SMARTWITNESS FOR SOFTWARE PACKAGE DISTRIBUTIONS

ABSTRACT

The present invention provides a blockchain-based software distribution method for distributing a software package of a developer through a distributor. A user of the software package obtains the same from the distributor through a package manager on the user's device, and a security provider accessible to the software package for security assessment. The method comprises receiving a request from the developer for a witness contract for the software package from a Certificate Authority (CA), the request includes developer's account for declaring ownership over the software package; obtaining evaluation from the CA a legitimacy and identity of the request through out-of-band procedures; receiving the witness contract pertaining to the software package from the CA; registering a hash value for the witness contract by making a call through a transaction which is mined on a blockchain; receiving a security score of the software package based on a security assessment done by the security provider; publishing the software package along with a verification proof, *proof*, wherein the proof comprises a block ID, proofs of the software package's registration, the developer's ownership, the security score and an expiry of the software package; distributing the verified proof to one or more databases in the blockchain.

FIG. 2A for publication.