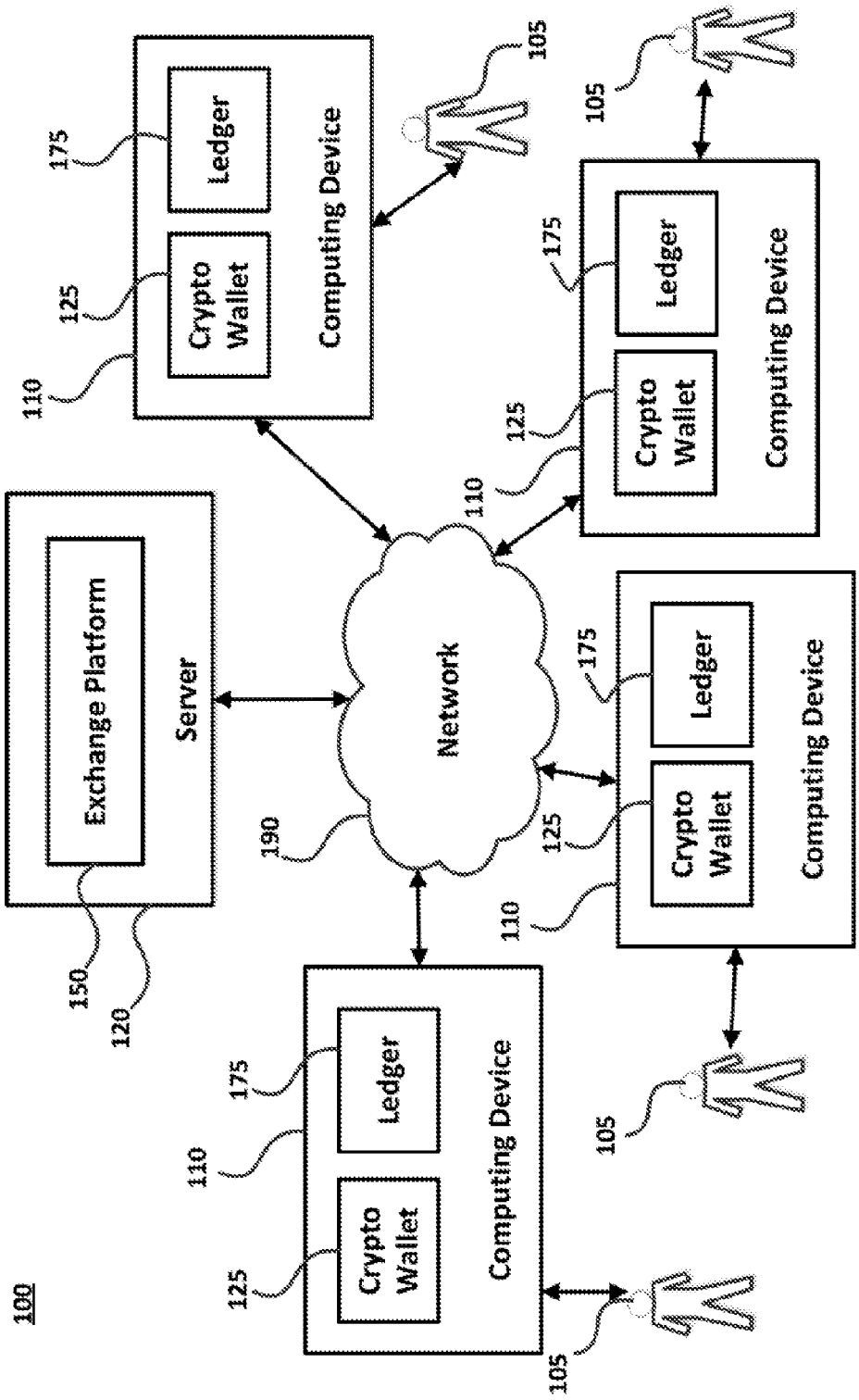

100
Exchange Platform
Server
150
120
Network
190
Computing Device
Crypto Wallet
Ledger
110
125
175
105

FIGURE 1

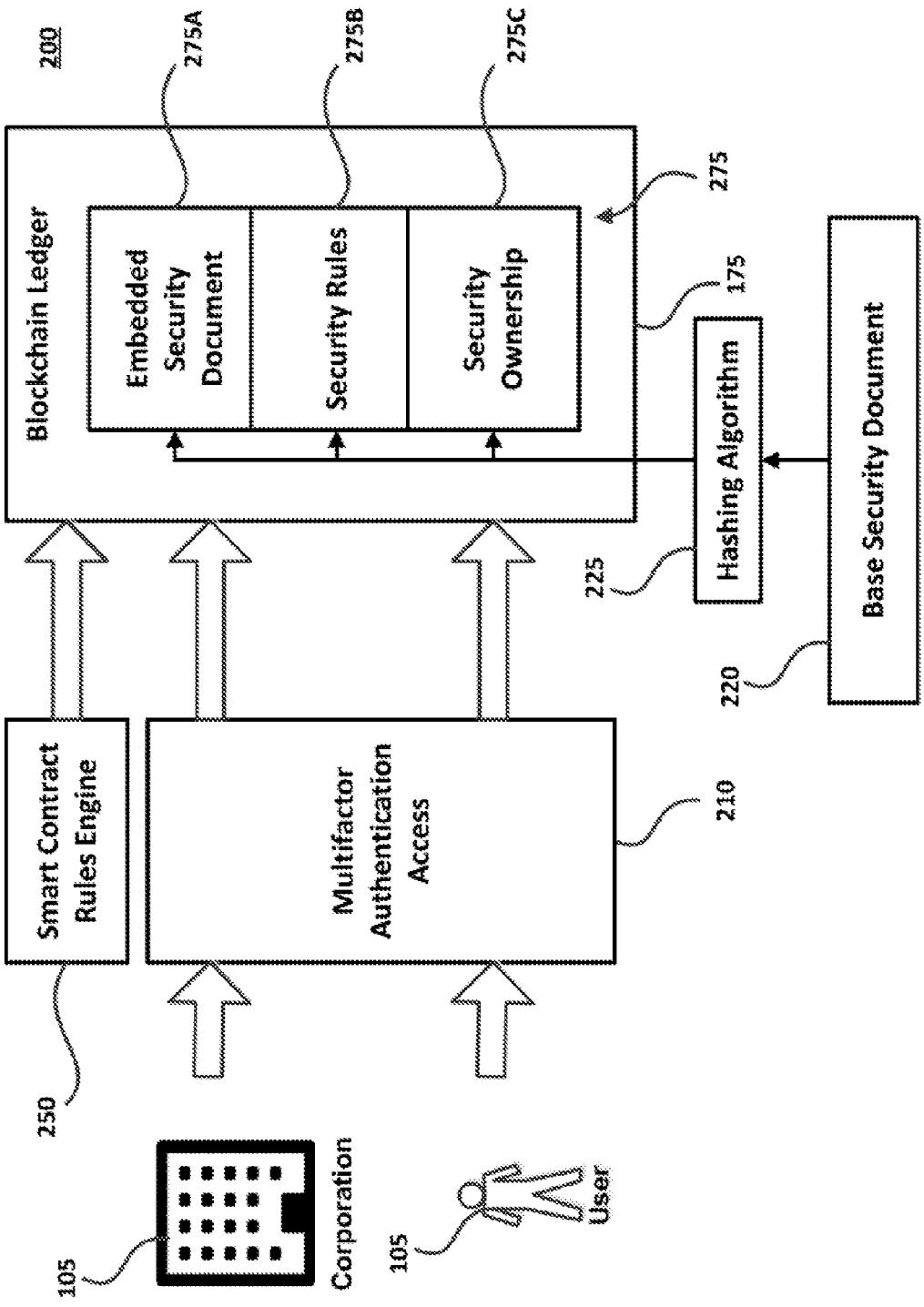

200
275A
275B
275C
Blockchain Ledger
Embedded Security Document
Security Rules
Security Ownership
275
175
Hashing Algorithm
225
Base Security Document
220
Smart Contract Rules Engine
Multifactor Authentication Access
210
250
105
Corporation
105
User

