Game On: The Rising Prevalence of Patent-Related Issues in the Video Game Industry

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Over the past twenty years, the video game industry has blossomed into a multi-billion dollar business. Some of the world’s most notable corporations now dominate the once small niche market spawned by fledgling entrepreneurialism. Gone is the little brother status that the entertainment industry formerly bestowed upon the gaming community. With revenues now surpassing both the music and movie industry, individuals are finally giving video games the recognition they deserve. Inevitably, however, as the business grows, so does the probability of legal disputes and problems.

One of the key reasons behind the rapid rise of the video game industry has been the constant influx of new technology. As video game players eagerly wait to get their hands on games offering the most innovative breakthroughs, video game developers continuously look to implement the latest technological improvements into upcoming games. Although, with this growth in technological sophistication, a corresponding growth in patent-related lawsuits has also occurred. Patents are playing a increasingly key part in the video game industry. Considering the dependence of the video game market on cutting edge technology, patent law is capable of dictating the direction of future game development. As games have become more and more complicated, so have the intellectual property (“IP”) related issues. Major litigation disputes have covered everything patentable in a video game from console architecture to game mechanics to controller schematics. Trends indicate that patent law will continue to assert its importance to video game developers and publishers well into the near future. This comment will document the increasing pertinence of patents and some of the current patent-related issues facing the video game industry. These issues include the position that too many patents are being awarded, causing development and progress to be hampered, and the rise of a litigation war being waged by patent trolls, also known as non-practicing entities. These issues will then be placed in the context of patent reform and the proposed measures for eliminating some of the problems caused by patents within the video game industry.

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I. History: The Gradual Emergence in the Role of Patents to Video Game Development

A. The Basic Purpose of Patents and Their Applicability to Video Games

Although the video game industry is barely over thirty years old, its relationship with IP rights, particularly patents, has witnessed considerable development and change over the past few years. A patent remains one of the strongest forms of intellectual property rights, offering an exclusive right to the inventor on behalf of their invention. The patent holder has a near monopoly for a period of twenty years, during which they have the right to make, use, license, and sell their patented invention. More importantly, the patent also protects against independent creation—if another individual independently creates something already patented, the patent holder has the right to exclude the independent creators of the invention. This ability to hold exclusivity against independent creators gives the holder of that patent a monopoly over that particular innovation.

Compared to the other facets of IP law, such as copyrights, trademarks, and trade secrets, a patent application must satisfy a more stringent set of requirements in order to be granted. In 1793, Thomas Jefferson defined the criteria of a patent as “[a]ny new and useful art, machine, manufacture or composition of matter and any new and useful improvement on any art, machine, manufacture or composition of matter.” This sentiment was later codified in Section 101 of the Copyright Act which states: “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore.” To be eligible for a patent today, an idea must satisfy the standards of novelty, non-obviousness, and usefulness. These standards are considerably more difficult to meet than the simple creativity benchmark of a copyright.

2. Id.
4. INTELLECTUAL PROPERTY RIGHTS & THE VIDEO GAME INDUSTRY, supra note 1, at 22.
5. Id. at 23.
8. §§ 101-03.
For a long time, patents were relatively under-utilized within the video game industry, despite the presence of areas in the game development process that were easily patentable. These areas include: “applied algorithms, display presentations, menu arrangement, editing functions, control functions, user interface features, compiling techniques, program languages, translation methods, utilities, the formulae to control program execution or process data, [and] many other areas.” Despite the plethora of patentable material in any one single game, a surprisingly long time passed before patents were given a lot of attention in terms of their ability to offer protection for some of the more important parts of a video game. At the very beginning of its existence, the video game industry was indifferent to potential patent rights. Although, this view changed once the industry became comfortable with using patents.

B. The Early Years: Video Game or Television Apparatus?

In 1958, a government employee named William A. Higinbotham began experimenting with an oscilloscope, a devise that displays electronic signals, while working in a nuclear research lab. He was able to modify an oscilloscope to allow user interactivity by manipulating the trajectory of a moving ball being displayed on the screen of an analog computer. Thinking that this alteration was obvious, Higinbotham did not bother to patent it. Instead, he put it on display at a local exhibit under the name of “tennis for two.”

The first patent in the history of video games is credited to Ralph Baer, who filed an application in 1968. His invention, which later became known as the Odyssey system, was very similar to Higginbotham’s modified oscilloscope. Using his education from the American Institute of Television Technology, Baer designed an apparatus that, once attached to a home televis-

10. Intellectual Property Rights & the Video Game Industry, supra note 1, at 34.
11. Id.
12. Id.
13. Id.
15. Id.
17. Id.
19. Id.
sion set, allowed users to manipulate rudimentary dots and lines across the television as part of a tennis-like game.\textsuperscript{20} Taking his design to the major television companies, Baer eventually signed a contract with Magnavox and began distributing his Odyssey system commercially in early 1972.\textsuperscript{21} Although limited in its capabilities, the Magnavox Odyssey set the blueprint for the home game console units, and a number of other interested parties began working to develop their own devices to acquire a share of this budding new market.\textsuperscript{22}

The next pioneer in the gaming world was a man named Nolan Bushnell.\textsuperscript{23} Bushnell had dreams of using a computer program created while he was in college, called \textit{Spacewar!}, to spawn an entirely new industry.\textsuperscript{24} Eventually, Bushnell was able to take the \textit{Spacewar!} program and wire it into a fiberglass cabinet, which resembled a pin ball machine, with a video monitor and a set of controls.\textsuperscript{25} After tweaking this original design, Bushnell had a working video game unit that went to market in 1971.\textsuperscript{26} Within five years of the original \textit{Spacewar!}, 15 different manufactures had developed over 50 different games, thus bringing about the dawn of the video game arcade.\textsuperscript{27}

Having committed himself to the future business of video games, Bushnell created the Atari Corporation in 1972.\textsuperscript{28} Along with developing video arcade games, Atari began working on a home console system, or television gaming apparatus. In 1974, Atari released a game playable on home televisions set by the name of Pong.\textsuperscript{29} The game mechanics of Pong were overwhelmingly similar to that of the Odyssey tennis game designed by Baer years earlier, and such similarity may have been due to the fact that future Atari president, Nolan Bushnell, had played with an Odyssey unit at a Magnavox dealership demo in May of 1972.\textsuperscript{30} Within a few months of Pong’s release by Atari, a number of competing companies released their

\begin{itemize}
  \item[20.] Hunter, \textit{supra} note 14.
  \item[22.] The History of Video Game Programming, \textit{supra} note 16.
  \item[23.] \textit{Id.}
  \item[24.] Hunter, \textit{supra} note 14.
  \item[25.] \textit{Id.}
  \item[26.] \textit{Id.}
  \item[27.] \textit{Id.}
  \item[28.] Stahl, \textit{supra} note 21.
  \item[29.] Hunter, \textit{supra} note 14.
\end{itemize}
own version of a Pong-like game.31 Magnavox went the offensive and filed lawsuits claiming patent infringement against Atari and other game makers.32 This set off a period of intense litigation that went on for around 15 years.33 The patent used by Magnavox in most of its claims was Baer’s original patent filed in 1968, U.S. Patent 3,728,480, entitled “Television Gaming and Training Apparatus.”34 In one of the decisions, the court deemed it the pioneering patent of the video game industry, and credited it as the phenomenon “that heralded the beginning of an industry, the home video game.35

In light of all the development in gaming technology and Magnavox’s successful lawsuits, the use of patents remained relatively sparse throughout the 1970’s and 1980’s.36 Instead, individuals continued to rely on copyrights to protect their games and consoles.37 Of the few patents in effect during the early years of the video game industry, most focused on gaming hardware—the actual machines used to play the game.38 This made sense at the time as the industry was driven around developments in video game hardware.39 The conception was that these gaming consoles were similar to a type of television or television add-on and the term “video game” did not appear until the mid 1970’s.40 Hence, many of the industry’s earliest patents referred to video game systems as “television gaming apparatuses.”41 Furthermore, there had yet to be a meaningful legal distinction between gaming hardware, the machine that played the games, and gaming software, the actual games themselves.42 Thus, as the video game industry continued to develop new technology, there was a need for corresponding development in patent law related to computer software.

