

Financing and creation of intellectual property assets through DAOs

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Topics

DAOs

Emerging Web3 technologies undoubtedly enabled new forms of financing and creation of intellectual property (IP) assets. Stands out the so-called non-fungible token (NFT), regarded as a way to facilitate the monetization of copyrights of artistic works for the benefit of their creators.

The NFT applied to artistic works is a digital certificate of property, subject to the Copyrights Law just like any licensing contract, but with the advantages of transparency, traceability and reduction of transaction costs brought by blockchain technology. As for NFTs, it is possible to identify promising discussions related to innovation projects through Decentralized Autonomous Organizations (DAOs), also built around Web3 technologies.

On the one hand, DAOs could enable new forms of financing of innovation projects with the issuance of tokens based on participation, contribution and investment. An example is the Molecule Protocol initiative, which establishes a platform for biotechnology startups structured as DAOs, so that they can access resources, both the know-how expertise and the financial ones, in a

decentralized manner. In this context, the issuance of “IPNFTs” – combining smart contracts and licensing contracts of IP – could facilitate the development of innovative projects related to new medicines.

From the perspective of creation of IP assets – patents, for instance, the main asset tied to the protection of new medicines – DAOs could function as platforms for cooperation between different actors. Within the mutual trust paradigm between members of DAOs, research institutes, specialized laboratories at universities and startups or reputable companies could collaborate in the production of data (initially non-structured and under secrecy, such as reports with clinical tests results in-vitro or in-vivo, data os genetic sequences, etc.) that would serve as the basis for the patent protection of new medicines.

For that matter, another initiative is the “bloxberg”, a DAO built as a consortium headed by the Max Planck Society that intends to increase the cooperation between the researchers of the institutions participating in the DAO. Decentralized applications (DApps) employed within bloxberg would permit the generation of encrypted records, on a blockchain, as proof of existence and authorship of the results from the initial steps of research, without being disclosed or stored in a centralized database.

This application could be expanded, subsequently, in order to create a reliable and confidential record of all the development of certain technology, allowing the surpassing of a common obstacle to the advance of early-stage research generated by the risks of exposure during the sharing of information that is not yet protected by a patent. At the same time, this record can serve as evidence, in the future, to prove the performance of

inventive activity, one of the requirements for patentability.

A great challenge of these new possibilities is the doubts they certainly raise. For instance, to whom belong the IP rights of creations originated in DAOs? For that matter, there are already legal dispositions concerning the ownership of copyright works, industrial inventions, distinctive signs, and other IP assets that must be respected. Thus, it is recommended that the rules for attribution of ownership, as well as the assignment of rights of creations developed within the scope of a DAO, be previously determined during its conception.

In the case of smart contracts involving licensing or confidentiality clauses, caution shall be taken to impede contractual dispositions, even if self-executing, from becoming ineffective, for instance, because they are contrary to legal provisions or have a territorial scope more limited than wished.

As can be seen, DAOs and their decentralized management established via codified rules in smart contracts bring potential advantages to strengthen cooperation and technological innovation. In order to guarantee legal certainty for all involved, it is crucial that DAOs are well attached to the existing legal framework, even though we may see, in the near future, the emergence of new legal grounds and case law specifically directed toward these new organizational forms.

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