A STUDY ON PATENTABLE OBJECTS AND THE DIGITAL LEDGER.

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ABSTRACT:

This is an effort to learn more about the role social media played in the 2019 Lok Sabha election campaigning in India. Those countries, such as the United States of America, India, and others, have democratic systems of government. Particularly in political campaigning during elections, social media has become a vital component of political communications. The improved campaign method at the same period is crucial for attracting voters. Facebook, Twitter, Google+, WhatsApp, YouTube, and other modern platforms provided by social media have given political parties and voters a modern platform. These platforms are now being used by most of the political leaders as an easy tool to connect with their supporters. In order to reach more voters and organise their interactions with them, social media enables aspirant politicians to share, post, and comment on election-related topics. These contemporary tools or platforms are presented as unexplored territory. First, to define social media. Next, to understand the essence of political campaigning. Third, to engage voters in the Lok Sabha elections of 2019 through social media and campaigning.

Keywords: Internet of Things, Block Chain Technology, Cryptocurrency, Patent, Emerging Technologies.

INTRODUCTION:

The first thing to address is the fundamental question of what intellectual property is. There are many different sorts of intellectual property, including Patents, Copyright, Trademarks, Designs, Confidential Information, Industrial and Trade Secrets, etc.,[1] Since patents are one of the topics that are most frequently discussed in the realm of block chains, this research paper will specifically focus on them. Demystifying and clearing up any misunderstandings about what patents are is necessary. What can be or cannot be patented? and how that applies in the context of blockchain technology will be covered in the research paper. The copyrights also apply when discussing software-related innovations, but they only protect the source code, not the ideas and concepts that lie behind it. Therefore, if the algorithm or the ideas behind the source code are to be protected, an intellectual property right in the form of a patent is required. This will grant the patent holder a temporary, albeit limited, monopoly over that technology. Regardless of the technology involved, there are some fundamental requirements that an inventor must satisfy to obtain a patent. The inventor must also prove to the patent office that the innovation satisfies these requirements by demonstrating that it contains something novel and inventive.
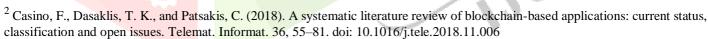
That sounds simple enough, but it gets a little bit more complicated because many jurisdictions have statutory laws that prohibit the inventor from obtaining patent protection for certain types of innovations. For example, typically computer software business methods, methods of playing games, etc. would fall into this list of what we call the excluded categories if the innovation is thought to relate to that type of technology by the patent office. These inquiries are best answered on a case-by-case basis. Each patent office will look at the invention that is described and claimed in the patent application; they will compare it to what is already known in your technical field; they will attempt to determine whether it falls into that list of excluded types of invention; and if not, if the invention is potentially patentable material, they will then have a look to see if they think that there is that's all I got. The potential inventor receives the patent certificate if the examiner/patent controller is convinced that the invention accomplishes something novel, inventive, and technically sophisticated. There is a common misunderstanding about patenting software and business methods from a US perspective about how to present the invention to the patent office. Developers often mistakenly believe that they are creating new software or a new method of conducting business, but in reality, technical innovation is taking place behind the scenes. It is the responsibility of the patent attorneys to recognise these innovations and present them to the patent office in the most effective manner possible. Whether it is a technical challenge or an abstract challenge, in the United States you cannot patent abstract concepts. However, in practise, determining whether an idea is abstract or not is similar to determining whether something is pornographic or artistic you can tell the difference when you see it. Instead, the key question is whether the idea represents a technical innovation that is, whether it required the use of technology and the application of that knowledge in a novel and inventive way. You cannot patent an abstract concept.