C. A Merging of Technologies: The Recognition of Computer Software Patents.

While “television gaming apparatuses” were becoming popular across America both in pizza parlors and attached to the back of television sets,  

32. Baer, supra note 30.
33. Id.
34. Id.
36. See INTELLECTUAL PROPERTY RIGHTS & THE VIDEO GAME INDUSTRY, supra note 1, at 34.
37. Id. at 30-32.
38. See Ramos & Berlin, supra note 3, at 68.
39. See Baer, supra note 30.
40. Id.
much of the actual content within a video game consisted of modifications to computer programs.\textsuperscript{43} The primordial video game created on Higinbotham’s oscilloscope was based on an analogue computer program for missile trajectory protocol.\textsuperscript{44} Unfortunately at that time, any breakthrough in the development of computer programs and software was deemed subject matter not capable of being patented.\textsuperscript{45} Several Supreme Court decisions in the 1960’s and 1970’s ruled that computer programs in general were incapable of patent protection; the logic at the time was that computer programs were nothing more than fancy mathematical algorithms.\textsuperscript{46}

Under the mental steps doctrine, which was used to define the scope of patentable inventions, if the proposed patent featured a process that was performable in the human brain, that patent was denied.\textsuperscript{47} As computer programs and software were considered analogous to algorithms, a patent grant was viewed to be monopoly on a process in the train of human thought.\textsuperscript{48} Thus, courts continuously used the mental steps doctrine as a basis for denying computer software and program patentability.\textsuperscript{49} In 1967, Congress passed the Patent Reform Act.\textsuperscript{50} The Patent Reform Act was based on a report by the President’s Commission on the Patent System which recommended computer programs be excluded from the list of patentable subject matter.\textsuperscript{51}

The tides of change began in 1972 with the Supreme Court decision of \textit{Gottschalk v. Benson.}\textsuperscript{52} A patent application for a method of converting binary-coded decimal numerals into pure binary numerals for use with any general computer was denied; and the appeal made its way to the Supreme Court.\textsuperscript{53} The Court was quick to reject the patent as the process of converting the code into binary numerals was deemed to be a simple expression of a mathematical algorithm.\textsuperscript{54} However, despite rejecting the patent claim, the Supreme Court left open the possibility that computer software could

\begin{itemize}
\item[43.] \textit{See} Hunter, \textit{supra} note 14.
\item[44.] \textit{Id.}
\item[47.] \textit{Id.} at 35.
\item[48.] \textit{Id.}
\item[49.] \textit{Id.} at 36.
\item[50.] Rydstrom, \textit{supra} note 45, at § 2[c].
\item[51.] \textit{Id.}
\item[52.] \textit{Gottschalk v. Benson}, 409 U.S. 63, 64 (1972).
\item[53.] \textit{Id.}
\item[54.] \textit{Id.} at 71-72.
\end{itemize}
employ mathematical algorithms to carry out a certain method without eliminating the chance of acquiring a patent.55

The key portion of the decision was the specificity in which the Court used the term mathematical algorithm. The Supreme Court in Benson defined a mathematical algorithm as “a generalized formulation for programs to solve mathematical problems of converting one form of numerical representation to another. From the generic formulation, programs may be developed as specific applications.”56 Until Benson, people conceptualized computer programs in their entirety as a mathematical algorithm.57 The Supreme Court’s definition helped clarify that mere processes employed within the language of that computer program were expressions of an algorithm, and that the entire computer program was not an algorithm, per se.58

By the early 1980’s, Congress sought more uniformity in patent enforcement and established the Court of Appeals for the Federal Circuit to deal with patent cases.59 The Circuit Court proved to be a strong advocate of patent rights, particularly for computer software.60 Throughout a number of early cases, the Circuit Court reiterated that the presence of a mathematical algorithm within a computer program did not, per se, prevent that program from being patentable subject matter.61 The Circuit Court held in In re Freeman that “no basis exists for a moratorium on protection of inventions embodying or using computer programs. Such broad prohibition could subject meritorious statutory inventions to unabatable piracy and could forestall invention disclosure, the hallmark of the patent system, until Congress chooses to act.”62

In 1981, the video game industry witnessed another notable court decision concerning its legal evolution. The Supreme Court case of Diamond v. Diehr involved a patent application for a “process of molding raw uncured rubber into cured precision products.”63 The patent seeker argued that he invented a process where the temperature of the mold was constantly measured and fed into a computer that repeatedly calculated the cure time.64 Then, through mathematical equations, the computer signaled the molding

55. See id. at 65; Chandler, supra note 46, at 50.
56. Gottschalk, 409 U.S. at 65.
57. Chandler, supra note 46, at 50.
58. Id.
60. Id.
61. Chandler, supra note 46, at 50.
64. Id. at 179.
press to open at the proper time.\textsuperscript{65} Although the patent for this invention was originally rejected by the Patent Office, the Supreme Court upheld the patent.\textsuperscript{66} The Court reinforced its holding in \textit{Bensen} that although mathematical formulas are non-patentable, processes that involve an algorithm can be patentable subject matter, so long as the patent does not pre-empt the use of that mathematical equation (except in conjunction with all the other steps involved in the claimed process).\textsuperscript{67} Furthermore, the Supreme Court stated that an innovation does not become non-patentable “simply because it uses a mathematical formula, computer program, or digital computer.”\textsuperscript{68}

Further breakthroughs followed the \textit{Diamond} decision. In 1989, the US Patent Office officially announced it would recognize computer software as patentable; a gesture that opened the gates for numerous applications.\textsuperscript{69} In order to deal with all of the applications, many of which were without merit, the Patent Office issued a set of guidelines expressing their interpretation of the law of what they believed was a patentable software invention.\textsuperscript{70}

The recognition of computer software as patentable updated the law to the advancements in video game technology. After the 1980s, video games became a considerable business, and the nature of the games and gaming systems were increasingly complicated.\textsuperscript{71} The definition of a video game incorporated sentiments that gaming had become a form of computer entertainment:

A ‘video game’ has been described as \textbf{computers programmed} to create on a television screen cartoons in which some of the action is controlled by the player, . . . the game being built into a cabinet . . . which stores the instructions and data from a \textbf{computer program} in such a way that when electric current passes through the circuitry, the interaction of the program stored in the PROM with the other components of the game produces the sights and sounds of the audiovisual display which the player sees and hears.\textsuperscript{72}

\textsuperscript{65.} \textit{Id.}\n\textsuperscript{66.} \textit{Id.} at 175.\n\textsuperscript{67.} \textit{Id.}\n\textsuperscript{68.} \textit{Id.} at 187.\n\textsuperscript{69.} Ramos & Berlin, \textit{supra} note 3, at 85.\n\textsuperscript{70.} \textit{Id.} at 87.\n\textsuperscript{71.} See Hunter, \textit{supra} note 14.\n\textsuperscript{72.} Stern Elecs., Inc. v. Kaufman, 669 F.2d 852, 853-54 (2d Cir. 1982) (emphasis added).
D. A Rise in Favor: Patent Popularity Amidst the Atari Case

Although patents were becoming increasingly prevalent in the gaming industry, they still took a back seat to copyrights. Nintendo then sued Atari for copyright infringement, among other claims. Atari was not satisfied to pay a license to have its game made playable on Nintendo’s console, so the company developed a program that could bypass the Nintendo game console’s security program. To circumvent Nintendo’s security program, Atari’s engineers used reverse engineering to decode the locking mechanism. The problem was that Atari had obtained other parts of the code program illegally. The court ruled in favor of Nintendo and enjoined Atari from making any game cartridges that bypassed Nintendo’s security program.