FIGURE 2

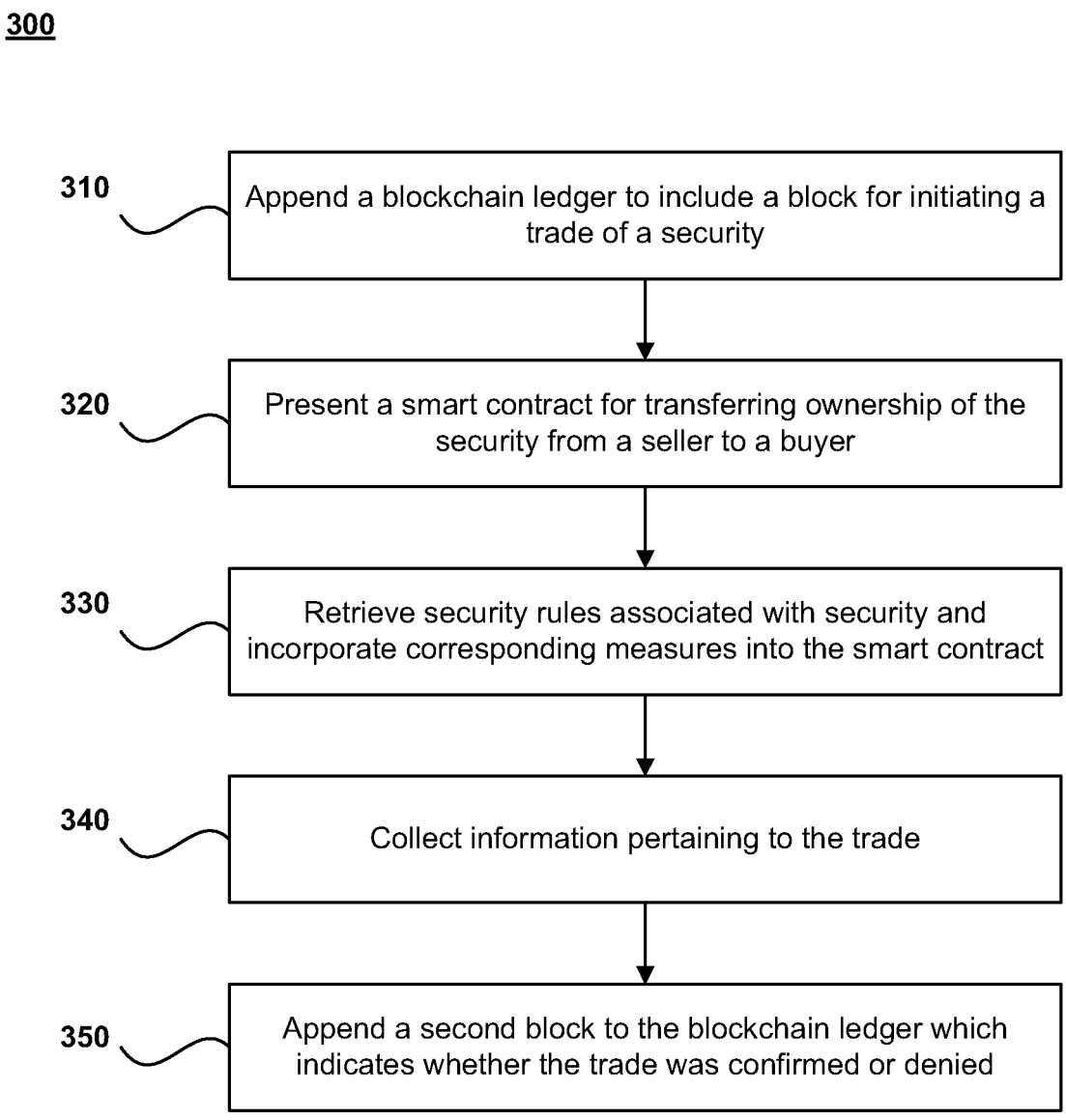

300
310
Append a blockchain ledger to include a block for initiating a trade of a security
320
Present a smart contract for transferring ownership of the security from a seller to a buyer
330
Retrieve security rules associated with security and incorporate corresponding measures into the smart contract
340
Collect information pertaining to the trade
350
Append a second block to the blockchain ledger which indicates whether the trade was confirmed or denied

