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(54) Title: COMPUTER NETWORK SYSTEMS FOR CRYPTOGRAPHICALLY-SECURED, TOKEN-BASED OPERATIONS AND METHODS OF USE THEREOF

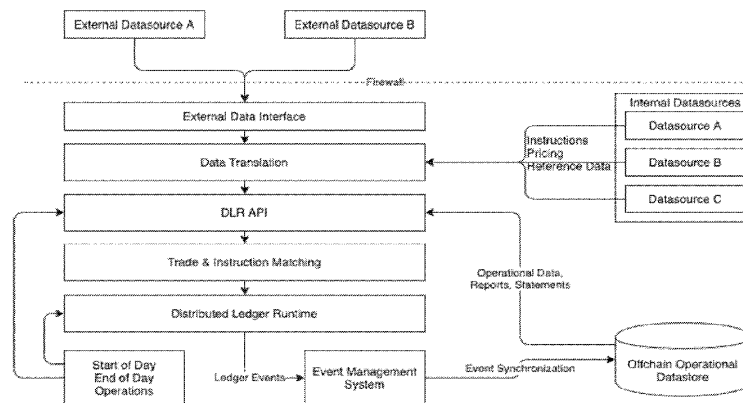


FIG. 1

(57) Abstract: Systems and methods of the present disclosure enable reversible blockchain operations. An operation-reverse operation pair specifies an operation for exchange of a first token for a second token, and a reverse operation for return of the second token for the first token upon at least one condition being satisfied. A self-executing software container (SESC) executes the operation-reverse operation pair according to the condition by detecting a transfer of the first token into a first segregated data structure, and a transfer of the second token from a second token storage to a first token storage. The SESC initiates a transfer of the first token from the first segregated data structure to a second segregated data structure in response to the transfer of the second token. Upon detecting a reverse operation matching the condition, the SESC initiates a transfer of the first token back to the first segregated data structure.

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