# PATENT IN GAMING: A COMPREHENSIVE OVERVIEW

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# **ABSTRACT**

The gaming industry has evolved immensely as one of the most innovative. Game developers' constant work with changing consumer preferences and technological advancement drives its exponential growth and innovation. Intellectual property means intellectual creations, i.e., Creations of mind, and Intellectual rights represent legal rights given to the creator or inventor of intellectual property for a certain period.

IPR includes a variety of rights, including patents, trademarks, copyrights, trade secrets, and industrial designs that give inventors or creators exclusive rights to their intellectual property. These rights allow them to control their work's use, distribution, and commercialisation, thus encouraging innovation.

The most valuable asset for those involved in developing, publishing, or investing in video games is the intellectual property (IP) associated with the game. This IP includes elements such as the storyline, graphics, sound, programming, and game mechanics, all protected under various IP laws. Trade secrets, copyrights, and trademarks have traditionally protected game developer intellectual property. However, patents are rapidly becoming an essential tool in the gaming industry.<sup>1</sup>

The gaming industry involves various creative elements. Intellectual property rights help protect these elements; trademarks help create a brand identity for the gaming industry; patents protect and encourage innovative incentives; and Intellectual property rights mitigate risks linked with unauthorised use and infringement and build investor confidence. Therefore, it's true that Intellectual Property Rights play an imperative role in the gaming industry. This article comprehensively reviews the role of patents in the gaming industry.

**Keywords:** copyright, gaming industry, innovation, intellectual property rights, intellectual property, patents, technology, trademark.

<sup>&</sup>lt;sup>1</sup> Chang, S.S., 2006. The Vital Role of Patent Law in the Gaming Industry. Gaming Law Review, 10(1), pp.8-13.

# INTRODUCTION

Visualise that video game you are so attached to. Think of racing through strange worlds, solving puzzles, and competing online with other players. Brains and impressive technologies behind such ideas make them work wonders. We know inventors get patents for their innovations, which they created using their creative minds; similarly, these game developers often patent their game mechanics and outlook. This overview will explain why patents count in making popular video games.

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The video game industry constantly evolves, with new games, consoles, and platforms appearing. In a way, patents are like secret weapons that protect those special tricks and technologies that make these games so much fun. Game developers invest their time and resources into developing new games, as the patent safeguards their intellectual property rights and acts as a tool for further innovations. Once patented, game developers establish ownership rights over their innovation. Patents are the exclusive rights that the inventor has over his invention.

To picture a patent in the gaming universe would be like putting together a giant puzzle piece. They foster collaboration and cooperation among game developers. Patents offer legal protection for game mechanics, graphical user interfaces (GUIs), algorithms, and other aspects of game development that are unique and innovative. Patents ensure that there will be no infringement or copying of the game design or technologies. Game developer use patents as a legal shield to protect their intellectual property from unauthorised use. Not only that, patent aid companies defend themselves by having strong patent portfolios and also minimise patent litigation against them as their competitor avoid the risk of getting themselves involved in counterclaims or injunctions.<sup>2</sup>

In this article, an overview of the patents in the gaming industry is discussed, given about the different types of Patents in the gaming industry, their significance in gaming, the importance of patents for game developers, licensing and monetisation strategies in gaming, and judicial precedent.

<sup>&</sup>lt;sup>2</sup> Gross, K., 2008. Game On: The Rising Prevalence of Patent-Related Issues in the Video Game Industry. SMU Sci. & Tech. L. Rev., 12, p.243

# TYPES OF PATENTS IN THE GAMING INDUSTRY AND THEIR PERTINENCE IN GAMING

Various types of patents exist in the gaming industry to protect different aspects of game development. To safeguard innovations, developers need to understand them. The gaming industry has three types of patents: utility, design, and software. The most common type of gaming industry patent is a utility patent.<sup>3</sup>

#### 1. UTILITY PATENT

In the gaming industry, Utility Patent protects the "functional aspects of the game". The patent covers gaming devices and consoles, innovative game mechanics and interfaces, and improvements in artificial intelligence in gaming systems.