In its ruling, the court stated that, had Atari not obtained some of Nintendo’s codes illegally, the gains of its reverse engineering efforts would have fallen under the fair use doctrine. Although courts previously refused to recognize reverse engineering in the area of computer technology as fair use, the “court in [Atari] expressly allowed reverse engineering to discern the unprotected ideas of a work.” The court limited reverse engineering as fair use, to the extent it is necessary to understand a program, by requiring the use be of an authorized copy, and the use be in a manner that did not profit through simple commercial exploitation.

Reverse engineering was a large threat to video game developers. Although copyrights offer protection for affixed source code and a fixed object code, it does not protect the basic functional aspects of a computer program. Consequently, many methods used to develop video games are sus-

73. See INTELLECTUAL PROPERTY RIGHTS & THE VIDEO GAME INDUSTRY, supra note 1, at 11.
76. Id. at 842.
77. Id.
78. Id. at 847.
79. Id. at 843-44.
80. Dallas, supra note 74, at 752.
81. Id.
ceptible to reverse engineering, as most software is designed from a top down process easy for others to retrace.\textsuperscript{83} Additionally, “the cost of creating programs is high compared to the cost of producing copies of existing programs. Developers [need] some degree of protection to avoid a major potential ‘free rider’ problem, as competitors [can now] use reverse engineering to avoid development costs.”\textsuperscript{84} Although patents do not directly trump reverse engineering, they still render it moot, as efforts would be unusable against the patent holder’s right of exclusion.\textsuperscript{85} Due to the \textit{Atari} decision’s effect on the protection capabilities of copyrights, game developers gave greater consideration to patenting their work.\textsuperscript{86}

Since the early 1990s there has been a steady rise in the number of patent applications related to video games\textsuperscript{87} due to the creation of the Federal Circuit and an increasing willingness of the Patent Office to issue software patents.\textsuperscript{88} Another contributing factor was a change in the source of funding for the Patent Office.\textsuperscript{89} In 1991, the Office transitioned from a general tax fund to sustaining itself by fees paid by applicants.\textsuperscript{90} Naturally, once the Patent Office became dependent on granting patents for revenue, there was a corresponding increase in the number of patents granted.\textsuperscript{91}

With an increasing number of filed patents and a Federal Circuit with a reputation of upholding validity upon disputes, it was predictable that patent litigation would become a ubiquitous part of the video game industry.\textsuperscript{92} The role and relevancy of patents to the development of gaming technology has existed under the shadow of the other available IP remedies.\textsuperscript{93} However, patents have been elevated to a new level of prevalence in today’s legal world. Key patent-related issues are poised to influence the future of the video game industry.

\section*{II. CURRENT PATENT ISSUES FACING VIDEO GAMES}

The video game industry has become increasingly fierce and competitive as companies are spending larger amounts of money trying to develop

\begin{itemize}
\item 83. Dallas, \textit{supra} note 74, at 741.
\item 84. \textit{Id.} at 752-53.
\item 85. Linhoff, \textit{supra} note 82, at 212.
\item 86. \textit{See id.} at 213.
\item 87. Ramos & Berlin, \textit{supra} note 3, at 84-86.
\item 88. \textit{Id.}
\item 89. \textit{See id.}
\item 90. \textit{See Sirlin, supra} note 6.
\item 91. \textit{Id.}
\item 92. \textit{See Ebert, supra} note 18.
\item 93. \textit{See INTELLECTUAL PROPERTY RIGHTS & THE VIDEO GAME INDUSTRY, supra} note 1, at 34.
\end{itemize}
In an attempt to gain a competitive edge, some developers now consider patents as a potential tool capable of tipping the competitive balance in their favor. Currently, every aspect of a video game and its development process has been subject to a patent, including, but not limited to, gaming consoles, controllers, game mechanics, and the subject matter of the game. This is partly because patents for computer and video game related subject matter have been easier to obtain over the past two decades, with more “patents [being] approved in a year than boxes of Cracker Jack are sold at Dodger stadium.” As a result of the rise in patents, it was virtually inevitable that patent disputes would become a common occurrence within the video game community. The potential for future problems stems not only from the number of patents granted, but more importantly from their scope. A growing argument within the gaming industry has been that the presence of too many broad patents robs the industry of future development and simultaneously facilitates expensive litigation.

A. Too Many Too Fast: The Growing Epidemic of Overly Broad Patents

When the Patent Trade Office began granting patents on a more liberal basis in the early 1990s—in need of patent fees for funding—it had a relatively limited database of prior art to judge the legitimacy of software and game-related patent applications. Additionally, until 1994, the Patent Office was also understaffed in computer scientists and technicians needed to accurately evaluate the merits of video-game-related patent applications. The end result was that many patents granted were poorly written and too broad in scope. Even though a patent claim must be definite, there is no requirement that a patent be unambiguous. On the contrary, “a claim may be definite even though it presents close questions of claim construction on

95. Id.
96. Id.
97. Sirlin, supra note 6.
98. See id.
100. Ramos & Berlin, supra note 3, at 86.
101. Id.
103. Id.
which expert witnesses, trial courts, and even the judges of [the Federal Circuit] may disagree.” Thus, as patents were being granted without the needed specificity, the stage for abuse was set due to patents’ powerful exclusion ability.

Video games are particularly susceptible to broad patents. Due to their multi-step development process, video games have a number of elements that could be patented within any of the different steps involving the hardware, software, algorithms, and data structures of a single game. If an individual obtains a patent that contributes to a single element within the design process, problems could arise when an overly broad patent allows for protection to spill over into other elements beyond the actual invention. This situation is a real threat to video games, as it is often difficult to decouple patent elements from those that are unpatented.

Broad patents are additionally dangerous because their protection lasts for a period of twenty years, a long time period to have a lock on an idea in an industry that is constantly making progress in technology. Usually, the usefulness of the innovation will transpire before the patent does. As a result, those on the outside have little other choice than to pay a license fee, as they cannot simply wait for twenty years. By that time, the innovation or idea will most likely be obsolete and worthless.

