Increasing Patent Allowance Rates by Selectively Targeting a More Technological Patent Class



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Class matters. Technology class, that is. In some of the more rapidly growing areas of our economy, like Social Networking and Mobile Phone Apps, it looks like you can almost double patent allowance rate by making sure your patent application is classified in the more technological patent office art units. For entrepreneurs, a faster allowance rate and earlier acquisition of patents can directly translate into better fund raising, more secure commercialization and more profitable licensing. For large corporations, it means substantially reduced patent costs. And with some forethought you can probably influence which class your application is placed in while at the same time creating a more comprehensive patent application.

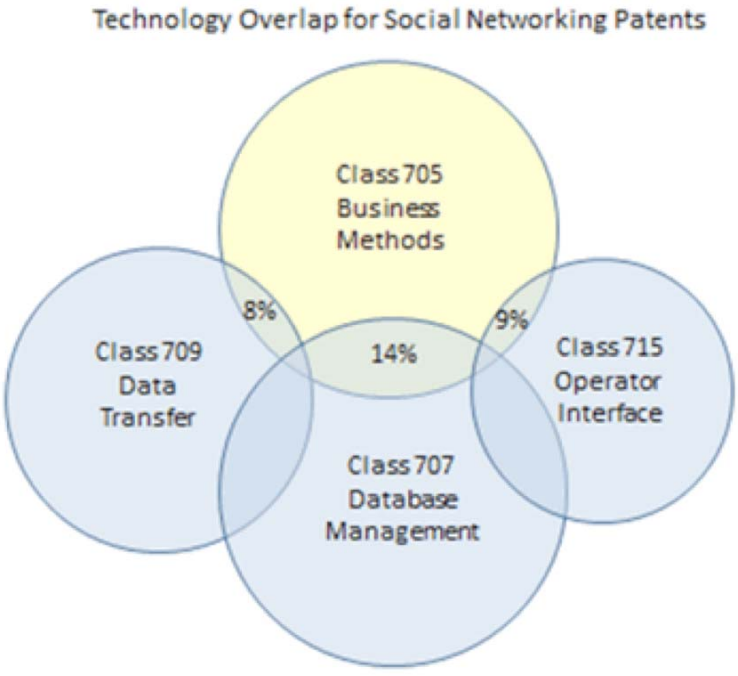
Patent applications are put into different art units based on their technology class. This helps insure that the

most qualified examiners in the field of an invention are examining patents in that field. There are two types of classifications given, an “original class”, and a “cross reference class”. The original class determines who the examiner is. The cross reference class determines what additional files the examiner looks in when examining the application. For example, a patent application on a new type of social networking site might be placed in class 705, Business methods. If that invention also involved a particular database structure, it would be cross referenced to class 707, Database management.

An outside contractor to the USPTO does the classification process using the USPTO’s Manual of Patent Classification. The employees of the contractor read the claims as well as the patent specification in order to determine the original class and appropriate cross reference classes.