# 2. DESIGN PATENT

Design patents protect the "visual element or aesthetical element of a game", such as

GUIs (Graphical User Interface) and character designs,

This patent focuses on the visual appearance and appearance of the game rather than the functional aspects of the game.

# 3. SOFTWARE PATENT

Software patent plays an essential role in the overall "shaping of the gaming industry". The patent covers algorithms and software for game engines, methods of processing graphics and audio in games, protection of the games against piracy, and other safety measures.

# IMPORTANCE OF PATENT IN GAMING INDUSTRY

# 1. INNOVATION INCENTIVES

In the success of video games, innovation plays a vital role, helping to identify patterns that formulate better business strategies and successfully bring new products to the

<sup>&</sup>lt;sup>3</sup> https://theamikusqriae.com/the-role-of-intellectual-property-rights-in-the-gaming-industry/

market. Innovation is at the heart of the gaming industry, where furious competition between publishers and game developers fuels innovation. The game developer invests their time and resources into developing new games as the patent safeguards their intellectual property rights and acts as a tool for further innovations. Patents push the game developer to work beyond their boundaries and create ground-breaking games.<sup>4</sup>

#### 2. SAFEGUARDING INTELLECTUAL PROPERTY

Patents are the exclusive rights that the inventor has over his invention. In the ever-changing gaming industry, patents ensure the total security of game developers' and publishers' technological or gameplay innovations.

#### 3. LEGAL PROTECTION

Many people mistakenly believe that a patent allows an inventor to use their invention. However, this is only partially true. Instead, a patent works as a grant to the work's original creator to safeguard his creative work from being copied, distributed, offered to sell or bringing the invention covered by the patent into the country. Patents ensure that there will be no infringement or copying of the game design or technologies. Game developer use patents as a legal shield to protect their intellectual property from unauthorised use.

Having strong patent portfolios not only helps companies defend themselves but also minimises the chance of patent litigation against them as their competitor avoid the risk of getting themselves involved in counterclaims or injunctions.<sup>5</sup>

## SIGNIFICANCE OF REGISTERING PATENT IN GAMING

Intellectual Property Rights (IPR) is a legal framework that protects creations. Here are some points on why IPR registration is essential:

First, it provides legal protection and deters infringement, and IPR registration enhances the credibility of the creator or inventor. Establish ownership rights, and registration grants holders exclusive rights to use, reproduce, distribute, and commercialise their intellectual property. IPR registration promotes innovation and creativity by incentivising individuals and organisations

<sup>&</sup>lt;sup>4</sup> https://www.investopedia.com/terms/i/intellectualproperty.asp.

<sup>&</sup>lt;sup>5</sup> https://www.forbes.com/sites/patsnap/2022/01/31/patents-in-the-gaming-industry/.

to invest in research, development, and creative endeavours. It enhances brand recognition, consumer trust, and loyalty; in this way, It allows companies to set their products and services

apart from those offered by their rivals and have a unique identity in the market.<sup>6</sup>

Patent registration is vital in the gaming industry as it protects their technology and innovative

designs from unauthorised use or imitation by other companies.

Many game developers register patents for gaming methods, engines, devices, and hardware

components like touchpads and design.

Patents under gaming are just expanding with increasing innovations and technologies being

introduced by game developers.

**Examples** 

o UNREAL ENGINES

EPIC GAMES registered their game engine as the most powerful game engine in this industry.

o SONY PLAYSTATION CONTORLLER

Sony patented The DualShock PlayStation controller for its unique characteristics. This new

controller, which has an analogue stick and built-in vibration, sets a new standard for the user.

o KINECT

Patent for gaming devices, Microsoft registered an innovative technology, a motion recognition

device, in which player can control the game through their body movements.

These are some of the examples that pinpoint the importance of registering a patent in the

gaming industry.

PATENT APPLICATION PROCESS

The registration process is two-way: filing an application for patented work.

<sup>6</sup> https://www.epo.org/learning-events/materials/e-learning/ip-business strategy/strategy/importance.html.

