ownership of the assets, without the use of a centralized server. Since software and other digital content licenses concern digital assets, they can be granted, tracked, and revoked on the blockchain via the use of NFTs. NFTs and the blockchain therefore provide a mechanism which is used to verify and authenticate software licenses, digital content licenses, and other types of licenses for digital assets. Thus, no centralized license server or license keys are required. Smart contracts may be used to define and enforce the terms of the licenses, at any level of granularity desired by the licensor.

[013a] In a first aspect, the present disclosure refers to a computer implemented method for using tokens and associated smart contracts on a blockchain to manage software licenses, the method comprising: responsive to a user attempting to access a piece of software, automatically providing blockchain transaction credentials from a wallet of the user to the piece of software, by a computer system; executing a smart contract associated with a blockchain token-based license for the software, by a computer system, the executing smart contract automatically performing a license verification for the user using the provided blockchain transaction credentials from the wallet of the user, the smart contract defining terms of the blockchain token-based license, the terms being defined by a licensor of the piece of software; and responsive to results of the verification, automatically enforcing terms of the smart contract, by a computer system.

[013b] In a second aspect, the present disclosure refers to a computer implemented method for using tokens and associated smart contracts on a blockchain to manage digital rights licenses, the method comprising: deploying a token-based license for a piece of digital media and an associated smart contract on the blockchain, the smart contract defining terms of the token-based license, the terms being defined by a licensor of the piece of digital media; and executing

a smart contract associated with the token-based license for the piece of digital media, by a computer system, the executing smart contract automatically performing a license verification for the user using provided blockchain transaction credentials from a wallet of the user; and responsive to results of the license verification, automatically enforcing terms of the smart contract, by a computer system.

[014] The features and advantages described in this summary and in the following detailed description are not all-inclusive, and particularly, many additional features and advantages may be apparent to one of ordinary skill in the relevant art in view of the drawings, specification, and claims hereof. Moreover, it should be noted that the language used in the specification has been principally selected for readability and instructional purposes, and may not have been selected to delineate or circumscribe the inventive subject matter, resort to the claims being necessary to determine such inventive subject matter.

Brief Description of the Drawings

[015] Figure 1 illustrates a network environment in which an NFT-based DRM processing system can operate, according to some implementations.

[016] Figure 2 illustrates the operation of an NFT-based DRM processing system, according to some implementations.

[017] Figure 3 illustrates steps of the operation of an NFT-based DRM processing system, according to some implementations.