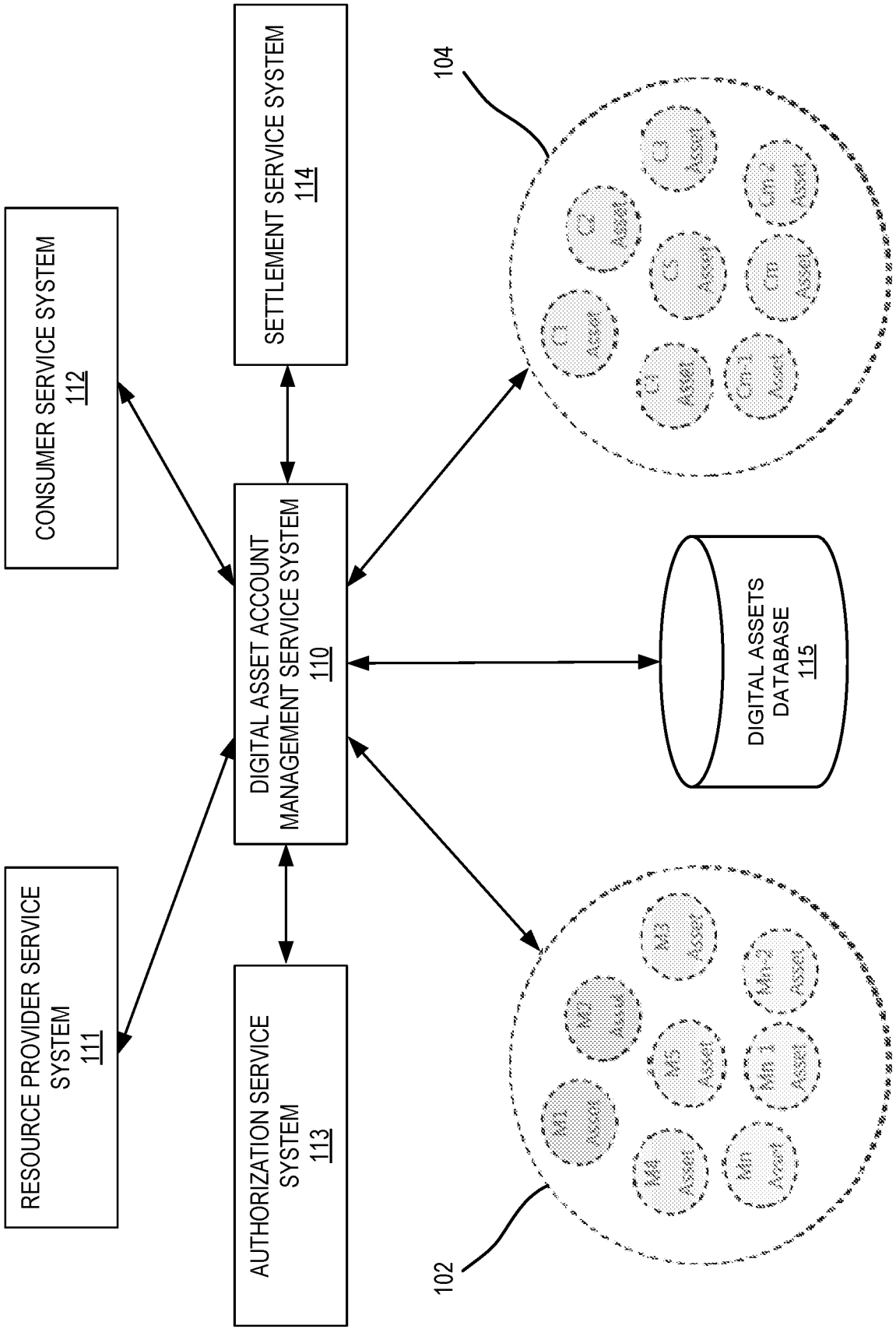

CONSUMER SERVICE SYSTEM
112
SETTLEMENT SERVICE SYSTEM
114
RESOURCE PROVIDER SERVICE SYSTEM
111
DIGITAL ASSET ACCOUNT MANAGEMENT SERVICE SYSTEM
110
DIGITAL ASSETS DATABASE
115
AUTHORIZATION SERVICE SYSTEM
113
102
104
100