The two processes are filing a provisional application or the standard application. Small and

midsize companies that don't have that much capital and are not open to taking risks can opt

for provisional application filing. Provisional filing is a cheaper way of getting your invention

patented than the standard filing.<sup>7</sup>

Getting your invention patented is governed by the UNITED STATES PATENT AND

TRADEMARK OFFICE (USPTO). Suppose the invention needs to get patented file

applications in standard form. In that case, the application is not examined immediately but

kept on hold for one year, giving the creator a reasonable reason to think about going through

the whole process.

The following process is the examination stage. Once the standard application is filed with the

UNITED STATES PATENT AND TRADEMARK OFFICE, an examiner is appointed to

review the invention and look for discrepancies. If any exist, the application filed for the

registration of the invention is rejected.

If there are no discrepancies, the application is complete, and the applicant will file it in the

patent office either through the postal system's mailing option or online.

Now came the third step and final step. Once the application is filled, the patent examiner will

examine the invention on three points:-

• Whether the invention is of any use in the industries?

• Whether it is inventive or not?

• Whether the invention is unique or not?

The patent will only be granted when the invention is unique, innovative, and valuable to the

industry. Then, the patent is granted, and the invention related to gaming is adequately

protected.

PATENT LICENSING MONETISATION STRATEGIES IN GAMING

Intellectual property rights licensing refers to giving others the right to use, distribute or market

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<sup>7</sup> https://www.wipo.int/sme/en/ip\_business/registration/importance.htm

intellectual property rights.

The owner who granted the license is called the licensor, and the person in whose favour the permit is given is called the licensee. For the gaming industry, not just having your work patented is a benefit, but patents also provide licencing and monetisation opportunities. It's beneficial for the game developers as it will generate revenue through earning royalties by licensing your patent.

The owner benefits from licensing his intellectual property, and some are mentioned as follows:

o Income in the form of licensing fees or royalties

Owner access to new markets leads to market expansion.

License reduces risks of market fluctuations.

o Patent licensing in the gaming industry is vital as game developers generate revenue.

O Under patent licensing, game developers are granted the right to use the patented technologies or game mechanics in exchange for licensing fees or royalties.

#### **MONETISATION STRATEGIES IN GAMING**

Monetisation strategies in the gaming industry are as follows:-

#### 1. CROSS LICENSING AGREEMENT

As a result, game companies enter into a licensing agreement to exchange proprietary technologies and game mechanics. This strategy encourages cooperation and collaboration, ultimately leading to innovation in the gaming industry. Under a crosslicensing agreement, a game developer from one company has the right to access the technologies of another contracting company and give that company access to its proprietary technologies.

#### 2. LICENSING TO OTHER DEVELOPERS

In this game, companies allow other developers to use their patented technology and gameplay features through licensing agreements. The developers who receive these

licenses then include the proprietary elements in their games. In return, the companies that own the patents earn money by charging royalties or licensing fees for using their intellectual property.

# 3. PATENT ASSERTION ENTITIES (PAES)

Patent assertion entities (PAEs), also known as PATENT TROLLS, are entities that are only engaged in patent licensing, asserting, and suing other companies for the alleged infringement and none the less. They only generate revenue from enforcing patent rights against other companies.

There has been a hot topic about these PATENT ASSERTON ENTITIES in the tech industries for years. Similarly, they significantly impact gaming industries and pose challenges to game developers. Patent trolls made strategies to target game developers with lawsuits and claim infringement, hoping that the threat of lawsuits and the financial burden would prompt the settlement.

Censurers argue that PAEs or patent trolls hinder innovation by filing trivial lawsuits against start-ups and small businesses. Upholders, however, believe that PAEs help protect inventors' rights and encourage innovation by putting unused patents to work. This debate continues, with PAEs having a solid presence in the technology industry.

# HOW PATENTS SCULPT INVESTORS AND PARTNERSHIPS

"Patented inventions" have a significant impact on the market. First, the patented invention is a result of screaming to people that the invention is unique and developed by the creative mind, something that nobody has yet come up with. These two terms provide long-term profitability, exclusive rights, and extended protection. Inventors and partners found themselves automatically attracted to this patented invention.

