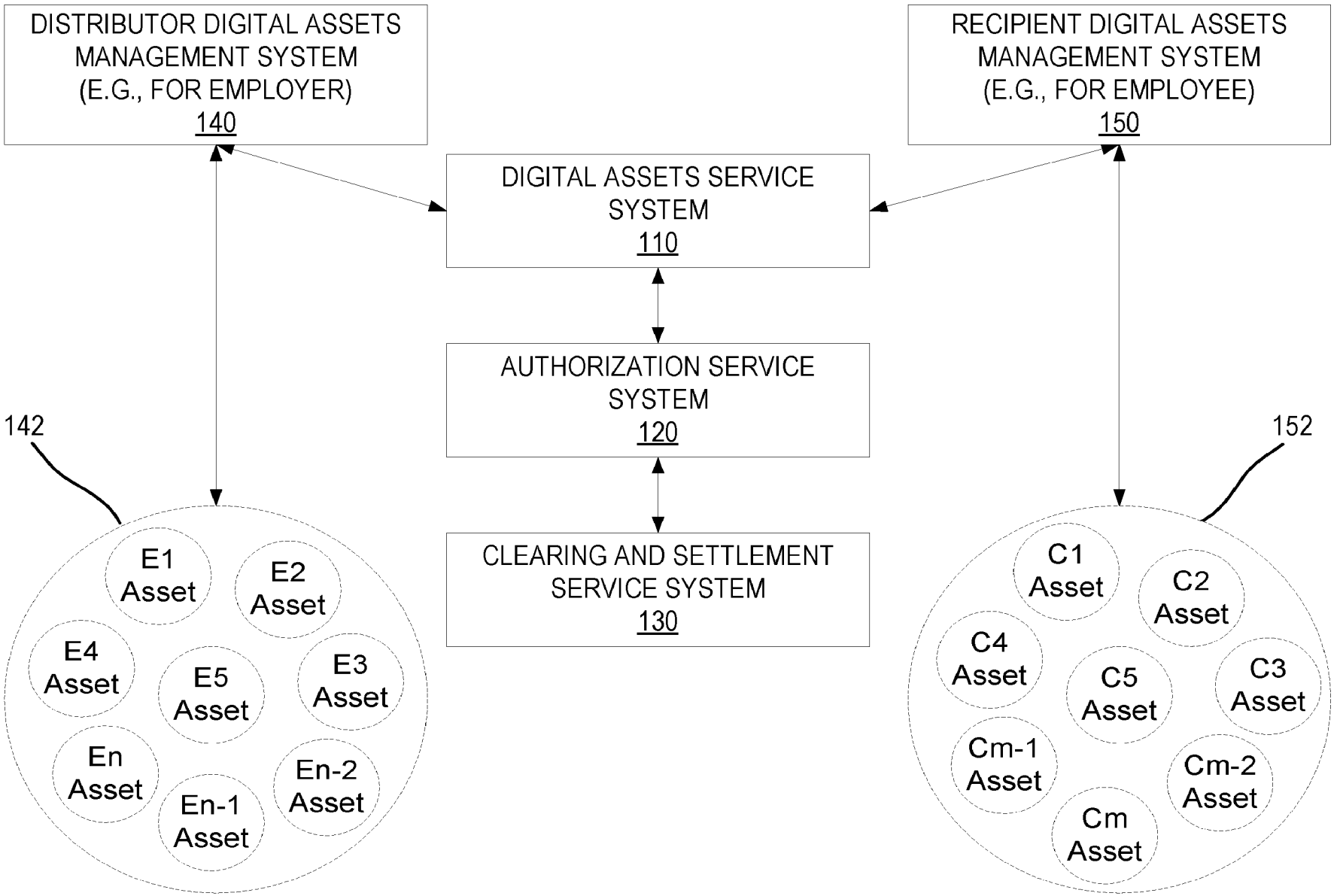
DISTRIBUTOR DIGITAL ASSETS MANAGEMENT SYSTEM (E.G., FOR EMPLOYER)
140
RECIPIENT DIGITAL ASSETS MANAGEMENT SYSTEM (E.G., FOR EMPLOYEE)
150
DIGITAL ASSETS SERVICE SYSTEM
110
AUTHORIZATION SERVICE SYSTEM
120
CLEARING AND SETTLEMENT SERVICE SYSTEM
130
142
E1 Asset
E2 Asset
E3 Asset
E4 Asset
E5 Asset
En Asset
En-1 Asset
En-2 Asset
152
C1 Asset
C2 Asset
C3 Asset
C4 Asset
C5 Asset
Cm-1 Asset
Cm-2 Asset
Cm Asset

