

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

With this issue we begin our 3rd year of publication. We hope that we have and we will strive to continue to provide value to our readers.

In this issue's feature article, *Duh! - Finding the Obvious in a Patent Application*, Tom Bakos addresses one very important requirement for a patentable invention ... it must not be obvious. Clearly, this is a very subjective evaluation and what is or is not "obvious" is, well, not often obvious. This may be particularly true in the business method type inventions prevalent in the insurance and broader financial services fields.

In our **Patent Q/A** we present some data Mark has developed regarding the lag between patent filing and expected first office action letter. As the chart shows, the lag has been growing by about 6 months every year.

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

Duh!

Finding the Obvious in a Patent Application – Brief Version

By: Tom Bakos, FSA, MAAA
Co-Editor, *Insurance IP Bulletin*

[A more detailed version of this article can be found at: [Full Version](#)]

In addition to being new and useful, an invention must also be *not obvious* in order for a patent to be granted in the U.S. An inventor does not need to prove non-obviousness in a patent application but may need to rebut a finding by a patent examiner that an invention is obvious.

It may be helpful for an applicant to head off such a finding of obviousness or, at least, lay the groundwork for a rebuttal to such a finding in the patent application. In order to do so, it is important to understand what rationale the examiner is likely to apply in asserting a finding of obviousness. Understanding these rationales will help to draft a better patent application that will stand up to such scrutiny.

Statutory Requirement Regarding Non-obviousness

Non-obviousness became a statutory requirement for patentability with the Patent Act of 1952 when 35 U.S.C. 103 was added. Prior to that time the only statutory requirements for patentability were novelty and utility. However, even before the Patent Act of 1952 was enacted the courts had imposed a non-obviousness requirement. Since then, the courts have helped to frame the tests for obviousness. In view of the recent Supreme Court decision in KSR and an earlier 1966 decision in *Graham v. John Deere*, the USPTO has recently (October 2007) published [examination guidelines](#) for determining obviousness under 35 U.S.C. 103. The USPTO also has more detailed [training examples](#) regarding obviousness which may be of interest.

Guidelines Used to Determine Obviousness

The following brief summary of the guidelines used by the USPTO will highlight the objective standards applied in determining obviousness.

The process to be used by patent examiners in evaluating obviousness is stated as follows:

- A. Determine the scope and content of the prior art;

INSURANCE IP BULLETIN

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- B. Ascertain the differences between the claimed invention and the prior art; and
- C. Resolve the level of ordinary skill in the pertinent art at the time of the invention.

With a thorough understanding of the claimed invention, the examiner will match it to the prior art and ascertain the differences between the two. The examiner will then relate this to the ordinary skill in the art at the time the invention was made. These are considered factual inquiries.

The next step is for the examiner to resolve whether or not the identified differences would be obvious to a person of ordinary skill in the art. In making this determination a person of ordinary skill can be imbued with the ability to draw inferences associated with ordinary creativity.

Rationales Used to Articulate Obviousness

The fact that there are differences between the prior art and the claimed invention is not sufficient. For patentability, the differences must be so great that bridging the gap would not have been obvious. The examiner cannot just reach a conclusion that the claimed invention is obvious. The examiner must articulate reasons drawn from the factual inquiry which explain why the claimed invention would have been obvious.

Several rationales have been enunciated by the USPTO which can be applied by the examiner to support a conclusion of obviousness:

A. Combining prior art elements according to known methods to yield predictable results.

If prior art contains all of the claimed elements and one of ordinary skill could have combined them using known methods to yield only predictable results, then this rationale can be used to indicate obviousness. It may be helpful in applying this rationale for the examiner to identify a reason why someone of ordinary skill might choose to combine the elements in order to produce the claimed new invention.

B. Simple substitution of one known element for another to obtain predictable results.

If prior art contains a process similar to the claimed invention which can be made into the claimed invention by the substitution of one or more known elements or steps and one of ordinary skill could have made the substitution with predictable results, then this rationale can be used to indicate obviousness.

INSURANCE IP BULLETIN

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C. Use of known technique to improve similar devices (methods or products) in the same way.

