

How to disrupt patent ecosystem with Blockchain?

 leewayhertz.com/blockchain-patent-ecosystem

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With the high pace of innovation across global technology sectors, Intellectual Property has become the most valuable asset class globally. On the other hand, patents were once the least understood and least effectively deployed asset classes. Today, the blockchain market for patents is constantly growing and is forecasted to reach 703 million USD by 2025, rising from 228 million USD in 2020 at a CAGR of 25.3%.

Blockchain technology brings exciting transformations to the Intellectual Property ecosystem. Blockchain technology aims to increase the system's efficiency and provide the required security to the data. On the other hand, when combined with AI assists in the analysis of various applications submitted at the patent office. Thus, Blockchain and AI reduces the amount of labor and time required for patent analysis.

This article provides a detailed explanation of Blockchain patents along with prevailing challenges in the system and a proposed solution.

- What are Blockchain patents?
- What is the problem with traditional patents?
- A new era of IP solutions powered by Blockchain
- How does the Blockchain platform work for the patent ecosystem?
- What are innovative use cases of Blockchain patents?

What are Blockchain patents?

Blockchain is the most popular technology in recent times. Blockchain patents are exclusive rights issued by an official authority such as a sovereign state and intergovernmental organization. These exclusive rights are given to the inventor to provide the details of the invention in the public domain.

Blockchain patent ensures the new business value of trust. The disruptive technology has achieved global importance since the emergence of Bitcoin. It does not involve any third party in its operations; rather, it preserves, broadcasts, corroborates and exchanges data over the distributed network, delivering trust and value at low cost.

What is the problem with traditional patents?

Over a million Patents are being granted worldwide every year due to the high pace of global innovation. Even then, the ability to capture the true measurable competitive benefit from significant investments in patents remains elusive. The management metric applied to patents often includes only “how many do we have” or “how many do we plan to get.” The actual performance metrics such as return on investment are not applied to intellectual property.

Financial accounting practices are not kept up with the transformation in most company’s balance sheets, which results in undervalued and misunderstood intangibles by investors and the market. It is primarily true for small and mid-sized companies. Such patent ecosystems are not business or management-friendly as the assets are often difficult to manage. Main challenges in the patent world include:

- It is challenging to determine and understand the protective, strategic, financial and transactional value of assets and simultaneously obtain and maintain their cost.
- Businesses are generally unaware of which patents are relevant to their business or their competitors’ business.
- Metrics for patent portfolios are often quantified, which is insignificant because one groundbreaking patent is far more valuable than hundreds of incremental patents.
- Approximately 30% of the time, ownership records are inaccurate.
- Organizations pay great attention to manage their financial and physical assets like offices, equipment, property and other receivables but often neglect intangible assets that represent the most significant part of their value.

Other than financial assets, digital content also face challenges in maintaining its transparency, privacy and ownership. For example, a song, video, or other digital content made live on the internet is uninterruptedly used without the owner’s consent. Moreover, numerous platforms are there on the internet that share pirated content.

The introduction of Blockchain to the IP industry can effectively resolve such issues and bring absolute transparency and privacy to the system.

A new era of IP solutions powered by Blockchain

The power of Blockchain applied to IP assets enables the paradigm shift in how the IP is being understood and managed. A Blockchain platform that builds Blockchain intellectual property can empower the entire patent ecosystem. It is a leading-edge IP solution that removes barriers by addressing fundamental issues within the traditional patent ecosystem.

Such a platform would provide patent owners the tools that offer greater visibility, ease of conducting transactions with patents, effective management and reduce costs for innovators.

It enables patent owners to:

- Better understand patent portfolios; analytical tools help identify commercially or financially exciting patents and analyze their relevance, significance, transactional value and other essential metrics.
- Better understand their position and IP-based competitive landscape with tools to generate a comparison between relative strengths of actual and potential competitors' IP positions.
- Evaluate and manage IP risk by proactively identifying sources of risk and implementing mitigation strategies focused on managing the risk on a more cost-effective basis.
- Reduce cost and simplify the conduction of all kinds of patent transactions, including licensing, acquisitions, insurance, sales, financings and patent pooling.

The Blockchain platform leverages Smart contracts for patent assets and ensures high security and privacy of the data. This platform aims to drastically improve asset management and reduce friction in patent transactions with appropriate and informed management decisions. Blockchain helps to lower delivery and transaction costs. By providing absolute transparency in patent identification and ownership, the Blockchain platform can solve the fundamental issues of outdated ownership records, inaccurate data and lack of transparency in the IP ecosystem.