FIGURE 3

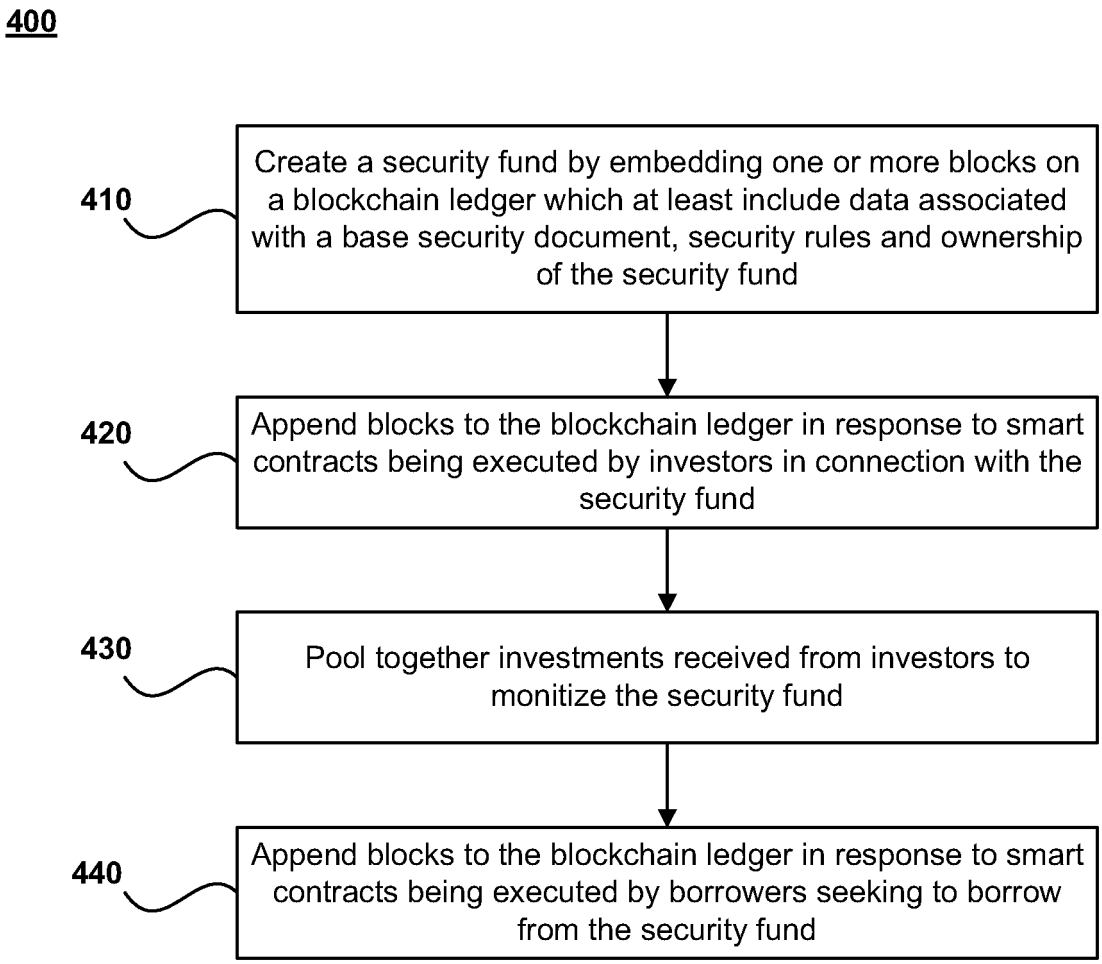

400
410
Create a security fund by embedding one or more blocks on a blockchain ledger which at least include data associated with a base security document, security rules and ownership of the security fund
420
Append blocks to the blockchain ledger in response to smart contracts being executed by investors in connection with the security fund
430
Pool together investments received from investors to monitize the security fund
440
Append blocks to the blockchain ledger in response to smart contracts being executed by borrowers seeking to borrow from the security fund