If prior art contains a “teaching” or example of a similar or comparable process that had been improved or enhanced in the same way as the process on which a patent is being sought and one of ordinary skill could have applied the known improvement with predictable results, then this rationale can be used to indicate obviousness.

The fact that the known method used in a patent claim had been used in the prior art to improve other similar processes would make this improvement technique part of the ordinary capabilities of one skilled in the art.

D. Applying a known technique to a known device (method or product) ready for improvement to yield predictable results.

If the prior art contains a base process for which the claimed invention can be seen as an improvement and a known technique that is applicable to the process and one of ordinary skill would have been capable of applying this known technique to the prior art with predictable results, then this rationale can be used to indicate obviousness.

The significant factor here is that the known technique used to improve the process on which a patent was sought was already one of the ordinary capabilities of a person of ordinary skill in the art at the time of patent application. Therefore, applying such technique to improve a known process ready for improvement would have produced predictable results and would have been obvious.

E. “Obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success.

If a problem (created, for example, by market need or design considerations) can be solved by the testing of a finite number of identified, predictable potential solutions to the recognized need or problem and one of ordinary skill in the art could have pursued these known potential solutions with a reasonable expectation of success, then this rationale can be used to indicate obviousness.

The essential element in this rationale is that when faced with the challenge of the problem one of ordinary skill could be expected, through acquired skill and common sense, to apply known options to find a solution. If such an approach leads to the anticipated success, it is more likely the result of ordinary skill than innovation.

INSURANCE IP BULLETIN

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F. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art.

A requirement of this rationale is that prior art, either in the same or a different field as the claimed invention, includes a process similar or analogous to the claimed invention which provides an example of a solution. If the differences between the claimed invention and such prior art example encompass known prior art variation or principles which would have been apparent to one of ordinary skill in view of identified design incentives or other market forces, then this rationale can be used to indicate obviousness. It is essential that the application of such variation or principles exhibited in the prior art to the invention being claimed produce predictable results.

G. Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

If the basic elements of the claimed invention exist in the prior art and there was some teaching, suggestion, or motivation in the prior art that would have led someone of ordinary skill to combine or modify the references into the elements of the claimed invention with a reasonable expectation of success, then this rationale can be used to indicate obviousness.

The teaching, suggestion, or motivation found in the prior art need not be explicit – it may be implicit in the knowledge of one of ordinary skill in the art or be made evident by the nature of the problem to be solved. An implicit suggestion or motivation may also be provided by the universal desire to improve or enhance commercial processes to make them cheaper, faster, or more efficient, for example. In this context, if an ordinary practitioner in the art has the knowledge and skills necessary to combine or modify prior art references into a solution, then this rationale can be used to indicate obviousness.

Patent Q & A

How long will it take to get a patent reviewed?

Question: One of my competitors has a pending insurance patent that we are concerned about, but it hasn't been examined yet. Is there any way to tell when it might get looked at?

INSURANCE IP BULLETIN

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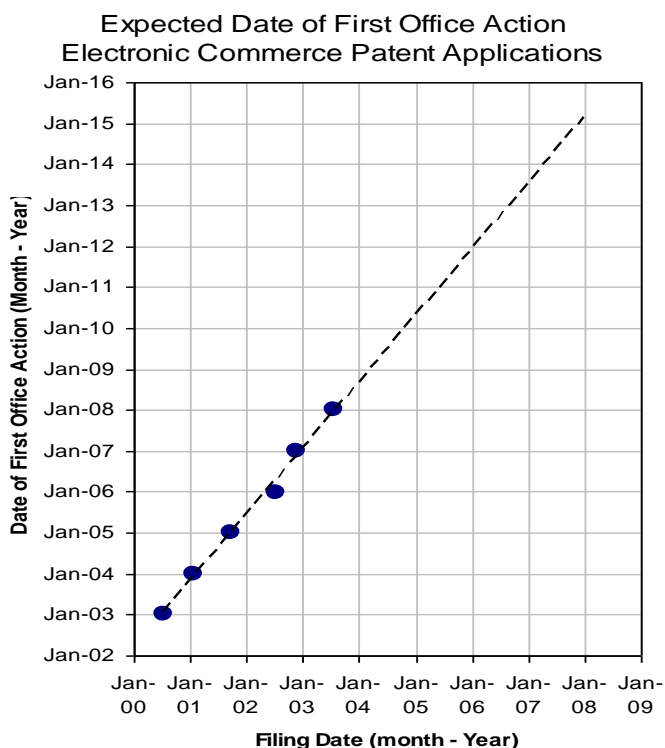
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Disclaimer: *The answer below is a discussion of typical practices and is not to be construed as legal advice of any kind. Readers are encouraged to consult with qualified counsel to answer their personal legal questions.*