FIG. 1

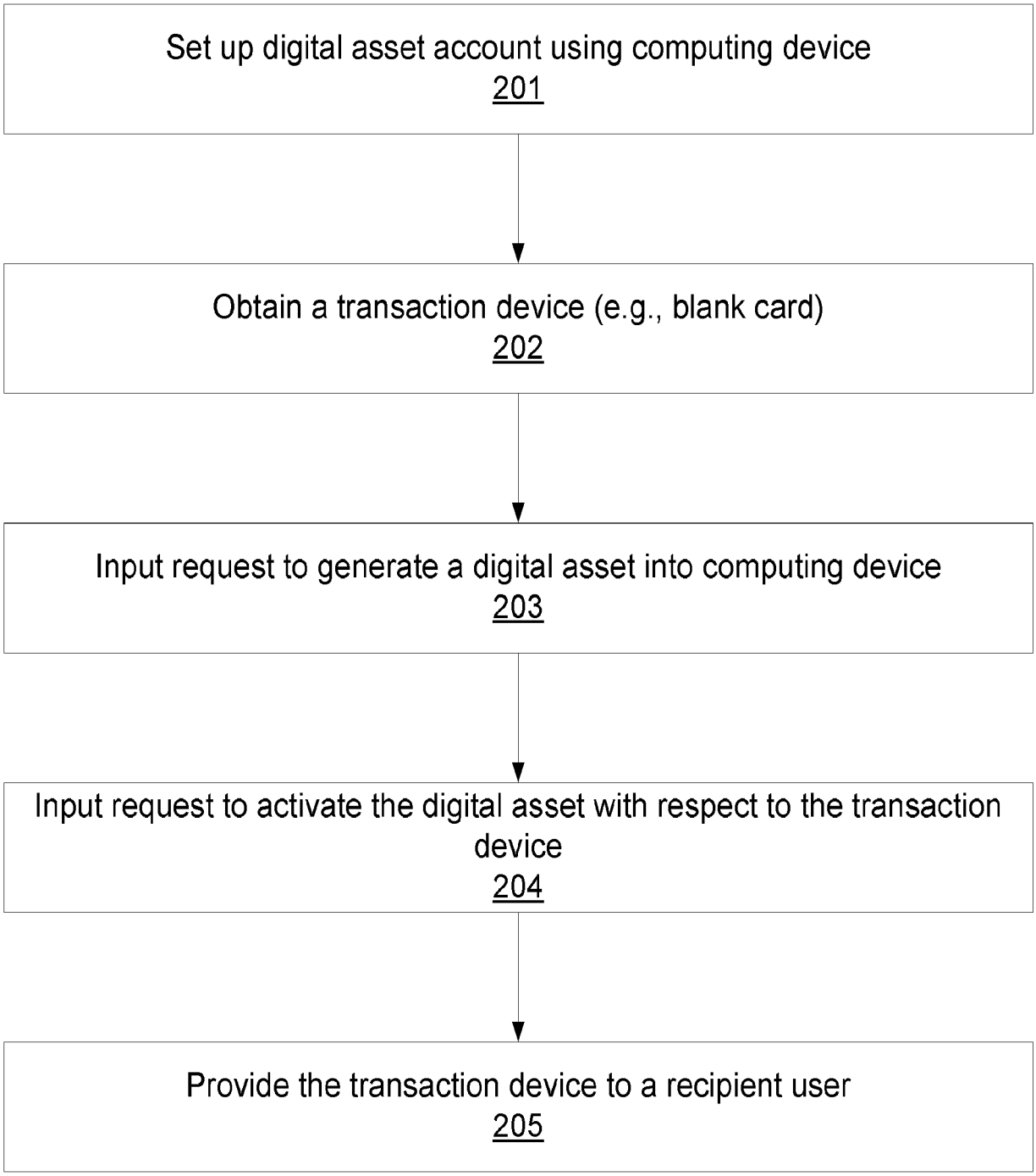
Set up digital asset account using computing device
201
Obtain a transaction device (e.g., blank card)
202
Input request to generate a digital asset into computing device
203
Input request to activate the digital asset with respect to the transaction device
204
Provide the transaction device to a recipient user
205

