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# Benefits and Considerations of Protecting Your IP With Blockchain Technology

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Blockchain technology is an emerging solution for high-security intellectual property (IP) asset management and recordkeeping. The blockchain records transactions and tracks assets within a business network as a shared, immutable digital ledger. Its tamper-proof nature, as a decentralized database with data stored across multiple computers, makes it not only a reliable database to track transactions but also a tool for authentication. IP owners may be intimidated by the technical and legal complexities of blockchain, but those willing to invest time into understanding its various applications will benefit from early adoption of this technology.

# **Background**

Blockchain technology is already implemented in various industries, including banking, health care, and education. As an area that requires authenticity and security, IP too can benefit from instituting blockchain.

Blockchain technology may be envisioned for various use cases in copyright, trademark, and patent protection. For example, its highly secure timestamping of data could be used as evidence of ownership in copyright disputes, a record of trademark usage, and to memorialize disclosure dates for patent validity purposes.

IP owners can embrace this emerging tool to further insulate their IP from infringement, copyists, and other bad actors by implementing blockchain technology to enhance documentation of ownership, authorship, and validity. To determine if this is the right solution, keep in mind these opportunities and risks:

## **Benefits and Opportunities**

### 1. Proof of Ownership and Authenticity

The blockchain cryptographically records, timestamps, and makes permanent any data entered on the chain. In areas of IP law where proof of ownership is critical, such as copyright protection, reliable blockchain information may be a valuable tool for IP holders to establish a verifiable record of ownership. In a copyright case where date of authorship was crucial to the infringement analysis, a French court relied on a blockchain timestamp to serve as proof of the date of authorship.

# 2. Immutable Record Keeping

A significant feature of blockchain technology is its development of an "immutable record." Data entered on the

chain (a "block") is encrypted using cryptographic information from the previous block. In effect, this benefits users by building a tamper-proof record that is kept in chronological order. This reliable, permanent system may be useful for tracking trademark usage to build an evidentiary record to dispute abandonment, for logging invention disclosures either defensively or to support patent validity, or in other legal disputes where a reliable and clear record may establish proof.

## 3. Smart Contract Features to Automate License Agreements

Blockchain technology is used as a tool to code contract conditions into automated systems. These "smart contracts" may be used in IP transactions to monitor IP usage and collect royalties. For example, a smart contract can facilitate the payment of IP royalties by automatically calculating and disbursing payments based on the usage terms of an agreement.

## **Potential Obstacles and Risks**

## 1. Legal Uncertainty

Blockchain technology is relatively new, especially in the IP space, and its integration into IP protection is not fully established within U.S. legal systems. Regulators are still working to understand blockchain technology and whether certain laws should be updated to properly address decentralization.

The complexities of blockchain technology and its impact on IP protection can be navigated by experienced attorneys. They can interpret existing legal and regulatory requirements and understand their implications in this emerging area in IP protection.

### 2. Challenges in Industrywide Adoption

As blockchain technology becomes more widespread, various blockchain platforms may be developed with distinct characteristics. Industrywide adoption of blockchain technology in IP is hindered by the lack of standardization across blockchain platforms, causing stakeholders to hesitate due to its absence of uniform standards. Before sharing information with a separate or new blockchain network, attorneys can advise on the best practices to protect sensitive IP information.

# 3. Technical Complexity and Cost

Blockchain technology may require substantial investment. Organizations may hire blockchain developers, establish secure nodes, and train legal professionals to navigate blockchain records. Alternatively, organizations may rely on predeveloped blockchain platforms, but this still requires substantial investment to understand a platform's features, operations, and risks.

## 4. Data Privacy and Security Challenges

The unique characteristic of the blockchain is that once data is stored, it cannot be altered. This permanence ensures data integrity for patents, trademarks, and copyright registrations. However, it may also pose challenges

in managing access controls to the blockchain platform and ensuring that only authorized individuals can view or interact with the data. To address these challenges, organizations should use private keys, encrypt sensitive data, and maintain audit procedures.

### Key Takeaways

Blockchain technology has the capacity to provide highly secure and reliable management of IP assets and transactions, both for recordkeeping and authentication in the event of a dispute. Undeniably, the challenges associated with blockchain technology in the IP space are complex to navigate. For IP holders, now is the crucial time to explore the opportunities and understand the risks associated with integrating blockchain in your IP protection strategy.

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