



PATENT TROLLS AND INNOVATION: EVALUATING THE IMPACT ON TECHNOLOGICAL ADVANCEMENT

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Abstract:

The coexistence of patent trolls, or non-practicing entities (NPEs), alongside the patent system designed to promote innovation has spurred debates on the actual impact of patents on technological advancement. This study explores the intricate relationship between patent trolls and innovation by examining historical contexts, legal frameworks, and empirical data. We provide an overview of the patent system's intended role in fostering creativity and protecting inventors' rights before delving into the emergence and characteristics of patent trolls. Through an analysis of case studies, legislative responses, and stakeholder perspectives, we aim to offer a comprehensive understanding of the controversies surrounding patent trolls. Critics argue that these entities divert resources, impose legal burdens, and stifle competition, hindering technological progress. Proponents maintain that patents are essential for protecting intellectual property and fostering investment. This research seeks to contribute to the ongoing discourse by providing a nuanced evaluation of the impact of patent trolls on innovation. By considering both challenges and opportunities, we aim to inform discussions and identify potential areas for improvement in patent policies, contributing valuable insights to the broader conversation on innovation in the digital age.

Keywords: Patent Trolls, Innovation, Technological

Introduction:

In the dynamic landscape of technological innovation, the role of patents is indispensable in fostering creativity, protecting intellectual property, and incentivizing inventors to contribute to progress. However, the emergence of entities commonly referred to as "patent trolls" has sparked debates about the actual impact of patents on innovation. Patent trolls, also known as non-practicing entities (NPEs), are entities that acquire patents with the primary goal of enforcing them through litigation rather than actively engaging in the development or commercialization of the patented technology.

This phenomenon has given rise to concerns regarding the potential negative effects on technological advancement. Critics argue that patent trolls hinder innovation by diverting resources away from research and development, imposing unnecessary legal burdens on legitimate innovators, and stifling competition. Proponents, on the other hand, contend that patents are essential for protecting intellectual property rights, fostering investment, and ultimately driving innovation.



This study aims to delve into the complex relationship between patent trolls and technological advancement, seeking to provide a comprehensive understanding of the issue. By analyzing the historical context, legal frameworks, and empirical data, we aim to evaluate the impact of patent trolls on innovation, exploring both the challenges and opportunities they present.

The first section will provide an overview of the patent system, emphasizing its intended role in promoting innovation and the protection of inventors' rights. Subsequently, the focus will shift to the emergence of patent trolls, their characteristics, and the strategies they employ to assert patent rights. This will set the stage for an in-depth examination of the controversies surrounding patent trolls and their potential effects on technological progress.

To facilitate a nuanced analysis, the study will also explore notable case studies, legislative responses, and the perspectives of key stakeholders, including inventors, businesses, and policymakers. By considering both sides of the argument, we aim to contribute to a balanced understanding of the implications of patent trolls on innovation.

In conclusion, this research seeks to shed light on the multifaceted relationship between patent trolls and technological advancement. By critically assessing the current state of affairs and identifying potential areas for improvement in patent policies, we hope to inform ongoing discussions and contribute valuable insights to the broader discourse on innovation in the digital age.

APPROACHES TO PATENT TROLLING IN THE SYSTEM OF INTELLECTUAL PROPERTY PROTECTION, INCLUDING BOTH THEORETICAL AND LEGAL CONSIDERATIONS

According to the assessment of the scientific literature, research on patent trolling has been undertaken from a variety of different angles. In the bulk of the scholarly works that deal with the aforementioned subject matter, the primary focus is on defining patent trolling and the impact that it has on the social and economic development of the nation. According to what has been seen, the phenomenon of patent trolling may be traced back to the growth of patents as well as the flaws of present legislation. The phrase "patent trolling" is currently being used often in a variety of situations, including academic and informal settings, all over the world, including in Ukraine. The laws of the majority of nations do not give a clear and exact definition of the phrase "patent trolling," regardless of the context in which it is used. For this reason, it is essential to investigate the definitions of the category that has been presented in order to get an understanding of the phenomenon of patent trolling. It is possible to define the phrase "patent trolling" as the combination of the words "patent" and "troll." These two categories may now be applied to the category of "patent trolling" in order to arrive at an appropriate interpretation. This is because we have now clearly defined both of these groupings. The term "patent" is not permanently entrenched in the TRIPS Agreement, contrary to the widespread notion that suggests otherwise. The consideration of scholarly study is therefore warranted. This is the