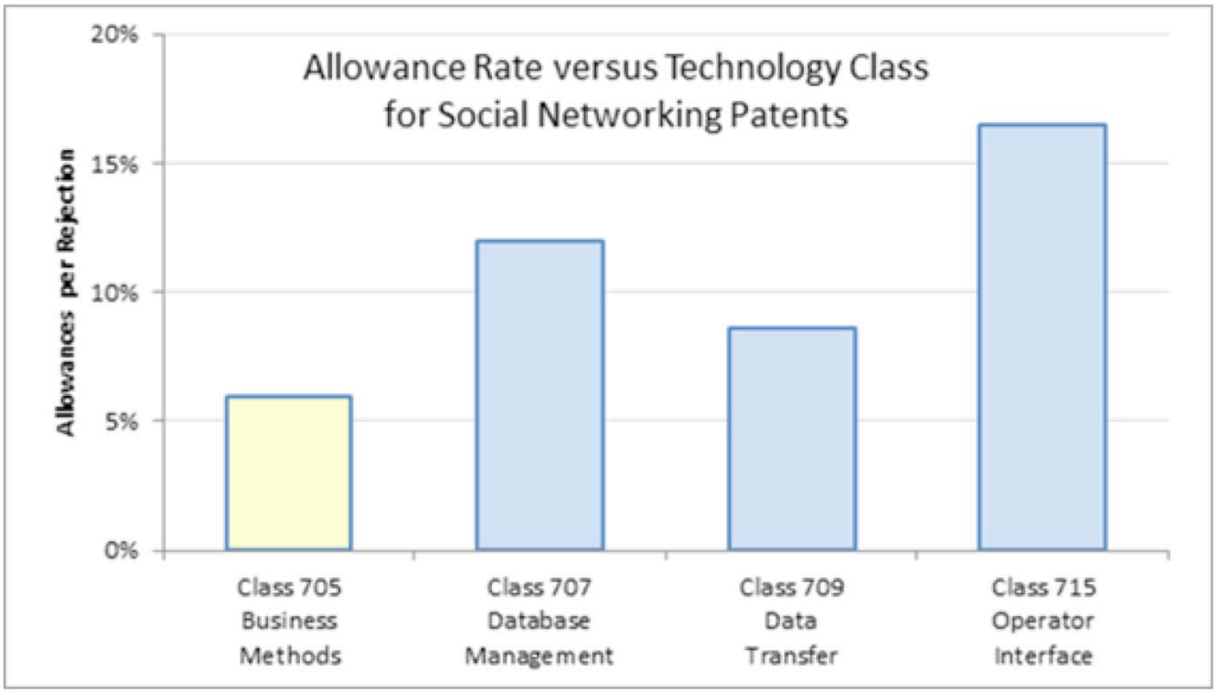
The quality of the classifications performed by the contractor is measured by USPTO examiners who take a random sample of applications, classify them themselves, and compare what they get to what the contractor gets. The contractor’s compensation is adjusted according to the quality numbers.

Emerging technologies tend to be spread out over several closely related original classes. The top four original classes for Social Networking and Mobile Phone app patents, for example, are 705 – Business Methods, 707 – Database Management, 709 – Data transfer, and 715 – Operator Interface. The Venn diagram below illustrates the relative number of applications categorized into these classes. The overlap shows the degree of cross referencing of different applications between classes. The class 709 -715 overlap is not shown due to limitations of a 2 D Venn diagram. This overlap is comparable to the others.



There is about a 10 – 15% overlap between these various classes. Business methods are shown in yellow

since inventions in this class are the least technological of the four. Applications that are assigned to class 705 have difficulty getting allowed as indicated by the graph below.



This graph shows the fraction of office actions that are allowances for applications in each class. This data is based on a sample of 250 social networking patent applications filed in 2005 and 2006. A value of 5% indicates that the office is issuing 1 allowance for every 20 rejections. A value of 15% indicates that the office is issuing 1 allowance for every 6-7 rejections. The lower the number, the higher the probability of not obtaining a patent as well as incurring greater expense.

All things being equal, an applicant will get a patent faster at substantially less cost, if the application can qualify for the more technological classes shown above. Once the patent office assigns a patent application to a technology class, however, there is nothing that the applicant can do to change it. It's not subject to appeal or petition. Any attempt to qualify for a particular class must be done during the drafting of the application.

It is tempting to try to finesse into a class by using key words or phrases in a claim when a patent is drafted. This can have a negative impact on examination quality if an application winds up in front of an examiner who doesn't have the background to understand the invention.

A more productive approach for qualifying for a more technological class is to define your invention in terms of the technical transformation and methods it embodies – put more technology in the patent application beyond how it operates on a computer. At a minimum this means that your patent agent or attorney should speak to the IT department or applications developers who are implementing the invention. Many inventors in the early stages of idea development will also hire a technical consultant to spec out an IT system in order to get this

technical disclosure. The technical disclosure then becomes the foundation for claims that will solidly qualify an application for the desired technology class.

You can validate what class a patent would be placed in before you file an application by having a patent search firm do a prospective classification. Patent searchers understand how classification is done and can provide this service relatively inexpensively. There are also automated tools available, such as our own **Coronado IP**, where you can copy and paste your application into a search engine and the engine will return other patents most like yours. The original classes of these most similar patents will be a guide to how your application would be classified. The returned patents also provide valuable information on prior art that should be considered by the applicant, and may even provide insight into the novelty for the invention.

Class matters in patents. At least for some of the more modern fields of innovation, like social networks and mobile phone apps, providing details on the underlying database, data transfer and/or operator interface technology that enable your invention will help you qualify for there more technological and hence efficient examination classes. This can accelerate the rate at which you get a patent, minimize your costs, and provide a firmer foundation for your investment fund raising, commercialization, or product licensing efforts.

