Comments for the

Patent Eligibility Jurisprudence Study

PTO-P-2021-0032-0002

7/09/2021

Abstract

In this document (titled Attachment1_comments.docx) I present arguments against the current state of the patent system including how it stifles innovation, how it hurts business and why software patents are not good. Additionally, I provide some suggestions that I believe could help resolve some of these issues in some way or another.

Introduction

Thank you for hearing comments on this issue.

When I was in high-school, along with a few of my friends, we came up with an idea for a device that attaches to a babies diaper and senses when it's been soiled. Being the engineer of the group, I began exploring how such an idea could work, while another one of friends began to explore what it would take to get a patent for this invention. Unfortunately, we hit a snag: there were numerous parents that covered roughly the same idea: a wireless sensing device attached to diaper which sends an alert when it's detected that the diaper has been soiled. This led to a fair amount of frustration, especially considering that these patents were more that a few years old. Yet, to date so such device has come to market (with the closest being Lumi by Pampers which is designed as a sleep tracker, not as a soil sensor).

I'm certain that it would be very easy find many similar anecdotes, where someone came up with an invention only to discover that it cannot be brought to market as someone else has already patented it.

Arguments

Innovation

I believe that it’s quite obvious that patents stifle American innovation, take the example of 3D Printers. 3D Printers have existed since the early 90's, however, being that they were covered by patents, they only existed in industrial settings. Around 2010 the patents expired and hobbyists began to experiment with the technology in their bedrooms and garages. Slowly, the popularity of these machines began to accelerate and they became more and more affordable, enough that

one can purchase a high quality printer with almost a cubic foot of print volume for only $400 on Amazon. The industry is now valued at 13 Billion Dollars and is expected to grow 17% over the next 3 years. Had the patent validity been shorter, this revolutionary technology could have been brought to the consumer far earlier, and the market cap would likely be much higher. Additionally, if patents are shorter, it forces companies to remain innovative by increasing competition, as once a patent expires anyone is free to the ideas in their product.

Issues with software patents

Additionally, there is the issue of software patents, which is arguably the worst patent, for a few reasons:

A. **The concept of multiple discovery:** the phenomenon where multiple people can come up with the same idea at the same time. If one of these people get a patent on this idea and fail to bring it to market, no one benefits as there is no actual implementation of this idea. Anecdotally, I have had numerous ideas that I have failed to develop and discovered that someone else had roughly the same idea and actually made it. Had I gotten a patent, these other people likely would not have been able to develop their product.

B. **Obviousness:** the ideas behind many software applications are very simple and obvious: an app to call a taxi, a program for for sharing photos, a program for operating machinery with greater precision, an application to send messages, a software for storing lists of data, an online store, etc. The Supreme Court ruled in *Alice Corp. v. CLS Bank* that such general patents are invalid. However, many of them still exist and continue to be filed.

C. **Inter-operability:** software patents prevent people from creating independent softwares that are inter-operable. Examples of this are the GIF, MP3 and MPEG patents. There are numerous cases of standards that were created solely to avoid license fees for using patents (e.g. the PNG format). This hurts everyone as it prevents the adoption of good file formats. Imagine if the internet was developed using proprietary formats, the World Wide Web would not exist simply because a few people couldn't afford the license fees.

D. **Innovation:** it very hard to create new software that works better than others in it's field when that field is littered with patents. Most innovation in software is incremental, and this would not be possible if software patents were even more prevalent.

These are some of the issues with software patents, for more arguments see https://en.m.wikipedia.org/wiki/Software_patent#Criticism.

Suggestions

To end off, I would like to propose a few suggestions that could perhaps solve some of the issues I see in the patent system:

A. **Patent Stages:** If one has idea that they would like to patent, they are free to create an "idea patent" that covers this idea and can be used to protect it for up to two years. This time frame

should be sufficient for the inventor to create a Minimum Viable Product (MVP) (if it wasn't enough one can apply for an extension), at which point he must present the actual MVP or the documentation that can be used to produce it in order to upgrade his patent from an "idea patent" to a "provisional patent", which lasts for 3 years from when the upgrade was filed. This should be enough time for the MVP to be developed into a commercial product, at which point a final upgrade may be filed for a "product patent" that protects the idea(s) covered by the patent for 5 years, giving a total 10 years of coverage. The reason for these stages is that if a product never comes to market it should not be held back for a long time, instead the inventor simply needs to demonstrate that they are actually using the patent system as it was intended and not simply to make a profit off of other people.

B. **Shorter Patents**: this one is rather simple, simply shortening the validity of patents will help ideas come sooner to market and increase innovation by forcing companies to innovate to remain competitive.

C. **Better Enforcement:** the USPTO has unfortunately been lax in the enforcement of the rules for patent submission allowing submissions that have clear and obvious prior art, are extremely obvious and/or are general enough that they nearly cover entire industries. If the patent rules were better enforced (and perhaps a bit more stringent) the patent system would not be abused as it is today.

Conclusion

It's said "The path to Hell is paved with good intentions", it seems that the patent system as it is today doesn't help innovation as much we would like it too, in fact I believe I demonstrated that the opposite is true. However, patents are not all bad and they can be leveraged to protect American innovation and the American economy. But it needs improvement.

Again thank you for taking comments on this issue, I hope the arguments and suggestions that are presented here are understood and used as food for thought in crafting the final report.