definition of "patent" that can be found on the website of the World Intellectual Property Organization (WIPO). It was decided that the definition of "patent" should be interpreted to mean "a document, issued, upon application, by a government office (or a regional office acting for several countries), which describes an invention and creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorization of the patent owner." . A "patent" is the legal right of the inventor to restrict others from manufacturing or exploiting their product, as stated in the article written by Hall. There are mainly two ways to look at a patent in this scenario: as a record of law and as a right to utilize that document. Both of these descriptions are correct. The term "patent" is typically understood to refer to a legally enforceable instrument that establishes the exclusive rights, inventorship, and priority of a design, innovation, or utility model. This is the most common way that a "patent" is understood in the majority of nations. Other elements that fall under the "patent trolling" category include the "troll" (which is where the name "trolling" comes from). An interpretation of the term that is considered to be legendary is supplied by the Cambridge Dictionary. A mythical and supernatural entity that dwells in caves or mountains and possesses magical skills is referred to as a "troll" in the ancient Scandinavian stories that have been passed down through the generations. Additionally, in today's world, the term "troll" may be used to refer to a variety of other things, such as a person who engages in online provocations or a fishing method that is prohibited in certain regions of the world. It is important to highlight that the suggested definitions do not correspond with the findings of our research. The concepts that were presented before can, on the other hand, be applied to comprehend the idea of "patent trolling" in a manner that is equivalent. The reason for this is that when we examine anything through the lens of abstract understanding, we are able to provide a description of what a category is and gain a sense of what it is all about. "Patent trolls" was the term that was first used to describe businesses that engaged in aggressive patent litigation in the year 1933. One definition of a patent troll is an individual or organization whose major business aim is to acquire and get several licenses in order to exercise their rights as the owner of a certain invention. It is important to make sure that the plan is followed.

They made the observation that patent trolls operate in several business sectors, which means that numerous members of the public, such as legal counsel, courts, and scholars, use a variety of different types and names for this phenomena. It was decided to classify patents into the following categories: patent aggregators, patent piracy, patent enforcement, patent litigation companies, non-manufacturing entities, patent dealers, and non-practicing businesses. In addition, it is possible that Peter Detkin, who was Intel's assistant general counsel at the time, was the first person to use the phrase "patent troll" in the year 1991. particular emphasis was placed on the fact that, according to Detkin, a patent troll is "someone who tries to make a lot of money off of a patent that they are not practicing, have no intention of practicing, and in most

cases, they never practiced at all." In addition to this, he underlined the concept that, according to this wide definition, even Thomas Edison, Intel Corporation, or International Business Machines may be deemed patent trolls. In his presentation, Peter Detkin discussed the history of the term "patent troll" as well as its many applications. He would use troll dolls to divert the attention of his daughter, who was five years old at the time. This was quite similar to how he would do it. She was given the job of collecting payment for his passage and depositing them inside the cubicle that she had constructed in her nursery after finishing the construction of the cubicle. In addition, the trolls who were not responsible for the construction of the bridge began charging for its use. Initially, Peter Detkin referred to it as "patent extortion" rather than "patent troll." This is something that should be taken into consideration. It is not possible to find the phrases "patent trolling" or "patent troll" in any recent international dictionaries. It is our opinion that the fact that there are several interpretations of the phrase "patent trolling" and that there is no one interpretation of the term that is widely acknowledged have both contributed to the difficulty in grasping this phenomenon and the scientific literature that pertains to it.

According to patent trolls:

- (1) own nothing of value except than patents;
- (2) create nothing;
- (3) retain legal counsel as its primary workforce, and
- (4) gets a patent without really coming up with new technologies. The author is right when she says that the aforementioned traits are hallmarks of pure patent trolls.