About the Author

Mark Nowotarski is the President of **Markets, Patents & Alliances, LLC** and is a registered U.S. patent agent specializing in business method patents. He currently serves clients in the financial services, medical devices, consumer products and manufacturing industries. Mark is a former Associate Director of R&D for Praxair and an inventor on 17 US patents. He has a Master's degree in Mechanical Engineering from Stanford and a Bachelor's degree with honors in Aerospace, Mechanical Sciences and Engineering Physics from Princeton. You can find Mark on Twitter at **patentbuzz**.

Arlene Zank is Co-Founder and President of **Coronado Group, Ltd.** a specialized systems integration and technology advisory firm focused on new and emerging technology, intellectual property, and advanced informatics. Ms. Zank has extensive experience in intellectual property and patent analytics, IP monetization strategies, and supporting a range of clients seeking advanced information search and analysis in the areas of prior art searching, substantial new questions (SNQ) of patentability to support patent reexaminations, validity and infringement analysis, citation analytics and patent landscape development, and patent prosecution support. Ms. Zank has developed a range of informatics tools and competitive and market intelligence products to help Coronado Group’s clients optimize their intellectual property, monitor scientific and technical advances, and

track the market boundaries of patented and emerging technology across the patent spectrum.

Michael Bowman is an Intellectual Property Analyst at **Coronado Group, Ltd.**. Mr. Bowman is an expert in patent classification, with a concentration in business methods patents. Mr. Bowman has worked for both USPTO and for commercial firms analyzing business methods patents and supporting USPTO in its reclassification efforts. Mr. Bowman leads Coronado Group's Business Methods Group.

Tags & Categories

Tags: allowances, arlene zank, business method, business method patents, business methods business method patent, coronado ip, mark nowotarski, michael bowman, patent allowance rate, patent classification, patent office, social network patents, USPTO

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1. Steve M **April 6th, 2011 5:34 pm**

   Thank you all for the great information.

   For your study, how did you define and identify “social network” apps?

   Because I’ve come across a number of such apps over the past few years which would easily qualify as such; but where the term “social network” appears nowhere in the app.

2. **Mark Nowotarski** **April 7th, 2011 6:32 am**

   Steve,

   We defined social network apps as those that used the term “social network” in them. We validated the search by looking at a sample of the apps returned in the search to make sure they were relevant.

   You are right that we missed any that didn’t use “social network” in them. If you find another set of related patents that don’t follow this trend, however, please forward them to us. It would make for an interesting comparison.

3. Paul F. Morgan **April 7th, 2011 8:51 am**

   Traditinally, which type of claim is claim No. 1 of the application had a lot to do with which art unit the application got classified into, but I also assume that internal PTO transfers do still occur?

4. Public Searcher DIP **April 7th, 2011 8:58 am**

   Thanks for the interesting article which puts broader numbers to my anecdotal knowledge. Speaking only with regard to the AE process, my clients have definitely found issuance of Class 705 patents to be a significantly more difficult endeavor than any other art area (regardless of the narrowness of the claims).

   I am looking forward to hearing more of Ms. Zank’s work at this year’s annual PIUG conference (**http://www.piug.org/2011/an11prog.php#zank**) though I’m sorry you’ve been slotted for the last session. The automated classification of applications has very real world

effects on those of us in the business of identifying potential roadblock references while performing FTO and clearance searches.

5. Steve M **April 7th, 2011 9:26 am**

   Thanks Mark.

   Sorry I didn't keep the "social network" apps I came across w/out that phrase in them. Would have been interesting to consider them as a whole.

   In reviewing a handful of those apps which are either titled (or otherwise indicated as such in the spec) social network apps, it's interesting to note that the examiners are generally (perhaps worth a review to determine statistical percentage?) not accepting the applicants' attempts to traverse 102/103 "the-phrase-'social network'-nowhere-in-the-spec" prior art by arguing that their "social network" inventions makes them (patently) different.

   Any thoughts on this?

   Anyone else have thoughts on this?

6. Steve M **April 7th, 2011 9:53 am**

   Sorry; should read: . . . prior art by arguing that because theirs are "social network" inventions, that makes them (patently) different from that prior art which is not labeled as such.

   Some interesting back-and-forth over this in their files.

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