Another problem is that video games belong to an industry where most of the technological innovation is built from existing technology. For much of the video game industry’s development history, there has been a certain level of reciprocity among the basics of technological development, as players within the industry were interdependent and needed to progress with some level of technological symmetry. Due to the advice of lawyers, however, many video game developers patented some of the more miniscule and routine developments, the saying being: “if it will help you sell the game it is probable worth protecting by patent.” Small tweaks to existing tech-

104. Id. (citing Exxon Research & Eng’g Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001)).
105. Linhoff, supra note 82, at 212.
106. Id.
107. Id.
108. Id. at 212-13.
110. Id.
111. See Dannenberg & Chang, supra note 94.
112. Id.
114. See Dannenberg & Chang, supra note 94.
nology, which provide nothing more than an additional nuance to the original product, can be deemed novel and therefore patent worthy.\textsuperscript{115} A relatively famous example of this phenomenon was illustrated in Amazon’s “1-click buy” patent.\textsuperscript{116} In 1991 Amazon successfully patented the “1-Click buy” feature, which allows a website to store a user’s credit card information and later allows that user to click “buy now” on subsequent purchases without having to re-enter their card information.\textsuperscript{117} The patent was widely criticized, and Amazon CEO Jeff Bezos could only offer the response that he was taking advantage of a patent system that was, as it stands, broken.\textsuperscript{118} The video game industry is familiar with its own examples of poorly scrutinized patents. The danger lies in how many developers have been advised to use the broken patent system to their benefit by acquiring patents broader in scope than the original concept; this way, the patent will be able to encompass any future modifications the industry might be able to make to the original innovation.\textsuperscript{119} Consequently, there are growing concerns that the video game industry is losing some of the technological reciprocity that has been a part of the industry for years.

With so many people taking advantage of the United States Patent Office’s attitude of generously giving out broad patents, it is becoming increasingly harder for game developers and publishers to create video games without committing patent infringement along the way.\textsuperscript{120} The problem is that the courts have validated patents on subject matter that those in the business of video games consider to be obvious and common sense.\textsuperscript{121} The severity of this scenario is demonstrated in the “Crazy Taxi” case.\textsuperscript{122} In 2003, Sega sued Fox Interactive claiming that Fox’s 2001 video game, Simpsons Road Rage, infringed on Sega’s game, Crazy Taxi.\textsuperscript{123}

The point of Crazy Taxi was to “take the role of a taxi driver who has to accomplish outrageous driving stunts to pick up passengers and quickly de-

\textsuperscript{115} Id.

\textsuperscript{116} See Sirlin, supra note 6 (although not a video game related patent, it is indicative of what is happening to simple, but technical developments in video games).

\textsuperscript{117} Id.

\textsuperscript{118} Id.

\textsuperscript{119} Dannenberg & Chang, supra note 94.

\textsuperscript{120} GDC: Beware the Patent Troll (Mar. 21, 2006), http://www.edge-online.com/features/gdc-beware-patent-troll.

\textsuperscript{121} See id.


\textsuperscript{123} Id.
liver them to their destinations.”124 At the time, Sega had patent ‘138, titled: “Game display method, moving direction indicating method, game apparatus and drive simulating apparatus.”125 Further language within the patent described a “game apparatus for executing a game in which a movable object is moved in a virtual space, comprising: setting means for setting a dangerous area around the movable object[.]”126 The patent essentially gave Sega a lock on basic aspects of video game mechanics.127 This included the idea of driving a car around a city with an arrow pointing the player to the next destination, and the idea of a virtual city where virtual people jump out of the way should the player’s skill in navigating the city prove to be less than adept.128 As Sega and Fox eventually settled for an undisclosed amount, those in the game industry were left with the bitter reality that Sega had enforceable patents on concepts that were obvious progressions in game development.129 More troubling is the fact that any plans to design a driving video game now must tiptoe around incorporating directional arrows into the game.130

Namco’s ‘632 patent is another example of an overly broad patent bemoaned by game designers and publishers.131 The less that lucid claim of the patent follows:

A recording medium in accordance with this invention preferably has program code means relating to an auxiliary game and program code means relating to a main game. . . . The size of the program code means relating to the auxiliary game is small in comparison with the size of the program code means relating to the main game, and the relationship between the program code means relating to the auxiliary game and the program code means relating to the main game is such that the program code means relating to the auxiliary game is always loaded first, before the program code means relating to the main game.132

The purpose of the patent is to protect Namco’s concept of a playable minigame to entertain the player while they wait for the main game to finish

124. Id.
125. Sirlin, supra note 6.
126. Id.
128. See Sirlin, supra note 6.
129. Id.
130. Kuchera, supra note 127.
The problem is that Namco’s patent is written as broadly as possible, containing sixteen claims that appear to be practically identical to one another. Thus, the patent does more than just prevent other companies from placing mini-games in their load screens—it prevents them from exploring any type of player interaction whatsoever from taking place during a load screen in order to avoid any risk of being sued. Taking steps to avoid being sued for copyright infringement is now becoming the unofficial first step when it comes to making a video game.

The irony is that patents seem like a good idea because video game creators are able to profit from their ideas. However, these patents are being accused of hampering the natural creativity of the industry. Large corporations now possess the means and ability to exploit an already generous patent system by harvesting thousands of patents with the goal of locking out their competitors. The end result is that major gaming companies are now engaging in a nuclear arms race for patents. A fitting remark in one article states: “Competitors, who will no doubt take advantage of the patent process for themselves, will think twice about suing you if there’s a threat of you suing them back (i.e., a countersuit). Remember, the best defense is often a good offense.” Sticking to the idea of mutually assured litigation, video game companies constantly flex their legal might. Patents are proving themselves to be just as powerful in the boardroom as they are in the courtroom. In addition to inducing licensing fees, patents have been used to increase the holder’s marketability to investors, and as a leverage tool in negotiations.

Under the threat of being sued, many developers are faced with the choice of paying a hefty license fee, or altering their game to the point where it does not infringe on any copyright. The dilemma now is that either option is becoming more and more difficult to live with. Video game patents are being granted to the point where obvious, but essential, aspects of the game design process are falling under the coverage of broad patents.

133. Id.
134. Adams, supra note 99.
135. See Kuchera, supra note 127.
136. Id.
137. Adams, supra note 99.
138. Sirlin, supra note 6.
139. Id.
140. Dannenberg and Chang, supra note 94.
141. See id.
142. Dannenberg & Chang, supra note 94.
143. GDC: Beware the Patent Troll, supra note 120.
144. Id.
makes it practically impossible to design a video game around patented material.\textsuperscript{145} Thus, many developers would rather endure high costs and pay the licensing fees.\textsuperscript{146} Unfortunately, the licensing fees are becoming increasingly expensive as more patents means more fees. The consequence is that developers are finding themselves trying to navigate an increasingly perilous legal minefield.\textsuperscript{147}

\section*{B. Fending off the Patent Trolls}

Throughout the transformation of the video game industry, there has been a steady rise in the popularity of patents.\textsuperscript{148} Whereas the original founders of the industry could not afford the time and money needed to apply for patents, corporations today face significantly fewer hindrances to obtain one.\textsuperscript{149} Moreover, as video games are becoming increasingly complex, time consuming, and costly, corporations have greater incentives to use patents.\textsuperscript{150} Since the mid-1990s, there has been a steady rise in the number of patent infringement cases.\textsuperscript{151} In the first instances of litigation, major corporations focused their efforts on suing one another, and the fighting was contained primarily inside the video game industry.\textsuperscript{152} As the decade wore on, awards in the millions of dollars began to be handed out in these game patent disputes.\textsuperscript{153} With large amounts of money available from successful infringement claims, patents became as much of a sword as it was a shield.\textsuperscript{154} However, by the early 2000s, much of the legal aggression was coming from sources outside the video game industry.\textsuperscript{155}

Along with worrying about lawsuits from competitors for patent infringement, video game makers found themselves dealing with a growing

\begin{itemize}
  \item \textsuperscript{145} Sirlin, \textit{supra} note 6.
  \item \textsuperscript{147} Sirlin, \textit{supra} note 6.
  \item \textsuperscript{148} Dahl, \textit{supra} note 146.
  \item \textsuperscript{149} \textit{Id}.
  \item \textsuperscript{150} \textit{Id}.
  \item \textsuperscript{153} \textit{Id}.
  \item \textsuperscript{154} Ramos & Berlin, \textit{supra} note 3, at 86.
  \item \textsuperscript{155} Teske & Lina, \textit{supra} note 152.
\end{itemize}
number of patent lawsuits filed by non-practicing entities. These non-practicing entities are commonly referred to as “patent trolls.” A patent troll can best be defined as an entity that owns no commercial products, but owns patents rights and aggressively files patent infringement suits against companies that actually produce commercial products related to that patent. Basically, patent trolls hold onto patents for the sole intention of filing suits against those in the industry that “might be reluctant to get involved in a lengthy costly court battles over complex issues.” For trolls, the purpose of the patent is not about protecting an innovation from being copied by competitors. Instead, the troll uses the patent as a way to make money via lawsuits, settlements, and license fees. Even though the nature behind a patent might be centered on non-gaming-specific technology, broad interpretation by the courts allows that patent to serve as the basis for a patent infringement claim against a video game developer.

