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

In this issue's feature article, *Enablement*, Tom Bakos, co-editor – *Insurance IP Bulletin*, highlights a very essential characteristic that all patent applications must have. In exchange for a period of protected, exclusive use of their invention, inventors are required to describe in clear and concise terms how to make and use their invention.

In our **Patent Q/A**, we describe an ongoing challenge being faced by insurance patents. In **Ex Parte Bilski**, the patentability of business methods is being tested in the Court of Appeals for the Federal Circuit. The outcome of this case may have an impact on patents being filed in the insurance and broader financial services areas.

The Statistics section updates the current status of issued US patents and published patent applications in the insurance class (i.e. 705/4). We also provide a link to the *Insurance IP Supplement* with more detailed information on recently published patent applications and issued patents.

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 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

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Feature Article

Enablement

By: Tom Bakos, FSA, MAAA

Co-Editor, Insurance IP Bulletin

An essential feature or requirement of any patent application is that it be *enabling*. This requirement is drawn from the first paragraph of 35 U.S.C. 112 and its absence should result in a so called "112 first paragraph" rejection.

Essentially, to satisfy the *enablement* requirement an applicant must describe in the specification of a patent application "the manner and process of making and using" the invention "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" it. An inventor is therefore, required to disclose <u>all</u> of the non-obvious methods or processes of making and using his or her invention in order to advance the arts. In exchange for that disclosure, the inventor gets a protected use of the invention for a period of time – generally 20 years from the date of such disclosure.

The first paragraph of section 112 also requires that the specification contain two other things in addition to enablement:

- a written description of the invention and
- a best mode disclosure.

These requirements are distinguished from the enablement requirement by their purpose. The purpose of a *written description* is to demonstrate that the inventor at the time the application was made had possession of the subject matter on which the claims were based. The *best mode* requirement is to encourage the inventor not to conceal from the public the preferred embodiment of the invention they claim to have made. That is, an inventor might be otherwise be encouraged to disclose only a second or third best embodiment to the public saving the best for himself.

The invention to which this enablement disclosure requirement applies is the invention defined by the claims. There may be other aspects of the invention described in the written description of the specification but the only invention subject to the enablement requirement is the invention actually claimed.

The level of disclosure required is that which is sufficient for a person skilled in the art to make and use the invention. Enablement has been interpreted by the courts to mean can a person

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skilled in the art make and use the claimed invention based on the disclosures provided in the specification together with information known in the art without *undue experimentation*.

In general, determining whether or not <u>undue</u> experimentation is required to make and use an invention is highly subjective and dependant on many factors which, well, make generalizing difficult. And, for invention in the insurance and broader financial services subject matter areas, even greater subjectivity exists – in part, because most patent examiners have little training or experience in these areas and making a judgment on <u>undue</u> versus <u>reasonable</u> experimentation is determined from the perspective of a person of ordinary skill in the art, a perspective the examiner may not have. In addition what "experimentation" means in the context of a business method invention in the insurance or broader financial services areas may be difficult to define.

The need for one skilled in the art to experiment <u>a bit</u> in order to make and use the claimed invention does not invalidate a claim for lack of enablement – but *undue* experimentation would. How does one tell the difference? Well, one way to address this question is by factually considering the following:

- the level of direction and guidance provided in the specification;
- the level of skill in the art at the time of the application; and
- how well known the methods required to practice the invention are.

For example (without implying an application to any particular invention claim – that is, in very broad terms), suppose that in an invention involving the subject matter of actuarial science "pricing a term insurance product" were a step in a claimed invention but a method for such pricing had not been disclosed in the specification.

Certainly, pricing an insurance product involves what might be called experimentation in order to develop a premium rate that satisfies pricing standards, covering expenses and benefits while producing a profit. However, since methods of pricing term insurance products are well known to a person skilled in the art and the specification (let's suppose) is not suggesting that this pricing would be any different, then, I think, it would be appropriate to conclude that this was not undue experimentation. More simply, it may comparable to "calculating a square root" or "screwing in a light bulb".

