



# BOWMANS

THE VALUE OF KNOWING

## CRYPTOCURRENCY AND IP IN AFRICA

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# INTRODUCTION

## Background

- There has been a long-standing debate surrounding protection of blockchain technology, and specifically on whether traditional models of IP protection suffice to protect cryptocurrency platforms.
- Opponents of traditional IP models argue against exclusivity, on the basis that this has enabled continuous innovation on blockchain platforms due to their open source nature.
- Specifically in relation to cryptocurrencies, critics argue that the exclusivity granted by traditional IP models is an antithesis of everything decentralized currency stands for.
- Critics have also argued that blockchain technology and cryptocurrency already have their own self-policing mechanisms.

# INTRODUCTION

## Overview of Possible IP Rights

Copyright	Underlying code (where it is not open source)
	Databases (where applicable)
	Access keys
Patents / Utility Models	Transaction protocols, processing and validation methods
	Security, storage and identity management
	Digital wallets
	Mining, ledger data mining and analysis
	Consensus methodologies
	Merchant services
Trade Secrets	All aspects not available in the public domain
Trademark	Brand names

# Key Points To Consider

## Patents / Utility Models

The first blockchain application, Bitcoin, was not patented, thereby allowing numerous others to follow.

The jurisprudence determining whether financial technology is patentable subject matter has been constantly evolving with difficulties in establishing clear delineations of what is patentable and what is not patentable. This is primarily attributable to challenges in establishing **novelty**, bearing in mind that the open source nature of most code has allowed the development of innumerable innovations.

Despite an increase in patent filing activity, few are granted:

Keyword	Published Applications	Issued U.S. Patents
<ul style="list-style-type: none"><li>• blockchain</li><li>• cryptocurrency</li><li>• bitcoin</li><li>• Ethereum</li><li>• distributed ledger</li><li>• smart contract</li></ul>	<ul style="list-style-type: none"><li>• 522</li><li>• 373</li><li>• 1126</li><li>• 74</li><li>• 204</li><li>• 160</li></ul>	<ul style="list-style-type: none"><li>• 61</li><li>• 55</li><li>• 279</li><li>• 6</li><li>• 7</li><li>• 11</li></ul>

# Key Points To Consider

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## Trade Secrets

Traditional industries work on products in secret for many years until they are released. In contrast, many blockchain entrepreneurs explain what they are doing before they have anything to release. Some even provide that information before they have started to build anything. Others are able to use those ideas and create competing products.

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Although not a registrable right, protection of trade secrets may be an attractive common law remedy to the platform builder to guard the code and confidential backend server processes. A developer should however be aware that trade secret protection may prevent collaborative efforts with other entities and do not protect against independent development of the secret innovation by third parties.

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# Key Points To Consider

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## Copyright

The key for blockchain's rapid development is that the source code is open source. People are free to copy the code and improve upon it. A deliberate decision is made not to use copyright law to protect the source code, unlike proprietary software.

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Where open source code has not been used, platform builders may consider placing digital locks on copies of their works to provide additional security and heighten enforceability of their Copyright.

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Where the development has been commissioned, the rights between the parties need to be clearly delineated establishing to whom the copyright in source code vests.

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## Trademark

Given the nature of the business cryptocurrencies operate in, a certain goodwill and visibility is created by a good cryptocurrency platform, therefore securing trademark rights is essential to avoiding confusion in the market.

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Trademark filing through the Madrid system seems most prudent, to secure protection in as many jurisdictions as is possible.

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# Key Points To Consider

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## **Interoperability & infringement**

Users are keen to have interoperability between multiple systems, allowing transfer of cryptocurrency values across platforms.

Developers must consider the interoperability of the platforms they conceive, and what impact interoperability will have on the disclosure of proprietary aspects of their platforms.

In building around interoperability of third party systems, developers must be careful not to infringe on the proprietary aspects of those third party systems.

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## **Data Protection**

There has been massive growth in the complexity and volume of trans-border data flows through blockchain technology. This is a key concern in cryptocurrencies, as these comprise users' financial data.

Global best practice rules should be observed, especially concerning security, cross-border transfer of data and establishment of data centres.

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# REGULATORY' CONCERNS

## Lack of Regulatory Sandboxes Hampers Innovation

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Current legislation on emerging technologies is piecemeal, archaic and two steps behind. Regulatory sandboxes typically involve temporary relaxations or adjustments of regulatory requirements to provide a “safe space” for startups or established companies to test new technology-based financial services in a live environment for a limited time, without having to undergo a full authorization and licensing process.

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No such regulatory sandboxes have been tested in Kenya. Currently, the government is currently considering public views on the implementation of blockchain technologies generally, with the Central Bank taking a cautious approach to use of cryptocurrencies. Cryptocurrencies are not considered to be legal tender and users have been cautioned that no recourse to the CBK will be available in the event of a loss.

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This cautious approach by the CBK has lead to traditional industry players (banks and other established financial service providers) shying away from developing innovations on cryptocurrencies.

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Most innovative activities we have seen are limited to foreign multinationals such as IBM.

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# REGULATORY' CONCERNS

## IP Registration Challenges

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In addition to the cautious approach adopted by government agencies, IP protection of cryptocurrency-based innovations is marred by multiple issues:

While software innovations are patentable in Kenya, the lack of specialized examiners skilled in this particular areas means that patent applications lie un-examined for years on end.

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South Africa, among numerous African countries, practices a depository patent system, which only requires an applicant to deposit their patent claims with the registrar. The claims are not examined, but rather are deemed to be registered on the lapse of a particular period. Patents secured in this manner are considered to be weak as they are more often than not cancelled upon examination when enforcement action is instituted by a patent holder.

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We generally advise developers, where eligible, to pursue registration in the US.

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**THANK YOU**