FIG. 2

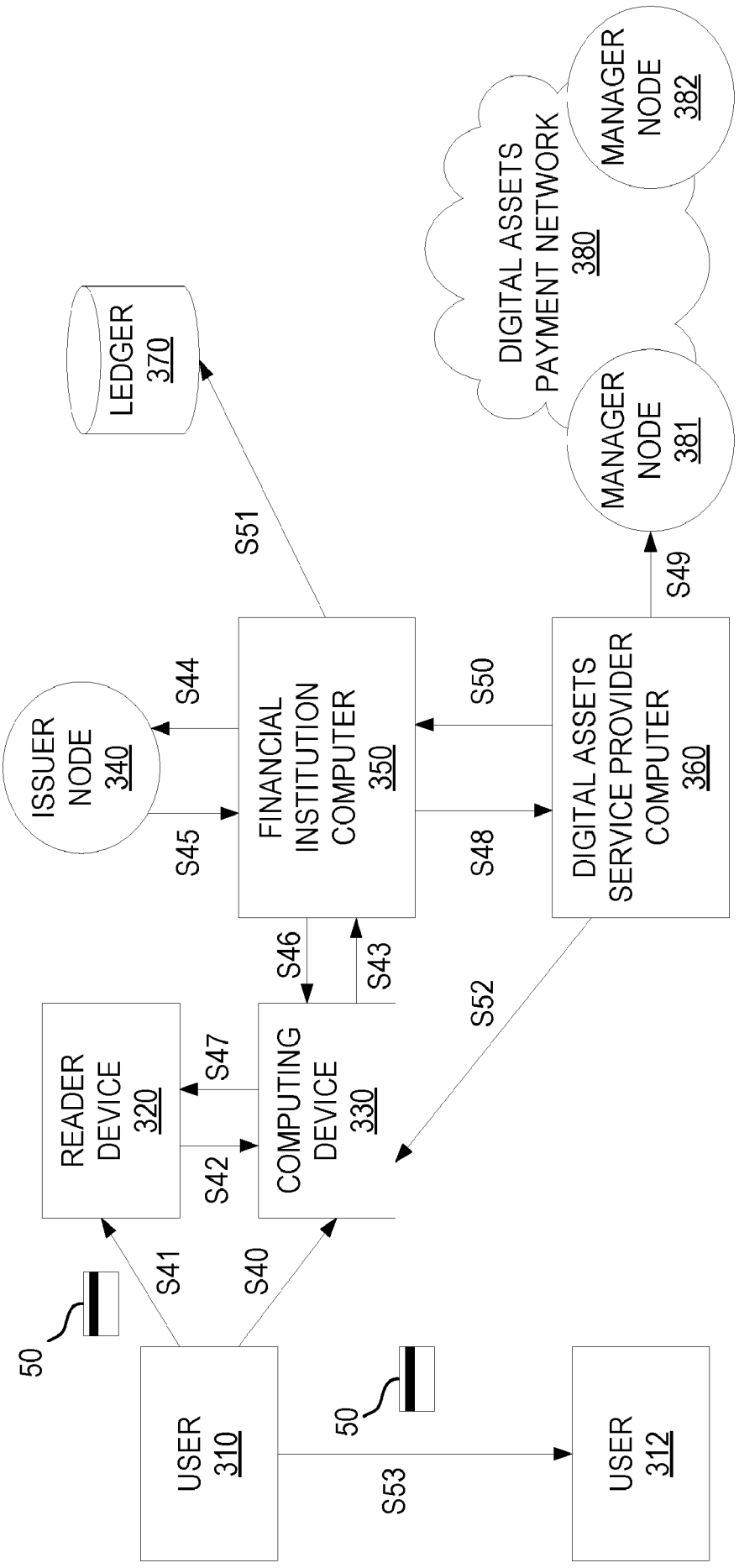
LEDGER
370
DIGITAL ASSETS
PAYMENT NETWORK
380
MANAGER
NODE
382
MANAGER
NODE
381
ISSUER
NODE
340
FINANCIAL
INSTITUTION
COMPUTER
350
DIGITAL ASSETS
SERVICE PROVIDER
COMPUTER
360
READER
DEVICE
320
COMPUTING
DEVICE
330
USER
310
USER
312
50
50
S40
S41
S42
S43
S44
S45
S46
S47
S48
S49
S50
S51
S52
S53