Investors and partners are tilted toward these patented inventions to control the market and ensure better growth opportunities.

It's evident if the patented invention shows proof of long-term profitability, and who will not invest in these inventions?

So, to lure this investor into investing in your invention, you must mention the uniqueness of the long-term growth opportunities and profitability. If the work is attached with the "protected by the U.S. patent," the value from the same increases the investment value, sanctioning loans from the bank becomes more straightforward, and overall, it increases the marketing value. If the work is legally protected through the patent, the investor will offer the developers more and even partner with the developers.

#### JUDICIAL PRECEDENT

Several high-profile INTELLECTUAL PROPERTY DISPUTE cases have been in the gaming industry recently. One of the most notable cases are:-

#### 1. DAVIDSON & ASSOCIATES INC V. INTERNET GATEWAY

In this case, Davidson and Vivendi Games (the plaintiffs), operating as Blizzard Games, had established an online system whereby end-users could access and play games 24 hours a day. Internet Gateway had entered into an End User License Agreement with Blizzard, one of the terms of which was to prevent reverse engineering.

Internet Gateway ignored this term and reverse-engineered the Blizzard system online, allowing it to create its online gameplay system, which would work with Blizzard. Although a clear EULA breach, the defendants correctly argued that reverse engineering was a fair use exception under US copyright law. Nevertheless, the Court held the EULA and other terms of use contracts overrode intellectual property law because, as individual parties agreeing, they were free to decide to forego exemptions provided for in intellectual property law.<sup>8</sup>

# 2. TOMITA TECHNOLOGIES USA LLC V. NINTENDO CO.

"A Japanese-American technology company brought a case against NITENDO, claiming its new 3D gaming system infringes on its stereoscopic (3D) technology patent.

They contended that a former Sony engineer formed the company and has developed and invented numerous inventions related to stereoscopic imaging since 2002, including a patent which they titled "Stereoscopic Image Picking Up and Display System Based Upon Optical

<sup>&</sup>lt;sup>8</sup> Davidson & Associates Inc. V. Internet Gateway, 334 F.3d 1163 (Fed. Cir. 2003).

Axes Cross-Point Information" (the '664 patent). This patent involves technology that allows for the display of stereoscopic images on a screen without unique eyewear.<sup>9</sup>

# 3. NINTENDO CO. V. ATARI GAMES CORP.

In this case, Nintendo Co. accused Atari Games Corp. of infringing on its patents related to technology used in arcade games. Nintendo alleged that Atari's arcade games, including "Hard Driving'" and "Race Driving'," violated its patents.

The critical patents involved in the case were related to techniques used in rendering graphics and controlling gameplay mechanics, particularly in racing and driving simulation games. The litigation between Nintendo and Atari Games Corp. resulted in a settlement where Atari agreed to pay Nintendo licensing fees for its patented technology.<sup>10</sup>

# **CONCLUSION**

The gaming industry keeps evolving and breaking the wall of creativity with a continuous flow of fresh ideas and unprecedented gaming experiences. The patents are vital in ensuring that game developers' intellectual property rights are safeguarded and, at the same time, act as building blocks for more innovations. Patents give game developers confidence, motivating them to spend their time and resources creating new games.

Patents are vital to the gaming industry. They drive innovations, offer legal protection, and build investor confidence. With several technological advancements in the industry, developers must ensure their copyright through a license. Patents cover everything in the gaming sector, from game mechanics to software algorithms, giving developers a way of defending their innovations against others and replicating them to safeguard intellectual property. The innovativeness is stimulated as the gaming sector remains dynamic and developing. Patents still constitute an essential source.

<sup>&</sup>lt;sup>9</sup> Tomita Techs. USA, LLC V. Nintendo Co., 2013 Wl 3283302 (Fed. Cir. July 9, 2013).

<sup>&</sup>lt;sup>10</sup> Nintendo Co. v. Atari Games Corp., 975 F.2d 832 (Fed. Cir. 1992).

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