On the other hand, if a claim step involved "establishing a charge" for a new type of insurance benefit or guarantee and a method for establishing such a charge was not described or even hinted at in the specification, then a person skilled in the art might be at a loss as to how to do such establishing without *undue* experimentation. This may be the case since there are no known methods or processes for establishing such a charge and similar methods do not exist in the subject matter area. If the financial impact or risk associated with the occurrence of the

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insured contingent event which is the subject of the claimed invention is new or unknown in the relative art, then *undue* experimentation may be required to figure out how to establish such a charge.

There is no requirement that information be disclosed in a specification that would result in a commercially viable or commercially successful application of the invention. Thus, any lack of disclosure of what might be considered *undue* experimentation to produce such a <u>commercial</u> success would not count against enablement.

Only a failure to disclose *undue* experimentation <u>required to make and use the invention</u>, <u>regardless of whether or not it would be commercially successful if made or used</u>, would impact enablement. As noted above, experimentation routinely done in the development of insurance products which may include testing or trials during pricing (e.g. stochastic modeling) or confirming conformance with insurance law and regulation (which often requires discourse and negotiation with state regulators) is not a requirement for enablement. Such routine experimentation should be well within the skill set of a person of ordinary skill and there would be no need to disclose it.

The purpose of the enablement requirement is to assure that how to make and use the claimed invention is communicated to the interested people with skill in the art in a meaningful way. In keeping with the section 112 requirement that such disclosure be "concise", it is OK to interpret "concise", meaning brief and to the point, from the perspective of a person skilled in the art. But, one caution is that a patent examiner looking at insurance business method specification language may not be skilled in the art. Therefore, since the examiner is the initial judge of enablement, using a lower standard than what a person skilled in the art would know when drafting specifications for insurance or financial services business method patent applications may be wise.

In drafting claims in one's own invention or if reviewing claims one may be accused of infringing, enablement is a characteristic one should check for. This is particularly true with respect to business method invention in the insurance and financial services areas since the patent examination process may not be as efficient in this subject matter area as in others.

Patent Q & A

The End of Insurance Patents?

Question: I heard there is a court case that could end insurance patents. Is this true?

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Disclaimer: The answer below is a discussion of typical practices and is not to be construed as legal advice of any kind. Readers are encouraged to consult with qualified counsel to answer their personal legal questions.

Answer: Perhaps. The case is <u>Ex parte Bilski</u>. It is currently on appeal before the Court of Appeals for the Federal Circuit (CAFC).

Details: In 2002, Bernard Bilski and Rand Warsaw filed a patent application that disclosed a method for hedging risks associated with energy trading. Their method is not tied to any particular technology. The patent examiner rejected all claims under 35 USC 101 asserting that the invention was essentially an abstract idea. Bilski appealed. The Board of Appeals affirmed the examiner. Bilski appealed again, and now it is in front of the CAFC.

This case has become a lightning rod for those that have strong feelings about the patentability of business methods. Thirty amicus briefs (i.e. outside legal opinions) have been submitted to the court with positions ranging from *all business method patents should be banned as a violation of freedom of speech* (ACLU) to *all business methods should be patentable, no matter how abstract the invention is, since that is the future of our economy* (professor Lemley of Stanford Law School et al.). Somewhat disturbingly, several major financial institutions, including MetLife, have <u>submitted an amicus brief</u> arguing that not only should abstract financial inventions **not** be patentable, but that the State Street Bank decision itself went too far and even technologically implemented financial inventions should not be patentable.

It remains to be seen how the CAFC will rule. It further remains to be seen if the CAFC's decision will be appealed to the Supreme Court. Prudent practice dictates, however, that in the meantime, anyone filing a patent application on a financial invention, such as a new insurance product, should say as much as possible in their application about the underlying technology required to practically implement the invention. Thus, even if the courts decide to roll the clock back and only allow patents on strictly technological inventions (e.g. computer systems) inventors can still get effective protection for their financial service inventions by patenting the advanced technological systems required to implement them.

Now Available

Lincoln National Life Insurance Company Alleges Patent Infringement - GMWB

Lincoln National Life insurance Company is the owner of three patents (one awaiting issue) and two additional patent applications which Lincoln believes cover the methods and processes used

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in providing the *Guaranteed Minimum Withdrawal Benefits* (GMWBs) prevalent in many insurers' variable annuity products.