The first of the major patent troll cases was Immersion v. Sony. Immersion was a small corporation that worked with basic electronics and did not produce video games. In 1995, Immersion filed patent applications for technology that produced subtle vibrations in small electronics. Three years later in 1998, Sony released the Playstation game console. The Playstation featured controllers that would vibrate in correspondence with on-screen action as the player was enjoying the game; Microsoft soon followed and added controllers with “rumble features” to its X-Box controllers. In 2001, Immersion received its patents for the vibration feature and subsequently sued Sony and Microsoft for patent infringement a year later. Microsoft, seeking to avoid a drawn out slug fest, agreed to settle in 2003 for twenty-three million dollars. Sony, chose instead to battle with Immersion in court. Sony first argued that it could not have infringed the patents because the

156. Id.
157. GDC: Beware The Patent Troll, supra note 120.
159. Id.
160. Teske and Lina, supra note 152.
161. Sirlin, supra note 6.
163. Id.
164. Id.
165. Id.
rumble feature of the controller was not based on the patented technology. The jury found otherwise, Sony petitioned the Patent Office as part of a challenge to the validity of Immersion’s patents. The Patent Office declined to reexamine the patent, prompting Sony to sue the Patent Office in federal court claiming that it should have proceeded with Sony’s petition. In May of 2006, a United States District Court dismissed the case on summary judgment. After almost five years of take-no-prisoners litigation, the final victory went to Immersion as Sony agreed to drop its last appeals. The result was a bill for Sony that ran 150 million dollars, including 97 million in judgment and 53 million in royalties.

Before winning its lawsuit against Sony in 2007, Immersion had been nothing more than a small struggling corporation. 2007 was the first year Immersion had ever made a profit, solely from the money it had won from Sony. The end result was a vivid demonstration of how the power of a patent could turn a fledgling corporation into a multimillion dollar anemia of an entire industry. The sheer amount of money that Immersion took from two of the biggest players in video games, Sony and Microsoft, was guaranteed to attract copycats. The blueprint had been laid by Immersion, and others were soon to follow in patent trolling. Internet Services LLC “wanted a piece of the Sony payment,” and the one-man company sued, claiming it had an exclusive license agreement to the [vibration] patent in question, for use in adult video games and pornography web sites.

A more legitimate, and ultimately more successful attempt at patent trolling, was the American Video Graphics case. Despite its name, American Video Graphics (AVG) was not in the business of making video games. In 1988, AVG had been granted the ’690 patent entitled “Method and Apparatus for Spherical Panning.” The purported purpose of the patent was to

167. Jones, supra note 162.
168. Id.
169. Id. at 44-45.
170. Id. at 45.
171. Jones, supra note 162.
172. Elinson, supra note 166.
173. Id.
175. Elinson, supra note 166.
177. Id.
cover “a graphics display terminal [that] performs a pan operation with respect to a view motion center to effectuate spherical panning, thereby providing perspective and non-perspective views, in addition to a zoom feature.”

This language seemed to “mean that any 3D game engine that uses camera movement or zooming of any kind relative to a specific object would be liable, a description that encompasses the vast majority of current video games.” Nearly sixteen years into its patent ownership, AVG dawned on such a conclusion, and in August of 2004, filed suit against twelve video game publishers in the United States District Court in Tyler, Texas for patent infringement. The list of defendants included a virtual “Who’s Who” of the major video game companies: Electronic Arts, Take-Two, Ubisoft, Activision, Atari, THQ, Vivendi Universal, Sega of America, Square Enix, Tecmo, LucasArts, and Namco Hometek. Despite some of the defendants mounting a common defense, AVG was able to obtain its goal. The case eventually settled, with AVG purported to have taken over 10 million dollars.

The AVG case was a further demonstration of how patent trolls are dangerous. Part of the predicament lies in the fact that these patent holders are relatively obscure companies that exist outside of the video game industry and off the radar. Both Immersion’s and AVG’s patents were completely unknown to video game developers and publishers before their respective lawsuits. The other part of the issue is that these unknown patent holders rarely file suit upon the first instance they think someone has infringed on their patent, which would bring the patent into the light for everyone in the video game community to take notice. Instead, patent trolls wait to file suit after a number of game developers have already implemented that patent into their game and have placed it on store shelves. This way, trolls stand to gain the most by having more defendants to go after, and more importantly the possibility of going after the sales and profits of the accused infringer. This explains why damages in these types of case are so staggering and such a threat to the entire industry.


179. Id.


181. Atari, supra note 178.


183. Id.

184. See Beware the Patent Troll, supra note 120.

185. Id.

The number of patent trolls appears to be on the rise. While the number of actual suits filed for patent infringement has leveled off and is now steady, the number of defendants being accused of infringement have increased. In 2007, the number of defendants picked up mildly and the speculation was that hints of congressional patent reform pushed many plaintiffs to sue before the year’s end. Currently, patent trolls are estimated to be responsible for nearly half of all patent litigation. The venue of choice for plaintiffs has been the Eastern District of Texas, which received a total of 369 patent cases in 2007. While evidence does show that the Eastern District of Texas is indeed plaintiff friendly, defendants are, overall, holding their own in court by winning about 57% of patent lawsuits. Yet, in instances where the judgment has gone for the plaintiff, the awards have usually been quite large. Moreover, the data tends to be misleading since it does not account for defendants that settle with trolls.

Until the rumors of patent reform become reality, patent trolling appears to be here to stay. The relatively low cost of filing for patents and the increased speed in which they are being granted surely does not provide any type of deterrence. Alongside multimillion dollar victories in cases like the AVG and Immersion suits, and a recent 612 million dollar victory awarded to a patent troll that sued Blackberry maker Research in Motion by using an outdated patent for a one-way paging system, it is easy to see why the Patent Office has been overflowing with technology related patent applications.

