not only to its “inventiveness” in solving a problem but also on its quality or completeness. For example, others looking at a patented invention will examine it to see exactly what is covered in the claims. This may provide the insight to invent around it, that is, find a different approach just as good or find a better approach to solving the problem. In fact, they may even see that the invention provides a solution to other problems not envisioned by the original inventor and, so, not claimed as part of the invention. That, in fact, is exactly how the patent process is expected to work.

Usually, inventors file patent applications based on gut feelings about the value of their invention or for reasons entirely unrelated to financial gain like fame and the general good. The truth is that most patents don't become commercial successes.

A very important measure of a patent's value is made in a patent infringement lawsuit. A patent owner is entitled to the higher of a reasonable royalty or their lost profits when someone infringes their patent. Actuaries may be called upon as expert witnesses in the determination of these measures.

The minimum damages are set at a “reasonable royalty” level. Courts tend to look at what a hypothetical negotiation for the infringer's use of the patent would have produced in royalties if both parties had been willing participants in the negotiation. Absent an established royalty level, this reasonable royalty may be determined by evaluating the value added by the patented technology. As in the earlier example, if this value is \$50 per unit, then a reasonable royalty may need to be less than \$50.

Lost profits caused by the infringer will usually (when the patent owner has profits to lose) provide a higher damages value. In addition, other damage theories can come into play. Price erosion, for example, can occur when the infringer's competing presence in the market forces the patent owner to reduce the prices it would have otherwise been able to charge. The entire market theory might apply when the patent owner loses other sales of products related as part of a whole to products sold with the patented technology.

Patents in the insurance industry are a relatively new phenomenon. Eventually, however, the same patent value theories will come into play in determining whether or not to seek patent protection in the first place or whether or not it is worth asserting patent rights in a patent infringement lawsuit.

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## Statistics

### An Update on Current Patent Activity

The table below provides the latest statistics in overall class 705 and subclass 4. The data shows issued and published patents and published patent applications for this class and subclass.

Insurance Patents Issued by Year as of 4/5/05			Insurance Patents Pending by Year Published as of 4/7/05		
	Class 705	Subclass 4		Class 705	Subclass 4
YEAR	#	#	YEAR	#	#
2005	413	10	2005	1,629	37
2004	996	24	2004	5,558	156
2003	968	23	2003	5,989	128
2002	883	16	2002	6,135	164
2001	879	21	2001	1,326	30
2000	1,062	33	<b>TOTAL</b>	<b>20,637</b>	<b>515</b>
1999	1,004	38			
1998	743	20			
1978-1997	2,775	47			
1976-1977	80	0			
<b>TOTAL</b>	<b>9,803</b>	<b>232</b>			

Class 705 is defined as: DATA PROCESSING: FINANCIAL, BUSINESS PRACTICE, MANAGEMENT, OR COST/PRICE DETERMINATION.

Subclass 4 is used to identify claims in class 705 which are related to: *Insurance (e.g., computer implemented system or method for writing insurance policy, processing insurance claim, etc.)*.

### Highlight of Newly Issued Patents and Applications During Last Two Months

There were eight new patents issued and 22 new applications in class/subclass 705/4 during the last two months. Of note are the following.

U.S. patent # 6,868,386 is a *Monitoring system for determining and communicating a cost of insurance* assigned to Progressive Casualty Insurance Company. The patent was issued March 15, 2005 from an application filed on May 15, 2000. This is part of a series of patents and patent applications all related to Progressive's TripSense™ system for "determining a cost of automobile insurance based upon

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monitoring, recording and communicating data representative of operator and vehicle driving characteristics". Progressive has, at least, four other patents or patent applications on this pricing technology. The first was filed on January 22, 1996.

Progressive first tested the system using a 100 person pilot test in Texas in 1998. This test was unsuccessful because of high equipment costs and privacy concerns. A new 500 driver test is currently ongoing in Minnesota. In addition, Progressive has granted an exclusive license on this technology to Norwich Union for use in Europe.

Another patent application, filed February 11, 2003, indicates the wide range of interest in auto insurance pricing. The application, US **20050071202** is for a *System of charging for automobile insurance* and seems very similar to the Progressive patents already issued. One purpose of this invention seems to be to help a driver modify driving habits by providing near real time feedback on insurance costs so as to reduce risk of an accident.

So, there appears to be quite a bit of activity in the field of automobile insurance underwriting and pricing designed to classify drivers more accurately with respect to driving habits affecting risk. This seems very much like the changes made about 25 years ago in the life insurance arena when non-smoker discounts were first introduced. This life industry initiative led to further risk classification redesign and the ultimate introduction of multiple preferred risk premium rate classes for life insurance. The big difference is that in the life industry patents were not a factor. If Progressive is successful in introducing this concept to the auto insurance market, their patents on the technology (and the patents and applications of others) could have a very interesting impact on the competitive environment.

A new patent has also been issued in the past two months to Walker Digital, LLC for a *Method and apparatus for providing insurance policies for gambling losses* (US #6,869,362). The patent deals primarily with a method to provide a *gambling loss insurance policy* to protect against unpredictable gambling losses. A little is said about how such an insurance policy might be priced. For example, it is indicated that the skill of the gambler might be a factor in determining a premium. Walker Digital is an ecommerce research and development company with over 200 patents for unique business systems a number of which are related to this particular patent. They are the ones that invented the Priceline.com computerized reverse auction process. Their revenue is derived from licensing their inventions.

## Again, a reminder -

Patent applications have been published 18 months after their filing date only since March 15, 2001. Therefore, there are many pending applications not yet published. A conservative assumption would be that there are about 150 applications filed every 18 months in class 705/4. Therefore, there are, probably, about 625 class 705/4 patent applications currently pending, only 473 of which have been published.

Because the pending patents total above includes all patent applications published since March 15, 2001, applications that have been subsequently issued will also appear in the issued patents totals.

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## Resources

These are links to web sites which contain information helpful to understanding intellectual property.

United States Patent and Trademark Office (USPTO) - <http://www.uspto.gov>

World Intellectual Property Organization (WIPO) - <http://www.wipo.org/pct/en>

Patent Law and Regulation - <http://www.uspto.gov/web/patents/legis.htm>

Patent Agent services – <http://www.marketsandpatents.com/>

Actuarial services – <http://www.BakosEnterprises.com>