Lincoln is beginning to assert its patent rights through the filing of patent infringement lawsuits against its competitors who offer GMWBs. As of now, Lincoln has lawsuits pending against **Transamerica Life Insurance Company** and **Jackson National Life Insurance Company** for alleged infringement of two of its patents.

Since GMWBs are such a common benefit option or feature of variable annuity products offered by insurers in the U.S., it is important for all companies offering GMWBs to be aware of what Lincoln claims its inventions to be.

Tom Bakos (co-editor of the *Insurance IP Bulletin*) has prepared a comprehensive *Intellectual Property Analysis* of the Lincoln National GMWB family of IP. This analysis (over 200 pages of printed detail plus supporting documents on CD) represents well over 200 hours of review, analysis, and dissection of the specifications and claimed inventions. It points out prior art (believed to be relevant) either not disclosed or not considered by the USPTO on examination. It addresses the quality of the claims made.

This analysis will be a valuable resource for anyone seeking a better understanding to the Lincoln claimed inventions.

For more information regarding this Analysis and how to acquire it, please go to: Intellectual Property Analysis (http://www.BakosEnterprises.com/IPA).

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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 patents and published patent applications for this class and subclass.

Issued Patents as of 4/15/08		
	Class 705	Subclass 4
YEAR	#	#
2008	836	33
2007	2,063	43
2006	2,224	44
2005	1,453	30
2004	998	23
2003	969	21
2002	887	15
2001	880	19
2000	1,062	29
1999	1,006	36
1998	745	20
1978-1997	2,778	47
1976-1977	80	0
TOTAL	15,981	360

Published Patent			
Applications as of 4/17/08			
	Class 705	Subclass 4	
YEAR	#	#	
2008	2,619	57	
2007	6,990	183	
2006	6,119	169	
2005	6,305	148	
2004	5,596	156	
2003	6,010	129	
2002	6,140	164	
2001 *	1,327	30	
TOTAL	41,106	1,036	

^{*} Patent applications were first published 18 months after filing beginning with filings dated March 15, 2001.

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.).

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Issued Patents

23 new patents have been issued during the last two months for a total of 33 in class 705/4 during the first $3\frac{1}{2}$ months of 2008.

Patents are categorized based on their claims. Some of these newly issued patents, therefore, may have only a slight link to insurance based on only one or a small number of the claims therein.

The **Resources** section provides a link to a detailed list of these newly issued patents.

Published Patent Applications

29 new patent applications have been published during the last two months for a total of 57 during the first 3 ½ months of 2008 in class 705/4 indicating a continued high level of patent activity in the insurance industry.

The **Resources** section provides a link to a detailed list of these newly published patent applications.

A Continuing reminder -

Patent applications have been published 18 months after their filing date only since March 15, 2001. Therefore, the year 2001 numbers in the table above for patent applications are not complete and do not reflect patent application activity in the year 2001. A conservative estimate would be that there are, currently, close to 250 new patent applications filed every 18 months in class 705/4. Therefore, there is approximately that number of pending applications not yet published.

The published patent applications included in the table above are not reduced when applications are either issued as patents or abandoned. Therefore, the table only gives an indication of the number of patent applications currently pending.

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Resources

Recently published U.S. Patents and U.S. Patent Applications with claims in class 705/4.

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

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

United States Patent and Trademark Office (USPTO): *Patent Application Information Retrieval* - http://portal.uspto.gov/external/portal/pair

Free Patents Online - http://www.freepatentsonline.com/

Provides <u>free</u> patent searching, with pdf downloading, search management functions, collaborative document folders, etc.

US Patent Search - http://www.us-patent-search.com/
Offers downloads of full pdf and tiff patents and patent applications free

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

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

Here is how to call the USPTO Inventors Assistance Center:

- Dial the USPTO's main number, 1 (800) 786-9199.
- At the first prompt press 2.
- At the second prompt press 4.
- You will then be connected to an operator.
- Ask to be connected to the Inventors Assistance Center.
- You will then listen to a prerecorded message before being connected to a person who can help you.

The following links will take you to the authors' websites

Mark Nowotarski - Patent Agent services - http://www.marketsandpatents.com/

Tom Bakos, FSA, MAAA - Actuarial services - http://www.BakosEnterprises.com