As would be expected, the emergence of patent trolls has had a negative effect on the video game industry. Money has been siphoned away from the industry as a whole, as a number of big name developers and publishers have found themselves subject to a patent troll’s lawsuit at some time or another. The consequences have trickled down to the small developers and publish-

187. Elman, supra note 158.
189. Id.
190. Id.
191. Elman, supra note 158.
192. Elinson, supra note 188.
193. Id.
194. Id.
195. See Dannenberg & Chang, supra note 94.
196. See Elman, supra note 158.
Many accuse patent trolls of failing to contribute anything in innovation or advances to the industry, while simultaneously making it more expensive for others to commercialize. However, the effects of patent trolling are not limited to only developers and publishers of video games. Video game players and consumers may unknowingly have to deal with some of the consequences of patent trolling. For example, after losing its dispute with Immersion about the patent over vibrations within game controllers, Sony decided not to include the rumble feature in its controllers for its newest gaming system, the Playstation 3. The decision came as surprise and befuddled many gamers as both Nintendo and Microsoft had rumble features in the controllers of their respective next-gen consoles. Sony’s excuse for its controller’s lack of a rumble feature was that the vibrations would have conflicted with the controller’s new tilt feature, an advent that allowed the player to physically tilt the controller up or down, or side to side as part of directing onscreen gameplay. The excuse put forth by Sony was met with a considerable amount of skepticism, as technical experts within the industry argued that the tilt feature and rumble feature were not incompatible, and both could be placed in a controller without any conflict. It was speculated that Sony decided to scrap the rumble feature as it did not want to continue paying license and royalty fees to Immersion. It is not clear to what extent video game designers are developing their games around the legal issues and problems raised by patents, but what is clear is that when it does happen, the result is undoubtedly bad for both players and the industry.

III. HITTING THE RESET BUTTON: IDEAS ON PATENT REFORM

Broad patents and patent trolls have taken a toll on the video game community. Consequently, many within the industry have jumped on the patent reform bandwagon, asking courts and legislatures to come to the rescue. The cry for reform grew after the Immersion suit against Sony witnessed over 150 million dollars transferred to the hands of what became the anathema of an entire industry. The video game industry joined forces with the technology sector to push for patent reform. Unfortunately, small or independent companies in the video game business will most likely benefit less

197. See Elinson, supra note 166.
198. Id.
199. Kris Graft, Vibrating Controllers Causing a Rumble, BUISNESSWEEK (June 21, 2006), http://www.businessweek.com/innovate/content/jun2006/id20060621_890559.htm?.
200. Id.
201. Id.
202. Teske & Lina, supra note 152.
203. See Sirlin, supra note 6.
204. Elinson, supra note 166.
from patent reform when compared to their larger competitors. The problem lies in the possibility that patent reform could reduce some of protection available to small businesses in terms of their patent rights. However, smaller companies should be able to compensate any reduction by turning to the protection offered by the International Trade Commission (ITC). With this in mind, patent reform remains the best option and the video game industry as a whole stands to benefit.

A. A Remedy Long Overdue: Judicial Acknowledgement of a Problem

The major problem associated with broad patents is not that individuals are being sued over them, but more that they continue to exist and have yet to be challenged.205 A number of broad patents used by both patent trolls and companies looking to lock out their competitors remain effective and present a hurdle for any game designer or publisher thinking about making a new video game.206 Consequently, the presence of so many judicially untested patents had practically turned the video game industry into an intellectual property minefield.207 The courts finally noticed the situation and attempted to restrain some of the more negative consequences caused by the current patent system. In 2006, the Supreme Court took a shot at curtailing the ease by which patent trolls could use poorly written patents and threats of permanent injunctions to induce large settlements from an accused infringer.208 In Ebay Inc. v. Mercexchange, the plaintiff, Mercexchange, held patents for online auctions where a buyer could use their credit card to place a bid.209 Mercexchange, a non-practicing entity that had not developed an online auction site of its own, sued Ebay and was granted damages and a permanent injunction by the lower courts.210 The Supreme Court vacated and remanded the decision stating that the grant of permanent injunctions should be left within the equitable discretion of the trial court.211 The Court added that, in order for a plaintiff in an infringement case to be granted an injunction, they must demonstrate:

1. that it has suffered an irreparable injury;
2. that remedies available at law are inadequate to compensate for that injury;
3. that considering the balance of hardships between the plaintiff and

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205. Beware the Patent Troll, supra note 120.
206. Id.
209. Id. at 390.
210. Id. at 391.
211. Id. at 392.
defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.212

This tougher standard for injunctive relief “struck a blow to patent trolls because the nearly automatic threat of an injunction had been a powerful weapon in a troll’s arsenal to induce early settlements from large companies.”213

A year later in 2007, the Supreme Court handed down another decision that aimed to limit the abuse of broad patents.214 In KSR international Co. v. Teleflex Inc., the accused infringer of a patent for automated gas pedals on trucks challenged the validity of a patent, claiming it failed the non-obviousness test.215 The Supreme Court held that the patent was obvious and therefore unenforceable.216 In its ruling, the court lowered the standard for declaring a patent invalid.217 The Court stated that there was no need for respecting a patent “if a person of ordinary skill in the art can implement a predictable variation, and would see the benefit of doing so . . . [and that] granting patent protection to advances that would occur in the ordinary course without real innovation retards progress.”218 Albeit this decision was not specifically aimed at video game patent trolls, it nonetheless diminished the ability of all broad patent holders in that an accused infringer now has a greater chance of invalidating those patents that contain no measurable amount of innovation.219

The Supreme Court made a noble attempt to diminish the power of permanent injunctions and the presumptive validity of patents serving as the basis in disputes.220 However, despite the efforts undertaken by the judiciary to cut into the heart of patent abuse, the incentive to use a broad patent for patent trolling remains undaunted. Since the Ebay ruling, and the establishment of the four factor test for obtaining injunctive relief, there has been a thirty-five percent reduction in the number of patent trolls granted injunctive relief.221 This reduction in the chance of being awarded injunctive relief is not enough to dissuade potential patent trolls, since the odds of winning big

212. Id. at 391.
213. Elman, supra note 158.
214. Id.
216. Id. at 1732.
217. Elman, supra note 158.
218. KSR Int’l, 127 S. Ct. at 1731.
219. Elman, supra note 158.
220. See Ebay Inc., 547 U.S. at 391; KSR Int’l, 127 S.Ct. at 1731.
money are still in their favor. Thus, in order for any meaningful gains to be made, there must be a bona fide attempt to reform the current patent system.\textsuperscript{222}

### B. The Next Step: Pursuing Patent Reform

The courts are limited in that they can only deal with patent issues indirectly, while self-policing from within the video game industry is unlikely, as companies are learning to play the “game with the broken rules [that are] presented to them.”\textsuperscript{223} For this reason, a legislative reform presents the best remedy for ridding the video game industry of the negative effects of patent trolling and overly broad patents. In an ideal world, such reform would see the United States patent system make three major changes: (1) an augment or cap on the amount of damages awarded for plaintiffs, (2) a re-evaluation of the non-obvious test to account for more peer review and assurance that legitimate innovation is present, and (3) a provision that excludes certain patents in certain industries (the video game industry for example) from twenty years worth of protection.\textsuperscript{224} These three elements in conjunction would make it much harder for patent holders to wield their patents in such an openly aggressive manner. Ambitious as this might be, the most recent attempt of achieving change in the Patent Reform Act of 2007 features amendments that would accomplish two out of the three proposals.\textsuperscript{225}

The 2007 Reform Act addressed a number of patent problems specifically afflicting those in the technology and video game industries.\textsuperscript{226} First and most importantly, the Reform Act addressed the sensitive issue of damages in patent infringement cases.\textsuperscript{227} In an attempt to prevent high damages being granted on the account of low quality patents, the Act requires that, when a court determines the amount of a reasonable royalty, its analysis must focus solely on the “economic value ‘attributable to the patents specific contribution over the prior art.’”\textsuperscript{228} Under the Act, courts can only consider certain portions of a disputed product and not the product as a whole when

\textsuperscript{222} See id.

\textsuperscript{223} See Sirlin, supra note 6.

\textsuperscript{224} See id.