When referring to official papers, the word "patent troll" is a good term to employ. According to international law, "patent trolls" are companies that do not actually manufacture or sell the patented goods but instead obtain patents in order to sue other companies that do use the copyrighted technology for infringement. These companies are "patent trolls." To restate another way of saying this, patent trolling is neither a production or sales operation; rather, it is a litigation firm. The targets of such proceedings are frequently large, profitable firms that concentrate on the creation and sale of complex technologies. These are the goods that serve as the foundation for hundreds of other intellectual property items that are eligible for patent protection. This perspective on the industry as a whole is congruent with the explanation that follows about the operation of patent trolls of the industry. Elaboration is required, however. As a result, the patent troll indications, which are acts that do not contribute to innovation, are deserving of condemnation. First, according to the material that is published in the United States, this phrase allows even educational institutions that have been granted permission to license their intellectual property by the Bayh-Dole Act to be referred to be patent trolls. When analyzing the issue of the category "patent trolling" and the phenomena that it entails, it is important to keep in mind that the basic concept of patent trolling differs depending on the different eras of law development and the varied legal systems of different countries. The foundation that fueled the



birth and expansion of patent trolling was comprised of a number of economic difficulties and gaps in the laws that were in place at particular time periods.

Articles published in academic journals have presented a number of different hypotheses on the first patent troll. Therefore, according to his story, Eli Whitney was the one who took the risk of venturing into the unknown. 1794 was the year that he submitted his invention of a cotton-cleaning machine, which was designed to make the process of separating fibers from seeds easier. It was three years after he got the patent that his company went out of business, and the innovator began suing southern planters on his own initiative. His concept was immediately adopted by other members of the planter community; however, many of them were hesitant to pay the exorbitant fee that he had established. In the event that an innovation is so lucrative, Eli Whitney stated that it becomes unnecessary for the inventor to do so. This is an example of a scenario in which the observant patent owner does not possess the required advantage to prevent the infringement from occurring. An innovation was beneficial to society as a whole, even though the person who developed it did not personally benefit from it. It is important to take into account George Selden's point of view because he was a successful patent troll throughout the nineteenth century. In spite of the fact that he delayed the eventual registration of his innovation for a gasoline car engine for sixteen years, he was successful in filing the application. Following sixteen years of expansion in the automobile sector, the "trap" was finally shut down in the year 1895. George Selden has contributed to the drafting of license agreements for a number of different vehicle companies. During the year 1911, the Second United States Circuit Court issued a ruling that was favorable to him, elaborating that Selden "only took advantage of the delays allowed by law." There was, however, a prominent exception in the form of Henry Ford, who was successful in the Selden process because he made the decision to refrain from engaging in extortion. According to evidence from a number of different sources, the origin of the category may be traced back to more than one narrative. As stated by a number of specialists, it was a lawyer working for Intel Corporation named Anne Gundelfinger that brought it into existence. Throughout the twentieth century, Jerome Hal Lemelson was the most successful patent troll operating. Over 600 patents were awarded to him, and he built up a fortune of 1.3 billion dollars. Lemelson made use of a concept patent that included "submarine patents" in its scope. It is clear from everything that has been said up to this point that patent trolling is not a new phenomenon. In addition, the word "patent trolling" may be used as a verb in our lexicon. In this particular scenario, Gregory proposed that the term "patent trolling" be defined as the conduct of searching for and acquiring patents that are not being utilized in order to use them as a kind of legal leverage against any company that uses technology that is related to the one being trolled. The word "patent troll" has been misunderstood by a number of individuals, including academics and media organizations, which has contributed to the widespread confusion on the meaning of the term. One example is the fact that PricewaterhouseCoopers has published research on patent