Answer: Yes, add four to seven years to the filing date for an initial estimate and then check the USPTO's [public PAIR](#) system every three months in case the application gets an unexpectedly early examination.

Details: The patent office has a growing backlog of unexamined patent applications in the electronic commerce (e. g. insurance) area. The graph below shows when pending electronic commerce patent applications have received their first office action by a patent examiner versus the date they were filed. The data is from the USPTO's [Official Gazette](#). Each point represents the average filing date for all applications receiving a first office action in the prior three months.

The filing date is the filing date of the nonprovisional (i.e. regular) patent application, not an earlier provisional application, if there was one.



INSURANCE IP BULLETIN

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The dashed line is a linear fit to the data. It extrapolates forward to give an estimate for applications still in the backlog. For example, an application filed in January of 2004 can expect to get a first office action sometime this year. An application filed in January of 2008 can expect a first office action in 2015. These estimates could change dramatically, however, if the patent office substantially changes its resource allocation to business method examination. Thus it is worthwhile to regularly check the files for a given patent application in the USPTO's public PAIR system.

Patent Regulation

Patent Reform Update: Special Protection for Banks Against Patent Infringement

An amendment has been made to the Senate version of the Patent Reform Act of 2007 which would exempt banks and other financial institutions from liability in infringing any patents related to check collection technology that have an effective date after September 30, 1996.¹

The rationale behind the amendment is that it would allow banks to comply with the Check 21 Act of 2003 without having to pay license fees to the inventors of the technologies that enable the compliance. The most notable inventor is Claudio Ballard, founder of DataTreasury. Claudio invented and patented a check imaging technology that has since become the industry standard.

Many banks, such as Merrill Lynch, have licensed the Ballard patents. Others, such as Bank of America, have refused to take a license and are currently being sued for patent infringement. The Congressional Budget Office has estimated that if the Courts find this amendment to be a "regulatory taking"², then it would cost the government about a billion dollars in compensation to the patent holders.³

In a related development, the Senate version of the patent reform bill also contains a special provision to allow a pharmaceutical company, The Medicines Company, a second chance at filing for a term extension on their patent for the drug Angiomax. Apparently they missed the filing deadline by one day.⁴ A companion bill has been introduced in the House. It is affectionately referred to as "The Dog Ate My Homework" act.

¹ [Report of the Senate Judiciary Committee on the Patent Reform Act of 2007](#)

² A [regulatory taking](#) is when regulations are passed which prevent the owner of private property from commercially exploiting said property.

³ [Jeffrey H. Birnbaum, "Lawmakers Move to Grant Banks Immunity Against Patent Lawsuit", Washington Post, February 14, 2008; Page A22](#)

⁴ [Patently O Bits and Bytes Number 13, February 18, 2008.](#)

INSURANCE IP BULLETIN

An Information Bulletin on Intellectual Property activities in the insurance industry

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The take away for our readers is that the patent process is ultimately a political process. The original American patents were issued by Colonial legislatures. In rare cases even today, our federal legislature can create or deny patent protection for specific inventions when sufficient national interest is at stake or sufficient political savvy is brought to bear.

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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 2/12/08		
	Class 705	Subclass 4
YEAR	#	#
2008	267	10
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	15,412	337

Published Patent Applications as of 2/14/08		
	Class 705	Subclass 4
YEAR	#	#
2008	1,158	28
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	39,645	1,007

* 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.).

Issued Patents

A total of 10 patents have been issued in class 705/4 during the first month and a half of 2008.

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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

A total of 28 patent applications were published during the first month and a half 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 free 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>