Research on the Application of Intellectual Property Asset Securitization Based on Blockchain

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Abstract: with the inclination of the policy to the securitization of intellectual property assets, new products are constantly emerging in the market, such as the issuance of abs products. However, due to the unique characteristics of intellectual property, the financing process is inefficient and asset pricing is unreasonable. Blockchain allows all parties involved to keep accounts together in an open and transparent environment. And it provides authenticity verification, which is conducive to reducing the credit risk and cost of products and providing strong support for the securitization of intellectual property assets.

1. Introduction

Since 2015, the state has continuously released favorable policies to promote the development of intellectual property ABS financing. In March 2019, under the joint effort of the state intellectual property office, China securities regulatory commission and other departments, the shenzhen stock exchange issued China's first ABS standardized product. In December 2019, guangdong development zone will grant a subsidy of 3% of the actual financing amount for financing through Hong Kong and Macao's intellectual property ABS in next years. However, in real operation process, due to the opacity of the underlying asset pool and the difficulty in data processing, the pricing of intellectual property ABS is unreasonable, which is not conducive to the activation of enterprise assets. Therefore, Using the latest technology, combining with the current situation of asset securitization, to effectively control various uncertain factors and risks in the process of implementation has become a problem to be studied.

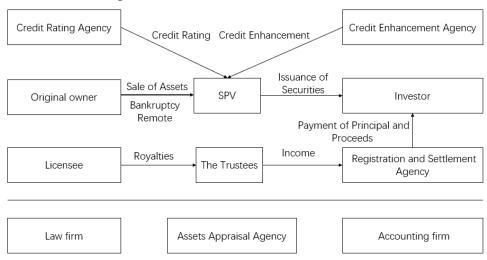


Fig.1 Transaction Structure of Intellectual Property Asset Securitization

2. The current situation of intellectual property asset securitization

The securitization of intellectual property assets is a process of issuing and circulating Securities for financing through repackaging, credit enhancement and other procedures, with the future income of intellectual property as the guarantee. Compared with the previous asset securitization

products, basic assets are intangible intellectual property rights. As an innovative financing method, intellectual property asset securitization is of great significance for enterprises to activate intangible assets, which improves asset liquidity and ease financing constraints. At the same time, the securitization of intellectual property assets can enable enterprises to obtain financing at the initial stage and obtain more financial support in production and content, thus enabling the market to enter a virtuous circle.

3. Problems in the securitization of intellectual property assets

At present, through different forms of intellectual property carriers in the market, for risk consideration, investors' expected returns and security of securitization are mostly from credit rating and external rating, so they cannot totally figure out the underlying assets.

At the same time, the current intellectual property securitization financing process is less efficient. The core of the whole process is the special purpose institution (SPV), which is difficult to meet the standards in the later stage of asset information disclosure and follow up the latest situation, so investors may not be clear about the real asset status.

(1) Uncertain future earnings of intellectual property

The cash flow of traditional assets (accounts receivable, housing mortgage) is relatively stable, while intellectual property rights are easy to be infringed because of its characteristics, and will cause value fluctuation with the change of technology update, popular trend, consumer preference, etc. The renewal of new technology will eliminate the old technology, especially in the high-tech industry. There is also the practice of using someone else's patent without permission, and it takes a lot of energy to bring a lawsuit. These risks affect the stability of cash flow.

(2) Difficult evaluation of intellectual property

Generally, financial assets generally have a fair value recognized in accounting, and intellectual property cannot accurately evaluate the value because there is no historical data that can be used for reference. At present, most of the valuation methods of intellectual property use the method of tangible assets, namely cost method, income method and market method. The particularity of intellectual property makes it difficult to determine the benefits and risks.

(3) Insufficient liquidity of asset-backed securities

There are fewer types of transactions in the securitization of intellectual property assets, which fail to form a uniform standard.

The trading places of other asset securitization products are mainly the credit asset securitization led by the bank insurance regulatory commission, the enterprise asset securitization led by the securities regulatory commission and the asset-backed notes led by the association of inter-bank market dealers. Among the three categories mentioned above, the products of credit asset securitization and asset-backed notes are issued and traded in the association of inter-bank market dealers, while the products of enterprise asset securitization are issued and traded in the exchange. The two major trading venues are not connected, making liquidity Lower. This market segmentation not only limits the issuance demand of the primary market, but also reduces the liquidity of the secondary market and weakens the attractiveness and competitive advantage of asset-backed securities in the capital market.

4. Blockchain Application

Blockchain is a distributed ledger technology that has a huge advantage in the collection and organization of historical asset information. It can be accurately recorded, shared, and stored on multiple network nodes in time sequence. Through the use of blockchain technology, in the early stage of the securitization of intellectual property assets, the status of the underlying assets can be accurately and real-time transmitted to the participating parties through the blockchain, avoiding information consumption and errors in the process. At the same time, it is conducive to the accurate evaluation of intellectual property. During the implementation of the project, if the underlying asset pool is updated, it can be communicated in a timely manner through the blockchain, avoiding data

errors generated by the intermediary, and penetrating the underlying assets through the blockchain technology, thereby solving the problem of information asymmetry. The blockchain can also process a large amount of data. According to encryption technology to improve data security, all information is encrypted, including address and trader's information. In the secondary market transactions, investors can understand the cash flow of assets with the help of blockchain, reasonably and effectively value assets, and make the transaction process more convenient.

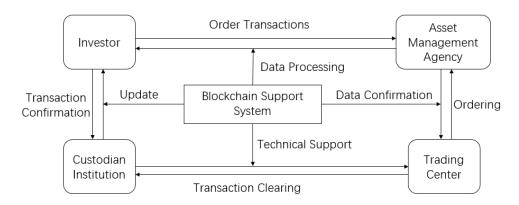


Fig.2 Application of Blockchain in Intellectual Property Asset Securitization

5. Conclusion

Blockchain, as an emerging technology, can play a role in most of the processes and fields of intellectual property asset securitization. It can use good data processing capabilities to make asset information more transparent and pricing more reasonable. The government should guide the industry to formulate relevant standards and regulatory mechanisms, and explore the organic combination of blockchain and asset securitization with new demonstration zones, so as to accumulate experience for the rapid development of blockchain in the future.

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