FIG. 3

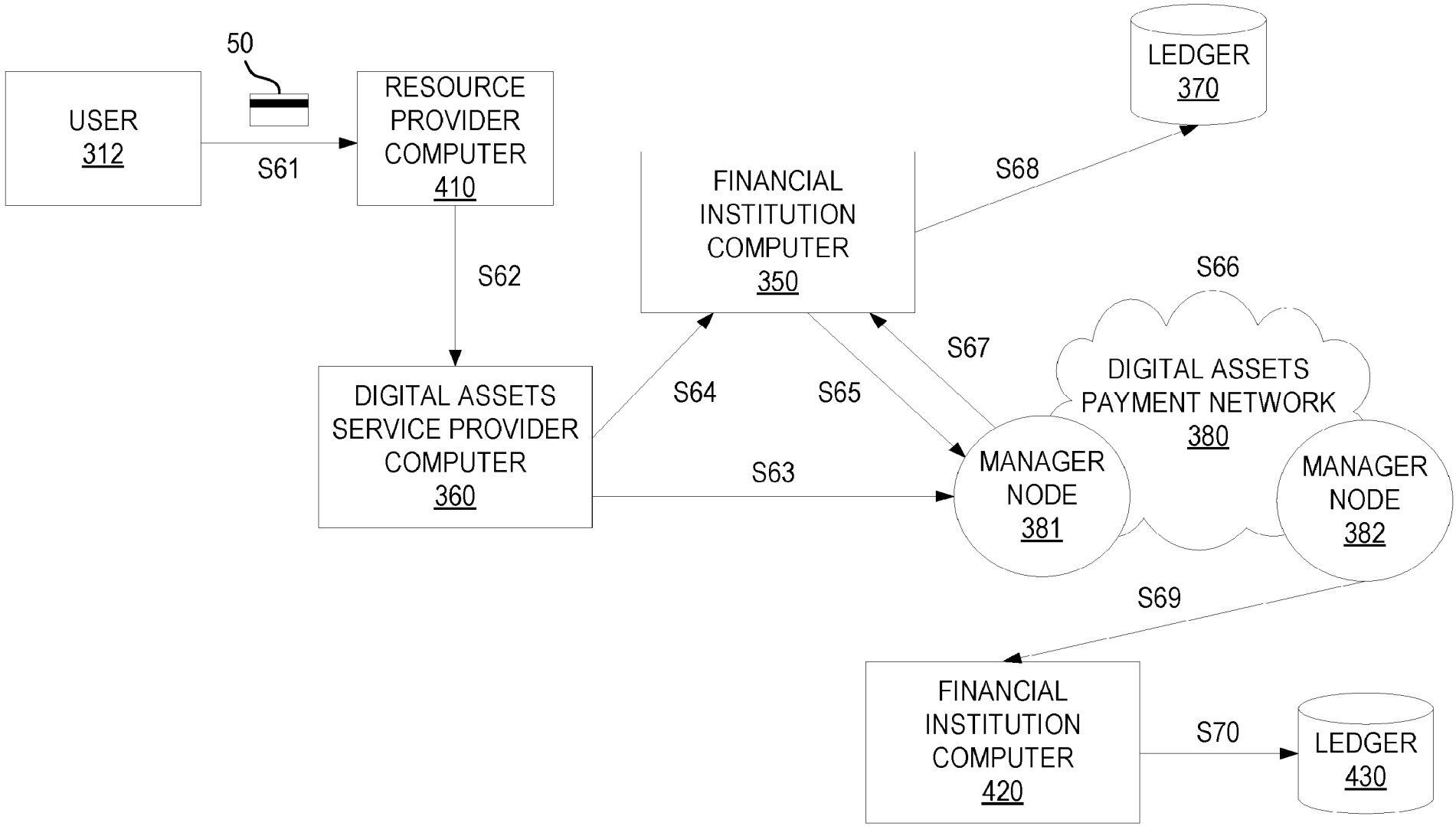
50
USER
312
S61
RESOURCE
PROVIDER
COMPUTER
410
S62
DIGITAL ASSETS
SERVICE PROVIDER
COMPUTER
360
S64
S65
FINANCIAL
INSTITUTION
COMPUTER
350
S68
LEDGER
370
S66
S67
DIGITAL ASSETS
PAYMENT NETWORK
380
S63
MANAGER
NODE
381
MANAGER
NODE
382
S69
FINANCIAL
INSTITUTION
COMPUTER
420
S70
LEDGER
430

