Project - 350

Member 1: Syeda Jannatus Saba Reg. No: 2016331006 Member 2: Biddut Sarker Bijoy Reg. No: 2016331012

Project Name: Intellectual property verification using blockchain.

Overview

IP or intellectual property refers to anything created using one's intellect such as a poem, an art, a business plan, inventions and so on. IP is protected by law in the form of patents, trademarks, and copyrights, which help the owner to earn recognition and financial benefits from their creations. But the average company loses about \$102 million in revenue per year owing to IP infringement and this number keeps on increasing. With the ease of availability of the Internet, it has become very easy to copy digital assets. Sharing these after copying takes less than a minute. Hence, there exists a lack of obstacles in this replication process which keeps adding to the loss of revenue faced by the owners of these digital assets.

Our main concept is that how blockchain can be used in the light of IP.

Goals

- 1. **Proving ownership rights:** Blockchain ledgers create time-stamped records that cannot be retroactively altered. This makes them an ideal solution for proving when a given piece of work was first created and used. Such a system could eliminate doubts about who created a piece of IP, making it easier for creators to enforce their rights when instances of infringement occur.
- 2. **Track the IP:** Blockchain ledgers can also be used to track subsequent instances of the use of an intellectual property. This aspect of blockchain in the intellectual property space is of critical importance since it could solve the problem of easy and cheap replication of IP.

Specifications

Finally, we think it's important to consider how smart contracts could play a role in IP enforcement. While basic blockchain ledgers can be used to establish IP rights and monitor for instances of infringement, smart contracts can play a much more active role in enforcing licensing agreements. Smart contracts allow creators to set their own licensing terms and ensure that they are being carried out. Another benefit of smart contracts is that they can be used to license content directly to end-users, thus cutting out middlemen and creating fewer opportunities for infringement.

Although blockchain isn't a 'be-all and end-all' for the world's IP problems, it is a technology with a great deal of potential to disrupt the IP space.

Milestones

1. Evidence of creator-ship:

We can generate evidence like a digital signature for checking any IP that is it previously created or not.

2. Provenance authentication:

When an IP property is created then we check by the evidence of the creator-ship for authentication.

3. Registration and clearance of IP rights:

By checking the evidence of any IP, if it is not previously created then we will register it into a new block and will give the owner clearance of IP rights.

4. Control and track unregistered IP:

If we find any of IP is unregistered then we will control and track it.

5. Management of Digital Rights:

By using digital signature, we will provide the digital rights of any owner.

6. Enforcement and establishment of agreements through smart contracts:

We will try to make an agreement system so that any owner can make any Enforcement and establishment of agreements through smart contracts of any of the IP.