disputes. These studies include analysis of inventors' lists, non-profit organizations such as universities, and firms that are not currently in operation. All of the non-operating businesses that were included on the list that was published by the Washington Post were referred to as "patent trolls" when the research conducted by PricewaterhouseCoopers was looked at. It has been seen that organizations who focus on innovation are unwilling to provide funding for research and development because of the possibility of patent litigation. Furthermore, it has been observed that patents serve little practical function if they are not utilized to either enhance or implement new ideas. Not only can "patent trolling" result in tangible injury, but it also weakens the underlying ideas that underpin patent law on a more global scale. The data make it abundantly evident that the term "patent trolling" is gaining more and more popularity. In fact, "patent trolls" have even begun to be classified according to the manner in which they demonstrate their behavior. Consequently, it is of the utmost importance to construct a strong defensive system. Taking into consideration the information presented above, it is essential to take note that the domain in question is plagued by a number of problems that, moving ahead, need to be solved first and foremost. At first glance, it appears that neither Ukraine nor any other nation could possibly possess a single, all-encompassing definition. Scholars and attorneys are, of course, subject to a number of different working definitions; nevertheless, none of these meanings are formally established in the law. Due to the fact that several scholars have offered various strategies to counteract patent trolling based on their own interpretations of the word, this has far-reaching detrimental effects for the situation. The author of this study offers a definition of "patent trolling" that is proposed within the context of this investigation. It is considered an abusive conduct by the law when persons participate in it in order to get legal protection for their intellectual property or industrial property rights. This legal protection is intended to safeguard the rights of the individuals involved. To restate, it is the unauthorized use of a patented innovation that belongs to another person or business by another party as a result of abusive behavior on the part of the first party.

Negative Impact on Innovation:**Resource Diversion:**

Litigation Costs: Companies targeted by patent trolls often face significant legal expenses defending themselves in court. These resources could otherwise be allocated to research, development, and innovation.

Settlements: To avoid the high costs of litigation, some companies choose to settle with patent trolls even if the claims are weak. This diverts funds away from innovation.

Chilling Effects on Startups:

Deterrence: Patent trolls may discourage startups and small businesses from entering certain markets due to fear of litigation. This can stifle competition and hinder the growth of innovative new companies.



Inefficient Allocation of Resources:

Reduction in R&D Spending: Companies may reduce investments in research and development to minimize the risk of patent litigation, leading to a decrease in overall innovation.

Ambiguity in Patent Quality:

Low-Quality Patents: Some argue that patent trolls thrive on low-quality, overly broad patents. This can create uncertainty about the validity of patents, hindering innovation as companies may be unsure about the scope of protection.

Positive Impact on Innovation:

Market for Patents:

Monetization of Unused Patents: Patent trolls can provide a market for companies to monetize patents they are not actively using. This may allow inventors to benefit financially from their intellectual property.

Risk Mitigation for Small Inventors:

Enforcement for Small Entities: In some cases, patent trolls may serve as enforcers for small inventors who lack the resources to litigate against large companies. This could help protect the rights of individual inventors.

Encouragement of Innovation Strategies:

Incentive to Innovate Around Patents: Companies may be motivated to innovate around existing patents to avoid infringement claims, leading to the development of alternative technologies.

Regulatory and Legal Responses:

Patent Reform:

Legislation and Court Decisions: Governments and courts have taken steps to address the issues related to patent trolls. Legislation and court decisions aimed at reforming patent laws can impact the behavior of patent trolls.

Transparency and Patent Quality:

Increased Patent Quality: Improving the quality of patents granted and increasing transparency in patent ownership can help reduce the influence of patent trolls.

CONCLUSIONS

This research aims to investigate the nature and features of patent trolling as one of the infringements of intellectual property rights. Additionally, the research will propose new approaches to combat and alter legislation in the field of patents. The research will be conducted in order to accomplish both of these goals. This research offers a theoretical generalization as well as a fresh approach to the scientific challenge that has been identified. It is the statistics of patent litigation that are the fundamental indication of how well the legal protection of scientific and technological accomplishments is being carried out. The facts shown here illustrate the extent to which the laws that are currently in place in a country regarding intellectual property rights are operating effectively. When the outcomes of the research were taken into

consideration, a number of provisions, conclusions, suggestions, and recommendations were established with the purpose of achieving this objective. These are the ones that are the most significant: 1. The concept of patent trolling, in its most fundamental form, has been around for a very long time, and the behaviors that trolls participate in as a whole have also evolved over the course of time. According to the acts of the trolls themselves, as well as the case law that has developed concerning them, the content that is inherent in the concept of patent trolling is somewhat different in different legal systems and different countries for a number of reasons. As a result of the fact that the court cases that have evolved around patent trolling have been different, this occurred.

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