\textsuperscript{225} See Chloe Albanesisus, \textit{Tech-Friendly Patent Reform Bill Passes House}, PCMag.com (Sep. 9, 2007), http://www.pcmag.com/article2/0,2817,2180705,00.asp (the twenty year life on patents has yet to face a serious threat of being reduced).

\textsuperscript{226} Id.

\textsuperscript{227} Id.

dealing with damages. Therefore, damages are no longer be based on the “entire market value” of the product containing patent infringement. Damages would be instead narrowed to the fair share of that patent’s specific contribution to the product. If passed, these proposed changes would have a resounding impact for the video game industry, considering that the infringing component is often part of a larger multifaceted device. Success for this measure would strike a serious blow to the ability of patent trolls to reap huge awards by suing over a minor aspect of a top-selling game or system. Trolls, like Immersion, which sued for patent infringement on a small vibrating component in controllers, would appropriately be denied from collecting damages and royalties based on the profits from sales of consoles and games.

The other facet of reform related to damages pushed by technology companies is to limit the availability of treble damages awarded for cases of willful infringement. With the presence of so many wide-ranging patents given broad interpretation by courts, many companies hit with treble damages for willful infringement knew of the patent, but honestly felt the patent was inapplicable to their product. In order to avoid this situation, a number of companies in the video game and computer software industry chose to simply avoid looking at patents due to fear of the heightened liability. The Patent Reform Act of 2007 addresses this problem by creating a more defined standard that would limit the finding of “willful infringement to cases where the infringer had received specific written notice from the patentee, the infringer intentionally copied from the patent, or the infringer continued to infringe after losing in court.”

Along with more defendant-friendly damages in cases of patent infringement, the Patent Reform Act of 2007 also seeks to remedy some of the problems associated with the overabundance of poorly conceived patents.

229. Albanesisus, supra note 225.

230. Haney, supra note 262.

231. Albanesisus, supra note 225.


233. Albanesisus, supra note 225.

234. Jones, supra note 162.

235. Coyle, supra note 232.


237. Lee, supra note 236.

238. Id.

239. Haney, supra note 262.
While those in the video game industry often lament about the number of existing patents, the general premise of this amendment focuses not on the ease in which patents are acquired, but more appropriately on the ease in which bad patents are filed and then abused.\textsuperscript{240} The Act’s proposed solution is two-fold: first, to strengthen the Patent Office’s resources and review process for determining the novelty and non-obviousness of patent applications.\textsuperscript{241} Second, it would introduce a new method where the validity of patents can be challenged.\textsuperscript{242} This second prong of post-grant review is different from the current reexamination process in that review could be requested by an infringer, or a third party, at any time throughout the patent’s life.\textsuperscript{243} Furthermore, the Act differs from the current setup by its rejection of a presumption of patent validity upon challenge.\textsuperscript{244} In light of such bold changes, the Act does contemplate the potential for abuse of the post-grant challenge system.\textsuperscript{245} Harassment of patent owners who wish to assume quiet title over their invention is banned by sections of the bill that “prohibit[s] multiple bites at the apple by restricting the cancellation petitioner to opt for a window” of challenge only once.\textsuperscript{246} “The bill also requires that the Director prescribe regulations for sanctions for abuse of process or harassment.”\textsuperscript{247}

The product of the proposed patent reform would be a patent system capable of producing stronger and more legitimate patents.\textsuperscript{248} These patents would be limited in their application to a specific process or element, thus reducing the occurrence of broadly interpreted patents used to lock out competitors through the monopolization of a common or obvious aspect within video game development.\textsuperscript{249} Additionally, the presence of oversight and challenges to validity would prevent the perpetuation of a system that has allowed patent holders to obtain large awards and injunctions based on things that should not have been originally patented.\textsuperscript{250}


\textsuperscript{242} \textit{Id.}

\textsuperscript{243} Haney, \textit{supra} note 228.

\textsuperscript{244} \textit{Id.}

\textsuperscript{245} \textit{Id.}

\textsuperscript{246} \textit{Id.}

\textsuperscript{247} \textit{Id.}

\textsuperscript{248} See Sirlin, \textit{supra} note 6.

\textsuperscript{249} See Gross, \textit{supra} note 241.

\textsuperscript{250} \textit{Id.}
Currently, a subsequent version of the Patent Reform Act of 2007 proposes the most practical and realistic solution to curing the IP ills of the video game industry. The Act of 2007 was introduced to the House and Senate on April 17, 2007; the House passed the bill that September, but momentum stalled as the Senate failed to come to an agreement by the time the doors closed on the 110th session of Congress.251 Thus far, the argument over patent reform has been dominated by two very large industries: technology, which favors sweeping changes to the patent system, and pharmaceuticals, which does not.252 Those in video games and technology understandably seek patent reform as they are most often the defendants in expensive litigation brought by trolls.253 “Pharmaceutical companies, on the other hand, are more often plaintiffs trying to enforce their patent rights against small companies and generic manufacturers. For them . . . stronger patents are better.”254 Voicing their opposition to the Reform Act, the pharmaceutical industry relied predominantly on Republicans to block the bill from passing.255 Drug manufactures and their employers gave $29.9 million to Republicans, while only giving $14.8 million to Democrats.256 Over the same time period, technology and computer companies gave $31.5 million to Democrats compared with $30.2 million to Republicans, winning a number of Republicans over, but not enough to break the stalemate over the proposed restructuring of damages.257

Despite the inability of the Senate to hash out an agreement over the issue of damages, the premises behind the Patent Reform Act of 2007 still stand a chance of being resurrected.258 It would behoove those in the video game industry to ensure that the issue of patent reform does not fall off the radar. With ample support, the odds seem favorable that this newest congressional grouping will pass an updated version of the bill and bring about the biggest change in the U.S. patent system in over half a century.259 Anything otherwise would be a waste of a perfect political climate and a grand


254. Id.

255. See Zura, supra note 252.

256. Id.

257. Id.

258. Eastman, supra note 251.

opportunity. The predominately Democratic Congress only hurts the pharmaceutical industry, as they now have significantly less Republicans to rely on for support.

Furthermore, the Supreme Court expressed continued interest in the subject of patent reform, with results mainly in favor to change the current system. It appears that many of the right pieces are in place for modernizing the outdated patent system, and with some earmarking, the eventual passage of the Act. Until then, the video game community should continue to partake in the heavy pressure for reform exerted by those in the technology industries.

C. Diminishing the Disadvantages of Patent Reform: Relying on the ITC to protect the unprotected

The Patent Reform Act obviously champions the rights of the biggest players in the video game industry. However, there is a level of uncertainty regarding what will happen to smaller publishers and developers that do not have the capital or clout of a Sony, Microsoft, or Nintendo. On one side, smaller companies engaged in making video games should still enjoy benefits of patent reform since many, if not most, of the broad patents that monopolize key elements within the video game development process would be eliminated. However, there is fear that, with the reduced power afforded to patents after reform, larger companies in the video game industry could lock out small companies from competing, as the patent has hitherto been the only weapon capable of preventing large corporations from pirating innovative breakthroughs. An additional anxiety stems from the Supreme Court’s *EBay* decision, which applied a limiting test for granting permanent injunctions and has apparently discouraged patent trolling. The concern is that smaller companies holding legitimate patents, but stripped of their biggest source of protection in an injunction, could do nothing to prevent a large infringing company wishing to take advantage of the expensive and long litigation period by simply waiting out the small company until they can no longer afford to pursue the case. While this lingering apprehension is un-

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260. Lee, supra note 236.
261. Coyle, supra note 232.
262. See Stone, supra note 253.
263. See Adams, supra note 99.
264. See Stone, supra note 253.
understandable, it is unlikely that patent reform will end up flinging the locus of abuse to the other end of the spectrum.267 Small companies holding a legitimate patent should have confidence that the law will continue to enforce their patent rights.268 But, in an effort to increase that level of confidence, it is important to note that small companies still possess a fallback for making sure that their patents for innovation and contribution are still protected.