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TECHNOLOGY USING BLOCKCHAINS:

Blockchain technology has enormous potential to benefit a number of industries[2] with its special blend of qualities, including as decentralisation, immutability, and transparency. We see promising applications for this technology in academia and science. This paper aims to demonstrate how Blockchain Technology is especially pertinent to open science. Technology has received the vast majority of attention in business and media headlines[3] pertaining to the advancement of electronic currency. Examples include the well-known market capitalisations of Bitcoin, Litecoin, Dash, and Monero. Blockchain technology is not, however, just for digital money. There are already blockchain-based applications in industry and the public sector, such as crowd funding[4], tracking goods in the supply chain[5], authentication[6] and voting services[7]; many more are in the process of being developed[8]. A research was released by the German Fraunhofer Institute for the Analysis of Trends in Science and Engineering (INT)[9] demonstrating that applications employed in the financial industry are now where blockchain technology is most frequently encountered. The exchange of units of value without middlemen is a typical use case for blockchain technology in this industry.[10][11]. Examples of this include the aforementioned cryptocurrency and other programmes that, for instance, let people list and sell their digital possessions like artwork or sensor data on the open market[12] or enabling land transfers without the need for a notary[13]. The financial industry's role in establishing blockchain technology appears evident given that cryptocurrencies are its first practical implementation. However, in recent years, other industries' interest in this technology's potential has led to many new projects. The development of blockchain technology is still in its infancy because there are no standards or commonly used frameworks.

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On how blockchain technology might be utilised to solve current scientific issues like the repeatability of results from published publications and studies, there are scholarly sources (but much more grey literature). Blockchain technology can offer transparency to all users at every step taken in the system because of immutability, limited functionality, and a clear record of all transactions. As a result, it is technically challenging to build an environment where there isn't a reliable authority. Decentralisation enables researchers to create their own open, open science-based ecosystem for research data, metadata, and communication. For us, the ability of the general public to engage in, cooperate on, and contribute to science defines open science above all else. The outcomes of these initiatives, including research data, methodologies, processes, and studies, are openly available for reuse and replication.

By utilising its capabilities, blockchain technology can also improve the validity of research and researcher collaboration in intricate scientific initiatives. With a unique engineering architecture that enables the technology to adapt to a wide range of use cases, Blockchain technology distinguishes apart from other systems. For instance, depending on the goal, developers can create blockchains for open or private access along with different governance frameworks. Cryptocurrencies, for instance, offer the complementary and distinctive potential to develop economic models and incentives for users or entire communities, which goes beyond a technological perspective. But in addition to blockchain technology, other technologies can be used for open science. The peer-to-peer data synchronisation protocol Dat is one illustration[14] it can serve as a platform for scientific communication and provides immutable and decentralised storage[15]. This protocol draws inspiration from a number of current technologies, notably BitTorrent[16]. The Open Science Framework is another method that supports open science but is not blockchain-based (OSF)[17] and OPERAS[18] platforms for study and cooperation, OPERAS, and the Zenodo open access repository[19], infrastructure for scientific data supported by the European Science Cloud (EOSC)[20] and F1000 Research publishing platform[21].

At the opening of this post, we wanted to be clear that blockchain technology is just that a technology. It is not a panacea for every issue in science that we are now facing. Some issues can't be resolved by technology alone; instead, people impacted must reconsider their routines, actions, and procedures. This may even lead to privileges being given up by researchers in rare circumstances. Commenters have also criticised

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the unscientific application of blockchain technology[22]. According to Hartgerink, blockchains, which are founded on free market principles and artificially increase scarcity, can potentially aggravate inequality. The consensus principle, which serves as the fundamental standard for what constitutes truth in a blockchain, is another area of criticism. First, a so-called 51% attack can always be used to take over a blockchain. Additionally, and more philosophically, Hartgerink[23] challenges if there should be agreement on scientific ideas or theories.

Suppose the inventor applies and mentions money or digital currency. In that case, the application will immediately be rejected since it doesn't sound like what is proposed or doesn't distinguish from being a new currency, on the one hand, while still making a valuable contribution.

It is essential for inventors who are thinking about trying to obtain patent protection for a technology to work with a patent practitioner because there are very territorial aspects to patent practice. This is true not only for the type of technology that has some understandings but also for what might work in one country, what might be allowable, what might get through to grant in one country, may not be patentable and allowable in another. The bottom line is that the inventor should make sure that they are working with someone who is a legal provider, who understands the inventor's technology, understands the industry properly and is obviously aware of the legal nuances and practices in the particular territories that the inventor want to seek protection.

