

TIME TO GET SMART?

Don't know the difference between a block, a fork and a node? It may be the moment for the IP profession to get to grips with the use of blockchain technology in its practice

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Blockchain and other examples of distributed ledger technology (DLT) have risen to their current fame as the technology underpinning cryptocurrencies such as Bitcoin, and the Ethereum platform. As the technology evolves to its third generation, various industries are exploring potential applications for DLT, and new blockchain use cases emerge on a regular basis. So, to what extent should these technologies be on the radar of IP professionals, and how might they be used in relation to trade marks and IP?

In its basic form, blockchain technology is an open ledger of information that can be used to record and track transactions, and which is exchanged and verified on peer-to-peer networks. From an information governance perspective, the real innovation of blockchain technology is that it ensures the integrity of the ledger by crowdsourcing oversight and removes the need for a central authority, ie transactions are verified and validated by the multiple computers that host the blockchain. For this reason, it is seen as “near unhackable”, because, in order to change any of the information, a cyberattack would have to attack all copies of the ledger simultaneously. As blockchain technology becomes mainstream, “private” blockchains – which may only be used by vetted users – are of increasing interest, as are shared ledgers, whereby information on the blockchain is split and shared on a need-to-know basis. Various types of data can be added to a blockchain, ranging from cryptocurrency transaction information and contracts to data files, photos, videos and design documents, and so on.

Owing to the fact that it creates a secure, incorruptible chain of information, blockchain is already finding new applications in brand protection and enforcement, marketing and customer engagement – and has been on the radar of various governmental agencies, including EUIPO and WIPO. ▶



In the context of IP-heavy industries, blockchain and related DLT offer obvious possibilities for IP protection and registration, and as evidence, either at the registry stage or in court. Some argue it might also offer a cost-effective way to speed up such processes. Potential use cases include: evidence of creatorship and provenance authentication; registering and clearing IP rights (IPRs); controlling and tracking the distribution of (un)registered IP; providing evidence of genuine and/or first use in trade and/or commerce; digital rights management (eg online music sites); establishing and enforcing IP agreements, licences or exclusive distribution networks through smart contracts; and transmitting payments in real time to IP owners.

The burden of efficiently gathering and retaining such information in anticipation of future need may, however, affect its usefulness to IP owners. Arguably, much of this information would only be drawn on when an IP right is being enforced. This may have an impact on whether the opportunities offered by blockchain would be fully utilised by IPR owners – perhaps with the exception of industries where there is another driving force for the advanced retention of such information, eg the new serialisation requirements for pharmaceutical products.

SMART IP

One important offer of blockchain technology is that it provides immutable and time-stamped evidence, either at the registry stage or at court. This leads us to the idea that IP offices might use blockchain technology to establish “smart IP registries”, eg in the form of a solution run by an IP office as an accountable authority which would create an immutable, robust and trustworthy record of events in the life of a registered IPR. Alternatively, blockchain could be used to supplement the existing register. In all likelihood, this would be actioned by way of a private blockchain, since IP registries would want to be able to vet the participating nodes.

IPRs registered on a distributed ledger rather than on a traditional database could become “smart” IPRs. As DLT can track the full chronology of the events and life cycle of a right (eg its application, official letters, transactions, licensing, assignments and changes of title), this would allow anyone to audit prior transactions and large trade mark portfolios, which could significantly ease the due-diligence exercises in an IP transaction (such as those required for mergers and acquisitions). This does, however, beg the question of whether a robust e-filing system, such as the one currently offered by EUIPO, in which the life cycle of a right can already be tracked reliably by accessing an online file, provides an inferior offering in practice.

While it is perhaps a somewhat aspirational target for countries where there are currently no administrative use requirements, registered trade marks, designs and other registered rights could, in theory, also be cleared for registration and use if actual use information were added to the registration details of a trade mark on the official register. For example, this could be achieved by linking the use of a product on the market back to a blockchain solution. This has been predicted by some enthusiastic observers, yet it seems unlikely that DLT could eventually lead to a single global registry for IPRs, since IPRs are territorial rights.

EVIDENCE OF USE

It remains true, however, that collecting information on the use of a trade mark in trade on a DLT ledger would allow the relevant IP

blockchain technology. While there are national variations, the main difference between collective marks and certification marks is that the former may be used only by a specific group of enterprises, such as members of an association, whereas the latter may be used by anyone who complies with the standards defined by the owner of the certification mark (eg that products meet certain established criteria or standards). As it is an important requirement for certification marks that the entity owning the mark must be “competent to certify”, these might be best suited to private blockchains. Fake certificates could be identified almost immediately, which would benefit both trade mark owners and consumers.