If the 111th Congress passes a version of the Patent Reform Act of 2007, small companies would find a backup source of protection in the International Trade Commission (ITC). At first blush, the ITC does not come off as a major player in the IP arena, but after the EBay decision, patent holders have increasingly looked to the ITC for protection.269 Firms inside and outside the technology sector “have asked the ITC to assist in cases where infringement questions have overlapped with imported goods.”270 The 1930 Tariff Act granted the ITC the power to block goods accused of patent infringement from being sold in U.S. markets.271 With video games transcending international markets, the ITC offers considerable protection for small American companies in the video game industry.272 For example, Nintendo is currently involved in a patent suit over its Wii remote, where the petitioner has lodged a complaint with the ITC to block importation of the remote control for Nintendo’s successful Wii console.273

The ITC features advantages that, when compared to the court system, make it a more appropriate venue for small companies.274 Although the ITC cannot impose fines or award damages, it can prohibit the sale of products that infringe on the patent.275 An ITC prohibition has the same effect as a permanent injunction, but the ITC is not required to use the more stringent four-factor test that the EBay decision laid out for granting a permanent injunction.276 Consequently, smaller patent holders should be able to avoid the

267. Lee, supra note 236.
268. See id.
269. Bangeman, supra note 221.
271. Id.
272. See Heidelberger & Darcy, supra note 266 (Sony and Nintendo are both based in Japan and a number of prominent game designers and publishers hail from Europe).
274. See Bangeman, supra note 221.
275. Id.
276. Id.
scenario of a large company continuing to infringe on a patent during a lengthy court proceeding.\textsuperscript{277}

Another advantage of the ITC is its capability to produce a ruling without the time and money necessary for a court proceeding. While litigation of a patent infringement case will undoubtedly take several years to complete and finalize, the ITC averages a fifteen month turnaround for dealing with disputes.\textsuperscript{278} Moreover, the expense of an exhaustive discovery period is foregone as the ITC employs a third party process of review—the Office of Unfair Import and Investigations ("OUII") is a party that is independent from both the patent holder and the alleged infringer.\textsuperscript{279} The OUII examines the complaint, which is much more detailed than typical court complaints, for sufficiency and compliance with applicable rules.\textsuperscript{280} The OUII then “conducts its own discovery, responds to motions, files briefs and is heard at trial.”\textsuperscript{281} The end result is a process that ensures a decent source of protection for smaller holders of legitimate patents, without the costs and time commitment of court-based litigation to boot.\textsuperscript{282} With that being said, many patent holders actually prefer the ITC over a court as their first choice of remedy, while others use the ITC in conjunction with district courts when resolving their patent disputes.\textsuperscript{283}

In light of the rising popularity of the ITC, it is important to note that the remedies afforded to patent holders by the ITC stand a far lesser chance of abuse by patent trolls than the current system.\textsuperscript{284} This fact should not be overlooked because without that end result, patent reform could be rendered moot if trolls were simply redirected to use the ITC instead of the court system.\textsuperscript{285} The ITC does not award damages or fines; this eliminates the primary incentive for trolls, as they will not be granted any huge windfalls by the ITC.\textsuperscript{286} In addition, a patent holder bringing a claim must satisfy two types of requirements: 1) a technical requirement that the patent holder is practicing at least one claim of the asserted patent, and 2) an economic requirement that the patentee have significant investments under section

\textsuperscript{277} See Heidelberger & Darcy, supra note 266.

\textsuperscript{278} ITC a Patent Suit Powerhouse, supra note 270.

\textsuperscript{279} Heidelberger & Darcy, supra note 266.

\textsuperscript{280} Id.

\textsuperscript{281} Id.

\textsuperscript{282} See Bangeman, supra note 221.

\textsuperscript{283} Id.

\textsuperscript{284} See Heidelberger & Darcy, supra note 266.

\textsuperscript{285} See id.

\textsuperscript{286} See Bangeman, supra note 221.
1337(a)(3) (A), (B), or (C). These requirements help ensure that claims heard before the commission are those of legitimate patent holders and not those of people or entities simply sitting on a patent with the sole intention of using it for trolling. Upon failing to meet these requirements, patent trolls will be precluded from using the threat of an ITC ban as a leveraging tool against the accused infringer. The outcome is that the patent trolls are left with little incentive to use the ITC in their attempts to cash out large amounts of money.

As its jurisdiction is limited to imported goods, the ITC is not a complete solution for all the concerns of small domestic companies looking to protect their video game patents, but it provides a backup plan that remains effective against some of the biggest names in video game entertainment whose goods are not domestically produced. Furthermore, the changes proposed in the Patent Reform Act are relatively modest and will not reduce the effectiveness of patent rights. Large corporations have a number of patents and are reluctant to surrender any of their lucrative licensing revenue. The real gist of patent reform is to rescue an outdated patent system from furthering the no-holds-barred litigation that has been hampering an entire industry. With more genuine patents being granted, and fewer patent trolls using poorly reviewed patents, all parties within the video game industry stand to benefit from patent reform.

IV. Conclusion

In its relatively short existence, the video game industry has experienced tremendous change. Advancements in technology have allowed developers to consistently upgrade and improve the entertainment value of their games. Simple television apparatuses were eventually replaced by computer console units and massive online virtual communities. The evolution of video game technology, in turn, facilitated an accompanying rise in the prevalence of IP law. Although patent issues were relegated to the back burner in the early years, the increasing complexity of the video game design and production process enabled patents to play an increasingly important role in the video game industry.

288. Id.
289. See id.
290. See id.
291. Id.
292. See Lee, supra note 236.
293. Id.
294. See Eastman, supra note 251.
Once video game consoles and software were recognized as being patentable, it did not take long for those in the industry to realize how powerful patents were and how costly it could be to litigate patent infringement. By the dawn of the 1990s, relaxed requirements for obtaining patents and a reduction in the protection afforded by copyrights induced a flood of patent applications. However, unequipped to adequately address the merits of many of these applications, the patent office inadvertently set the stage for the emergence of patent trolls. Unfamiliar with video game technology, the patent office approved many applications based on elements that were overly broad, and this oversight was often considered common sense within the gaming community.

The presence of numerous broad patents threatened to strangle the video game industry as companies used patents to lock out their competitors. Then, those outside the video game business, known as non-practicing entities, began to cash in by suing video game companies for infringing on non-video game related patents. The large awards given out in these suits led to growing numbers of companies engaging in patent trolling. Tired of paying huge royalties and settlements to patent trolls, the video game community has been a strong proponent for patent reform.

Overhauling the U.S. patent system would cure many of the legal problems related to video game patents. The current proposals to reduce damages and revamp the patent application system would help reduce the presence of patent trolls as well as the abuse of broad patents. Despite having stalled in the Senate at the end of 2007, patent reform has a substantial chance of passing in the near future based on the current political climate that seems conducive to change. Overall, the planned alterations should benefit more than just the big players in the video game industry. Small companies should benefit from the trickle-down effects of patent reform. In the meantime, with the ITC, small companies still have a considerable ally to enforce their patent rights. Patent reform should facilitate more room for innovation and creativity by freeing up some of the ideas that have been trapped behind broad, poorly written patents; thus benefitting both developers and players.