AREAS OF TECHNICAL COMPETENCE INVOLVED IN BLOCKCHAIN PATENT APPLICATIONS:

The things that are most frequently observed are things like data transport and cryptography. One of the major ones is cryptography, which is at the core of bitcoin and is what keeps it secure and enables its operation. Although cryptography is a complicated subject, there is much latitude in terms of what you can do and cannot do to make things really secure, so there has been much innovation in the area of how to use this immutable distributed global ledger while maintaining security for all activity taking place outside of the ledger. How can one ensure that what is occurring outside of the ledger is what should be appearing there? Additionally, much innovation in blockchain applications has been noted. Where the blockchain itself is being used to enable all kinds of novel functionality that people had never seen before bitcoin existed. These features include scale-ability, immutability, global aspect, and public aspect.

Patents have been filed for inventions that use blockchain technology but not for the blockchain itself? However, blockchain technology has already been created, and Satoshi's white paper is where it first appeared[24].

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[22]Hartgerink, C. (2018). Concerns About Blockchain for Science. Medium. Available online at: https://bit.ly/2kloBDB

[23]*Ibid*

[24] Bitcoin: A Peer-to-Peer Electronic Cash System Satoshi Nakamoto satoshin@gmx.comwww.bitcoin.org

IS BLOCKCHAIN GOING TO GET ANY ATTENTION?

Within the BSP community as well as both[25] and for being one of the biggest filers of blockchain patent applications and blockchain's IP portfolio in the larger digital currency market. N-Chain[26] is one of the world's largest and oldest patent holders for blockchain-related inventions. N-Chain has more than 150 members. It is only natural that there will be a lot of inventions in a company like n-Chain given that everything that is happening today is using cutting-edge technology, breaking new ground, and innovation. Judging by the work that has been done in this field, done well, n-Chain is from the very beginning aware that they are breaking new ground in terms of technology and very early on recognises this.

Anyone can ask themselves, "If a company files 1,000 new patent applications in a year, will all of those applications be determined to be really high technical merits inventions or will there be some lower quality applications in there?" If so, attention should be paid to the quality of the applications rather than the quantity, which should be prioritised over quantity.

A LOOK AT PATENT INFORMATION ON BLOCKCHAIN TECHNOLOGY

The cost of patents means that, it requires huge money to build a strong patent portfolio. If this money is spent on patents, the firm won't be able to function, so what's the use of an inventor being able to obtain a patent portfolio but not knowing what to do with it?

The innovator must wait until they have enough money before they can begin. There are various beginning stages, but once funding has been obtained, the inventor can proceed.

FREE BLOCKCHAIN USE VS. INTELLECTUAL PROPERTY:

Investors will be aware that an inventor has some ownership of the technology they have created if they conduct any kind of due diligence on them. If the same inventor raises capital, they will also be aware of the inventor's intellectual property position, and if they believe that the inventor needs significant funding to proceed, they will need to ask the inventor about this. As a starting point for any company and on a more personal note, the researcher discovers that having an established pattern portfolio makes it easier to talk and the inventor is less concerned with infringement of the inventor's rights when speaking with companies about potential partnerships or even when they are going to be a client for and chain. On sometimes, it can be difficult to tell who arrived. Who thought of that? It is actually simpler for parties to communicate and work together when they have already taken actions to protect what they believe to be their own intellectual property if each party has already put in place the proper procedures, the right advisors, and timely records their intellectual property.

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[25] BSP Financial Group Limited is an iconic and unique bank in Papua New Guinea and the Pacific, recognised for its strong commitment to the region and its Melanesian uniqueness.

[26] Founded in 2015, n-Chain advances the potential of blockchain technology through ongoing research and development of patentable inventions and commercial solutions. The Company has an IP portfolio that includes over 250 patent families and over 1,000 whitepapers. N-Chain leverages this expertise to offer commercial solutions such as digital payments and Kensei, a developer-friendly blockchain interface. Kensei is designed to drive adoption of the BSV blockchain by removing the complexities in creating and verifying tamper-evident data and processes.