FIG. 4

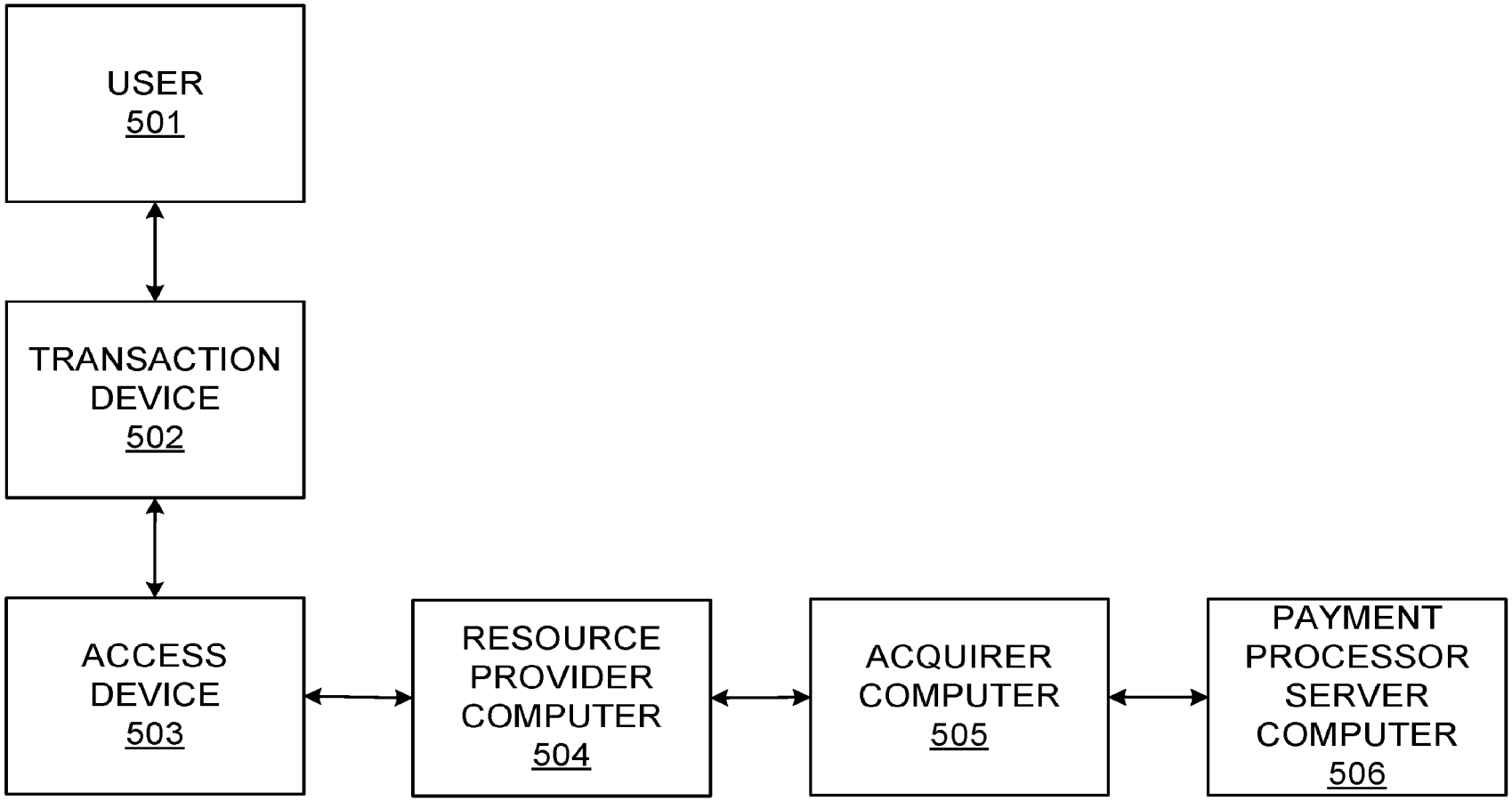
USER
501
TRANSACTION DEVICE
502
ACCESS DEVICE
503
RESOURCE PROVIDER COMPUTER
504
ACQUIRER COMPUTER
505
PAYMENT PROCESSOR SERVER COMPUTER
506