FIGURE 4

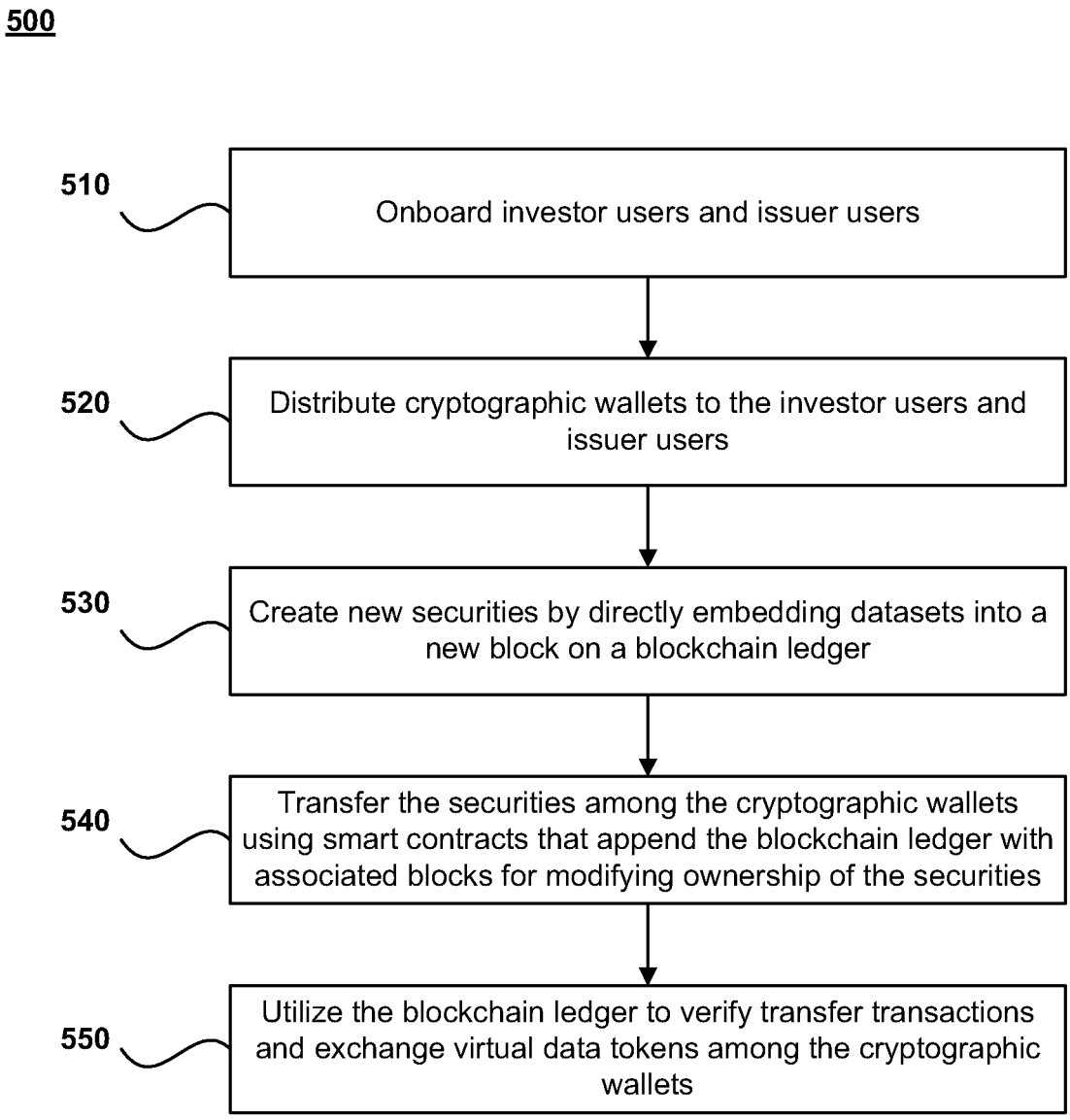

500
510
Onboard investor users and issuer users
520
Distribute cryptographic wallets to the investor users and issuer users
530
Create new securities by directly embedding datasets into a new block on a blockchain ledger
540
Transfer the securities among the cryptographic wallets using smart contracts that append the blockchain ledger with associated blocks for modifying ownership of the securities
550
Utilize the blockchain ledger to verify transfer transactions and exchange virtual data tokens among the cryptographic wallets

FIGURE 5