RIGHTS MANAGEMENT

Another blockchain buzzword is the concept of “smart contracts”. As some DLT solutions can

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office to be notified virtually immediately on the occurrence of a verified event of this use. Reliable evidence of actual use of a trade mark in trade, as well as the frequency of this use, could be available on the official trade mark register. If this were to be accepted legally, DLT could simplify the process of providing evidence of use of a trade mark and other evidence at an IP office or court – eg in cases of proving first use, genuine use, acquired distinctiveness or goodwill in a trade mark.

In contrast to traditional IP registers, a smart trade mark register could also reflect the state of the market, which is relevant when it comes to assessing the infringement risk in many jurisdictions. However, it is important to recall that much of this data is likely to be considered highly confidential by trade mark owners, so sharing of information would potentially have to be optional. The logistics of setting up such a system could put a significant up-front burden on trade mark owners, reducing the likely uptake if this were introduced as a voluntary system. This does have to be balanced against the benefit of having such information available without delay – saving time, resources and money when a trade mark owner needs to draw on it.

CERTIFICATION

Certification and collective trade marks are another field for the potential application of

hold, execute and monitor contractual codes, such “smart contract performance” could be of interest to digital rights management and other IP transactions. Smart contracts could be used to establish and enforce IP agreements, such as licences, and allow the transmission of payments in real time to IP owners. Meanwhile, “smart information” about intellectual rights of protected content (eg a song) could be encoded in digital form (eg in a music file).

Adding scannable blockchain-connected tags or other markings to products that include legal and other information could also enhance the effectiveness of customs enforcement in the fight against counterfeits, and help when it comes to validating a genuine product. If a brand owner is able to tell customs authorities that its genuine products are embedded with a tag or marking, then the absence of this tag, or a tag bearing incorrect data, provides an easy way for customs officers to check whether a product is counterfeit. It would also allow brand owners to educate consumers about the dangers of fake goods.

The idea of using interactive tags, such as QR codes, is not new. However, unlike blockchain, these established technologies link to one single source of information – rather than a distributed ledger – and, although they may make life more difficult for counterfeiters, they are still prone to corruption and copying. Blockchain



technology does not suffer from this drawback, since counterfeiters should be unable to alter the information on the blockchain.

The ability to add blocks of data to the chain also creates opportunities for IP owners to record details about a product's progress through stages in the manufacturing and supply chain; allows them to distinguish grey goods in cases of parallel imports; and helps to identify where certain goods left the supply chain. Similarly, DLT can be used to monitor and control leaks from selective distribution networks and so assist in enforcing these agreements, bearing in mind, of course, competition law aspects.

Such tracing and tracking of goods is also required by legislation that has been introduced to address counterfeits in the pharmaceutical industry. The EU Falsified Medicines Directive (FMD) will introduce an EU-wide system that aims to secure the supply chain between pharmaceutical manufacturers and patients

ownership, and to license and track use and potential infringements of their works on the internet. This application can also act as a deterrent to potential infringers, since all use can be traced.

INDUSTRY APPROPRIATE

The large-scale adoption of blockchain technology still faces a number of obstacles, both technical (eg scalability and energy consumption) and legal (eg questions of privacy, data protection, governing laws and jurisdictions). Blockchain developers will also have to create a regime of standards and interoperability protocols.

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against counterfeits. Blockchain lends itself to achieving the FMD's legislative aim of tracking of goods in fragmented supply chains. Indeed, such technology already exists – for example, London-based Qadre's blockchain solution, which is currently being tested by several large pharmaceutical companies.

Blockchain technology could also play an important role in the context of unregistered IPRs, such as copyright (which in many jurisdictions is not a registrable IPR) and unregistered design rights, since it can provide evidence of their conception, use, status and qualification requirements. Because unregistered rights are notoriously difficult to prove, blockchain could help to bridge the gap. This is not just hypothetical: online pioneer platforms, such as Binded, Bernstein and ascribe, use DLT and digital certificates to allow creators to make a record of their copyright

So, is blockchain use in IP more than just hype? Should Trade Mark Attorneys be reading up on the difference between a block, a fork and a node? While many of these blockchain ideas may be feasible or sufficiently attractive for implementation in practice, blockchain is now widely expected to have a transformative effect on IP-heavy industries, especially those faced with counterfeit goods and parallel imports.

It is the authors' view that the speed of that transformation is likely to be at least partially dependent on the development of corresponding technology, and changes to the regulatory and IP enforcement landscapes. Nevertheless, in the mid and long term, and when the initial buzz has calmed, IP law and practice appear to make for a feasible use case of DLT – which, one might argue, is only right for an area of law founded on the principles of embracing and protecting innovation. ●



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