FIG. 5

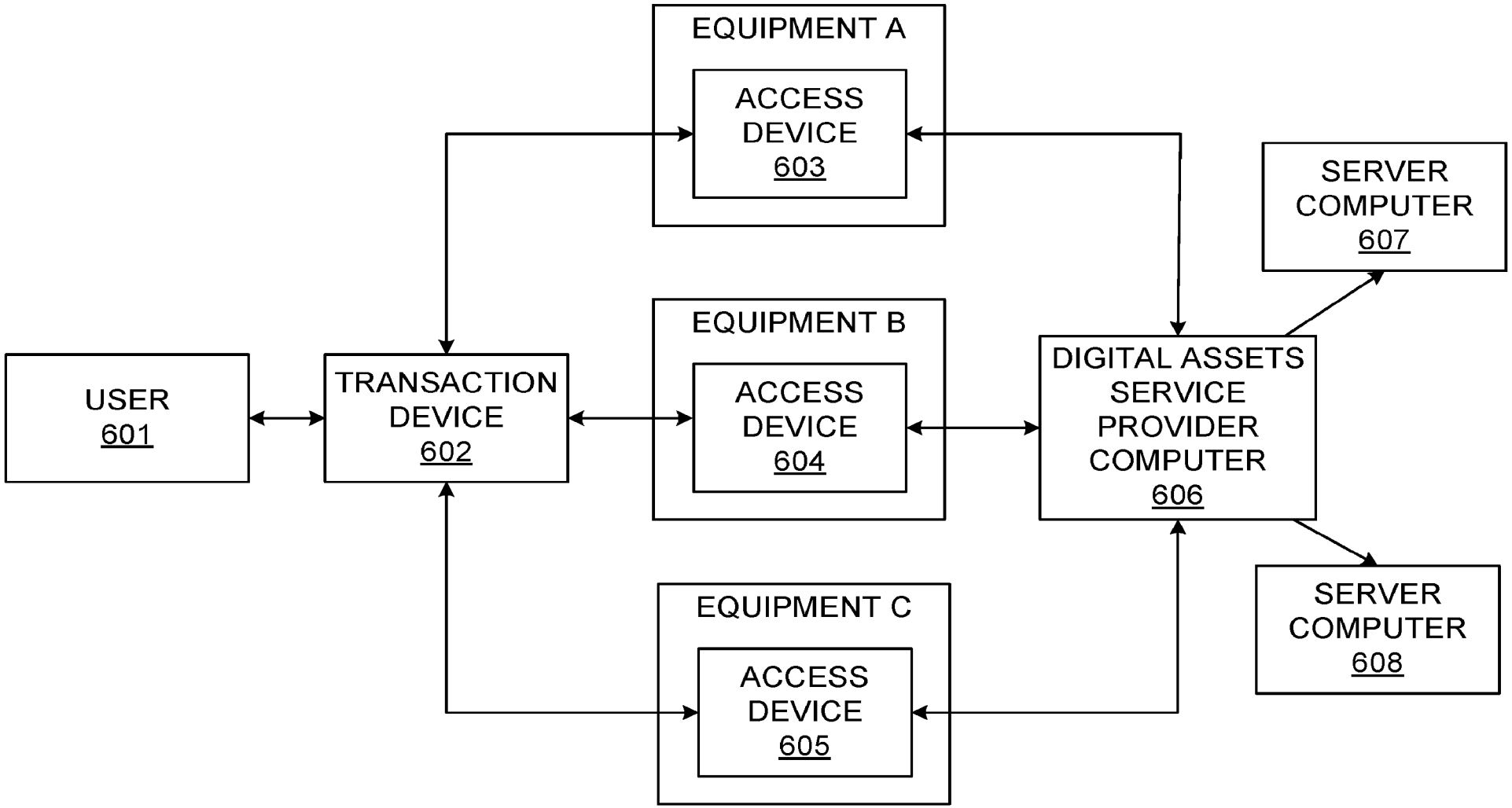
EQUIPMENT A
ACCESS DEVICE 603
SERVER COMPUTER 607
EQUIPMENT B
USER 601
TRANSACTION DEVICE 602
ACCESS DEVICE 604
DIGITAL ASSETS SERVICE PROVIDER COMPUTER 606
EQUIPMENT C
SERVER COMPUTER 608
ACCESS DEVICE 605

