

Blockchain & Cryptocurrency

Blockchain technology is ripe for investment, and Marshall Gerstein has the expertise and experience to help clients in all stages of innovation. Blockchain and other distributed ledger technologies support numerous rapidly growing industries with massive potential. The global cryptocurrency market reached a market capitalization of over \$1.5T in 2021. Decentralized finance or DeFi, has grown to over a \$100 billion industry. OpenSea, the largest non-fungible token (NFT) marketplace, has a valuation of \$1.5 billion and sold \$160 million in digital assets in June 2021. Andreessen Horowitz, a top-tier venture capital company, recently invested \$100 million in the NFT marketplace, highlighting the legitimate and lasting utility of NFTs and other distributed ledger technologies.

Put simply, a blockchain is an immutable database that collects information or transactions together in blocks and links them to previously filled blocks, forming a “blockchain” of data. Blockchains are decentralized; multiple entities can view and submit transactions to the blockchain and multiple entities validate each transaction to ensure the transactions follow a set of consensus rules. In a public blockchain, all transactions can be viewed using a personal node or public blockchain explorer, making the system highly transparent.

Blockchain is a relevant technology to clients in cryptocurrency, real estate, finance, DeFi, marketing, Internet of Things, Web 3.0, virtual reality, gaming, and other software and Internet-based industries. Companies can use bitcoin, a peer-to-peer electronic cash system, or other cryptocurrencies to transparently make and receive payments. Insurance companies, real estate groups, and others can use smart contracts supported by a blockchain network to facilitate, negotiate, or verify contract agreements. Smart contracts can automatically carry out the terms of agreements, decreasing the need for intermediaries. Companies can also use blockchain technology to maintain the integrity of the supply chain by verifying the authenticity of products based on their origin.

Marshall Gerstein’s team of professionals have significant experience in blockchain technologies. We successfully advise and assist clients in protecting blockchain innovations, such as cryptocurrency and others, in the U.S. and around the world. Marshall Gerstein offers both technological and intellectual property law knowledge to help clients with all of their blockchain-related IP needs.

Legal aspects of blockchain inventions in the United States

Blockchain inventions are generally patentable in the United States, however, because they involve computer and software-related features, care must be taken regarding the U.S. Supreme Court's subject matter eligibility test under 35 U.S.C. § 101, as provided in *Alice Corp. v. CLS Bank International*.

In general, in view of *Alice*, when considering blockchain inventions for patent protection, a patentee should focus on the unique technical features that may be identified in an blockchain invention and related components. These may include, for example:

- The trustless, immutable, and secure storage of the data
- The type of distributed ledger (e.g., improvements or adjustments to the distributed ledger architecture, layers added to the distributed ledger for security or other purposes, etc.)
- The type of consensus algorithm (e.g., improvements or adjustments to the consensus algorithm and the reasons for choosing or modifying a particular consensus algorithm)
- Adjustments to the distributed ledger to improve privacy, security, or the transaction rate