The platform may include innovative Blockchain features such as Smart pooling and enhanced reporting capabilities designed for IP professionals and business executives like competitive analytics, valuation, innovation and FTO reports.

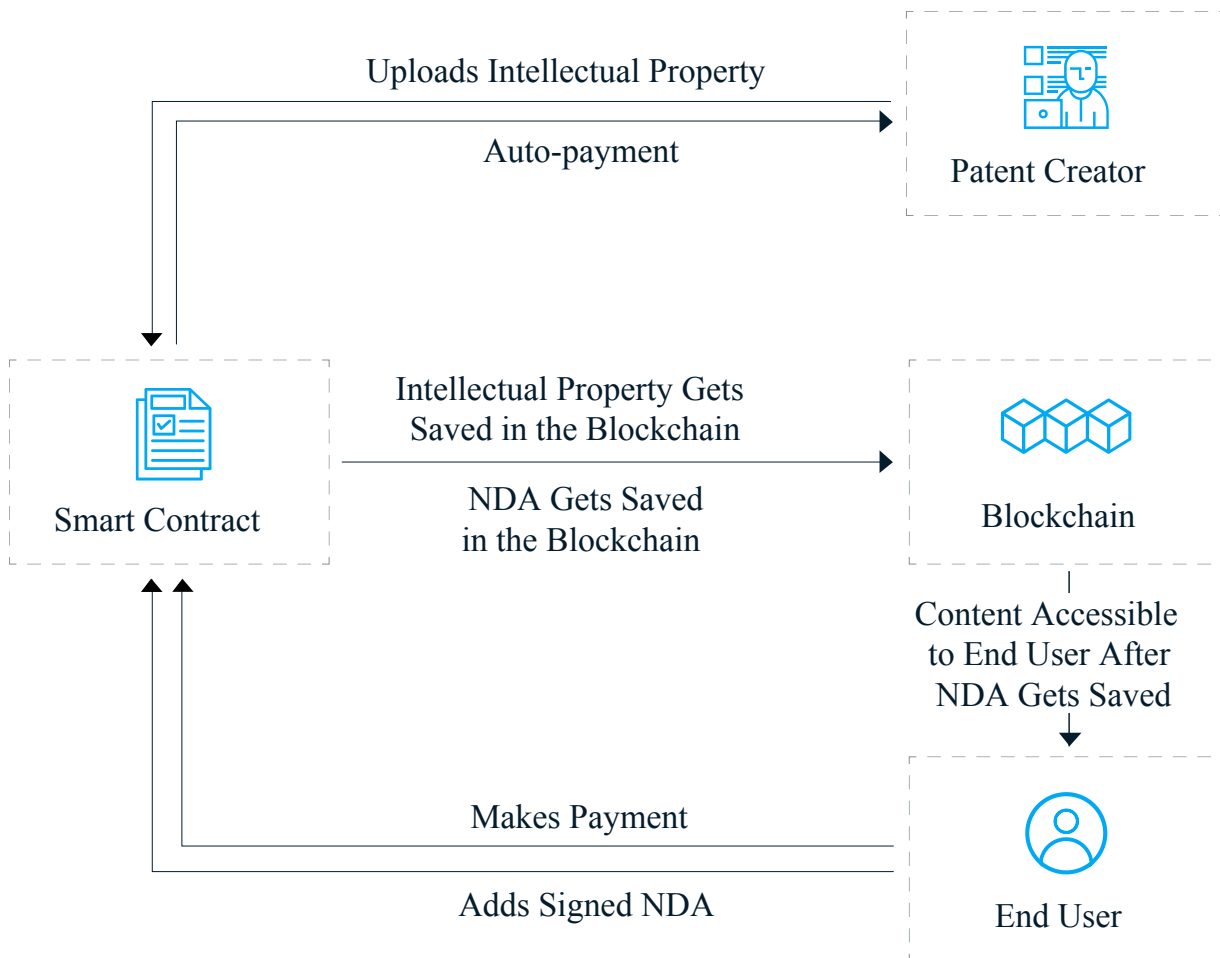
The significant benefits of developing a Blockchain platform for blockchain patents include:

- Low costs
- Enhanced returns
- Full transparency
- Detailed information

How does the Blockchain platform work for the patent ecosystem?