MISCONCEPTION ABOUT THE USE OF OPEN SOURCE LICENSES:

There is a misunderstanding that stems from the use of the phrase "open" that open source at all times entails free-for-all; however, this isn't always the case. There are many different open-source licences available. Still, they all essentially imply that the creator of the software agrees to a set of terms and obligations in exchange for the right to use it. As such, it is important for anyone planning to use open-source software to know the obligations associated with the specific open-source licence they may choose to use. Because occasionally people fail to read those requirements and the subtleties carefully, they are surprised to learn that the open source licence was not nearly as open as they had first thought. When considering the use of open source, the party must be certain of their actions and the licence. Make sure you are dealing with a lawyer who is knowledgeable about intellectual property and technology legislation and who can explain the distinctions between the various licences and how to choose the effective one. Seek good counsel from an expert. It is entirely true that open source does not automatically imply that there are no intellectual property rights that can be accepted through the open source licence. Still, inventors should exercise caution since the area is reportedly filled with mines.

For instance, if a piece of software is created and made available for use under an open-source licence, the person who originally owned the copyright will also possess any patents covering the underlying technology and anyone who makes use of the licence to use your programme is still subject to its conditions and retains ownership of the intellectual property. One thing that should be observed is that the different intellectual property rights provide different forms of protection; copyrights will literally just protects the written form or the representation of the intellectual property. What is appearing on the screen or them or the printed page and so, on if attempts are made to change or make any sort of changes to that written form, then you can potentially navigate around the copyright protection that patent protection as discussed earlier, it gives you protection for the underlying fundamental concept and algorithms and the functionality so that there is different forms can be a presence in the same invention and in the same explanation or written description of that invention so the white paper copyright protected. But other types of rights attach for example when writing a paper, copyright ownership essentially exists at that moment and thinks it in a tangible medium of expression.

INNOVATION V. ASSISTING BUSINESS GROWTH IN THE INDUSTRY:

Patenting digital currencies and blockchains stifles innovation. When research is well-funded, innovation advances because it would be difficult to do so without the assurance of investors that their money will be wisely spent; both types of projects—commercial and open source—have a place in the world. But it is necessary to demonstrate adequate handling of intellectual property rights to draw those commercial ventures. Anybody who is genuinely investing in research would not be or once to advance the technology than that just comes hand-in-hand with hundred patent protection. That will be the privateer research institutes, firms, and colleges.

From a different angle, a company that has been operating for a few years with an entity that is active in the payments industry and is well-known for its power for wealthy organisations such as banks, payment

providers, and so on, as well as companies that had an elementary idea a few years ago and are still doing well often have straightforward ideas that are the most powerful ones.

There is an example of how patent protection can actually encourage and enable innovation to flourish when there is a small, innovative company like that. It gives them the slingshot they can use against that giant, and they can then continue to innovate and grow their portfolio by adding to their ideas, more research, and more innovation, growing that technology feet and back into the economy, and so on.

CONCLUSION:

While writing this study piece, the question of whether patents are beneficial for businesses or whether they should open source their work arose. Is there a universally accepted solution to this question, or do some businesses in the patent industry combine the two? No one solution works for everyone, but there are things like open source patents and other kinds of intellectual property like copyright, patents, trade secrets, etc.; they all go hand in hand and there is a need for a customised approach because it really depends on the technology, the business schools, for example, if the innovation is not a platform that an inventor wants people to use the inventor will be going further down the road of licencing. However, if the invention is something that will be entirely secret and impossible to reverse engineer, the inventor may want to forego patents. However, if it is something that someone could put enough effort into and reproduce, the inventor may want to think about patents and then take a broader view to see how the other types of intellectual property fit in.

For instance, despite having a sizable intellectual property portfolio, Microsoft makes part of its software available for free use on the condition that it runs on the Windows Operating System. Even though various patents and other copyright interests may cover the rights connected to them. There are potentially thousands of patents that cover the MS office software that a person uses. When considering patent and intellectual property protection in relation to blockchain technology, and you have an idea of where this thing is going to be in the next three to five years in terms of companies' patent portfolios, what we are going to see over the next few years is gaining some clarity there has been this exponential growth in patent filings the sort of the significant patent holders are sort of switching quite regularly or is not clear which at the moment which provisional patents are the most important. In the upcoming years, many patent owners will need to start communicating with one another and providing clarity in the market.

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