

PROCESSING AND STORING BLOCKCHAIN DATA UNDER A TRUSTED EXECUTION ENVIRONMENT

Abstract

Disclosed herein are methods, systems, and apparatus, including computer programs encoded on computer storage media, for processing blockchain data under a trusted execution environment (TEE). One of the methods includes receiving, by a blockchain node, a request to execute one or more software instructions in a TEE executing on the blockchain node; determining, by a virtual machine in the TEE, data associated with one or more blockchain accounts to execute the one or more software instructions based on the request; traversing, by the virtual machine, an internal cache hash table stored in the TEE to determine whether the data are included in the internal cache hash table; and in response to determining that the data is included in the internal cache hash table, executing, by the virtual machine, the one or more software instructions by retrieving the data from the internal cache hash table.

FIG. 3