FIG. 6

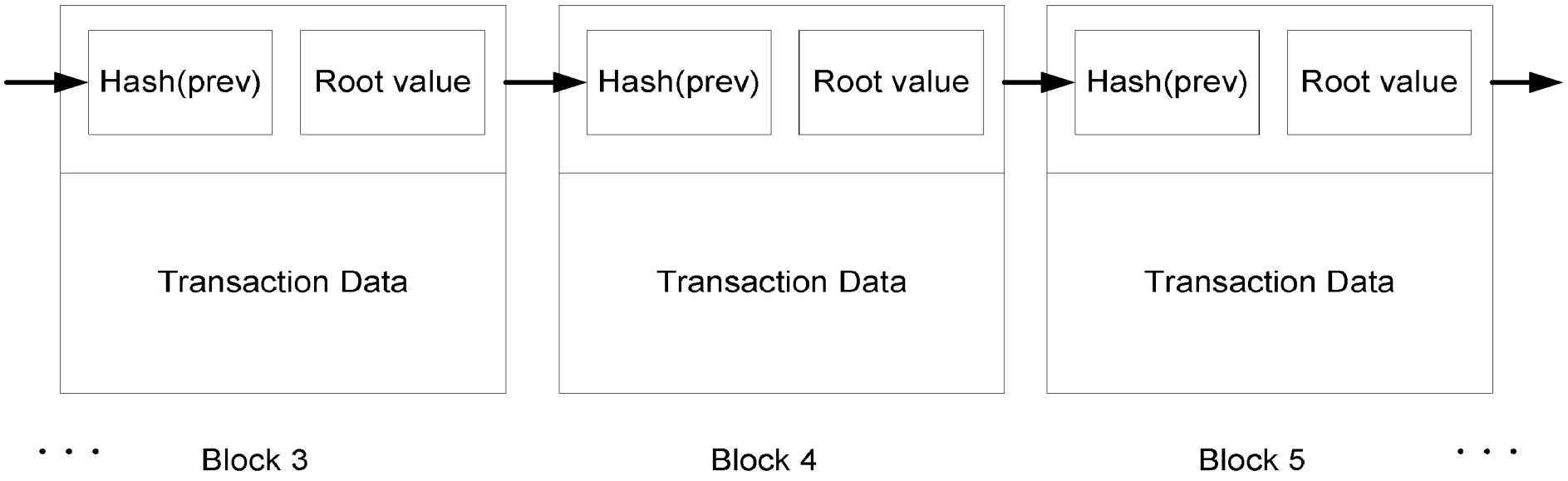
Hash(prev)
Root value
Transaction Data
Block 3
Hash(prev)
Root value
Transaction Data
Block 4
Hash(prev)
Root value
Transaction Data
Block 5

FIG. 7