Blockchain can efficiently handle patents and trademarks by effectively reducing approval wait time and other required resources. The user personas involved in Intellectual Property management are:

- **Patent Creators:** Users with ownership of the original data are the patent creators, e.g., writers, artists, researchers, musicians, photographers, etc.
- **Patent Consumers:** Consumers are the users who are willing to consume the content and support the creator's artwork.
- **Copyright Managing Entities:** Users responsible for protecting the creators' Intellectual Property are the copyright management entities, e.g., lawyers.



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The blockchain solution for IP management works by implementing the following steps:

Step 1: Creators sign up to the platform

Creators need to first sign up on the blockchain platform to get patented their creative work. The following information will be required while signing up:

- Name
- Address
- Contact
- Date of Birth
- Designation

Blockchain ensures the security of the personal data entered into the system and leaves no chance of data disclosure without the user's consent.

Step 2: Creators upload IP on the blockchain network

Once the sign-up to the blockchain platform is successful, add an intellectual property for which the patent application is required. The creator will apply and upload the information related to IP on the network. The following information is required while applying for a patent:

- Name of creator
- Name of owner
- Title
- Keywords
- Abstract
- Classification (Category)

The creator saves and uploads the data on the blockchain network. Blockchain ensures traceability and auditability to prevent data from duplicacy and manipulation. Once the patent is added to the Blockchain, it is made visible to all the network members.

Step 3: Consumers generate request to use the content

Consumers willing to utilize the content also need to register themselves on the blockchain platform for accessing it. Signing up to the platform is done similarly to the creators. After creating the profile, consumers can request creators to grant access to the patented content.

Before the patent owner approves the request, a Smart Contract is created to enable consumers to access information like the owner's details, abstracts and ratings. Moreover, the consumers may need to pay the fees either in fiat money or specific tokens to utilize the original information published by the creator.

When the creator approves the request, an NDA agreement is generated and signed between both parties. Blockchain handles the agreement and ensures that the participants agree to the terms and conditions filed.

Step 4: Patent management entities leverage Blockchain to protect copyrights and solve related disputes

Blockchain assists the patent management entities in resolving a variety of disputes that may include:

- sharing confidential information
- establishing proof of authorship
- transferring IP rights
- making defensive publications, etc.

Suppose a person used a line from a patented poem as a slogan for his company without the poet's consent. The poet can report it to the patent office and claim that he wrote the line. If the organization claims the line as a new creation, the poet can consult the lawyer. The lawyer, leveraging the potential of the Blockchain to save the time-stamped auditable records, can easily prove the originality and provenance of the content.

What are innovative use cases of Blockchain patents?

Progressive protection

While working on an innovative idea, the product development cycle often encounters numerous iterative changes. These changes are so frequent that it gets nearly impossible to patent every single version of the product. Blockchain helps in such situations by implementing progressive protection. Through progressive protection, Blockchain continuously captures iterative improvements, records every time-stamp and certifies the innovative cycle.

Secure collaboration

It is a common scenario with scientists when others use their research without their consent. It happens because the researchers share their ideas with big businesses to get funding. It discloses the main features of their project. In return, the company refuses to provide funds and use the research for its purposes.

Blockchain patent platforms can help to protect digital assets before sharing them. It can also regulate access rights, link policies and NDA to sensitive IP assets, eliminate data leaks and do not provide access to unauthorized parties.

Extensive IP safety

Blockchain ensures the safety of intellectual property and provides access only to intended individuals. For example, a company working with many innovators and has a breakthrough research deliverable to the market. Such companies must use Blockchain platforms to secure their data and allow access only to the required department, e.g., device designs and specifications should be accessible only to the hardware department. Blockchain excels in avoiding data leaks and unauthorized access.

Conclusion

Blockchain is a definite boon to the IP industry, benefitting both patent owners and offices. Blockchain technology provides strong time-stamping, the potential for Smart Contracts, proof-of-existence and enables the creation of a transparent, distributed, cost-effective and resilient environment that is open to all and where each transaction auditable. When these intrinsic characteristics of Blockchain are applied to IP, it helps copyrights be enforced more effectively in digitization and render the patent system less vulnerable to abuses and make them more efficient.

Are you looking for an experienced and leading Blockchain development company to develop your Blockchain platform or implement Blockchain business patents for your valuable patent assets? We're ready to help you. Discuss your requirements with our Blockchain experts and avail the opportunity to get the best development services.