FIG. 1

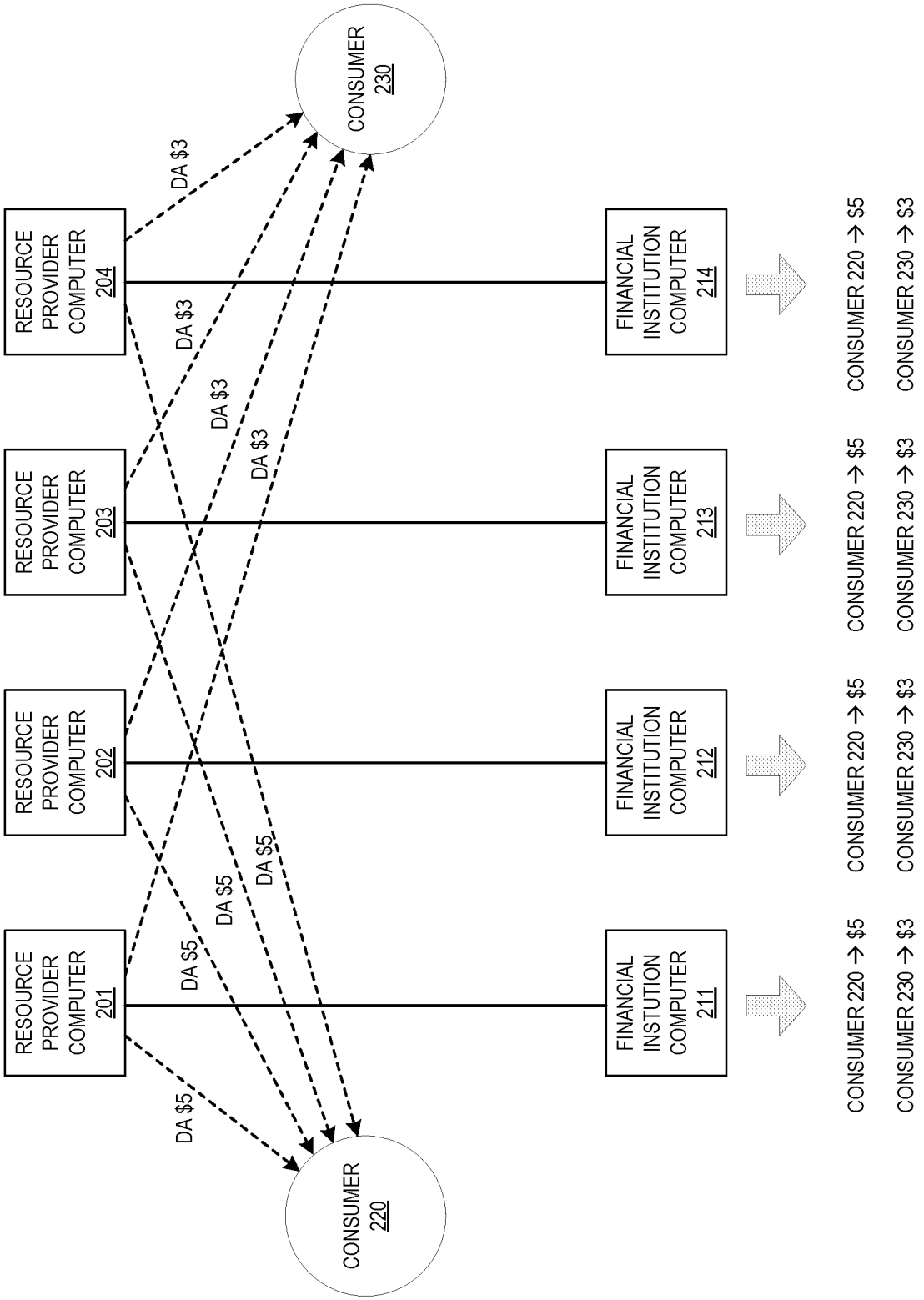

RESOURCE PROVIDER COMPUTER 201
RESOURCE PROVIDER COMPUTER 202
RESOURCE PROVIDER COMPUTER 203
RESOURCE PROVIDER COMPUTER 204
CONSUMER 220
CONSUMER 230
FINANCIAL INSTITUTION COMPUTER 211
FINANCIAL INSTITUTION COMPUTER 212
FINANCIAL INSTITUTION COMPUTER 213
FINANCIAL INSTITUTION COMPUTER 214
DA $5
DA $3
CONSUMER 220 → $5
CONSUMER 230 → $3

FIG. 2

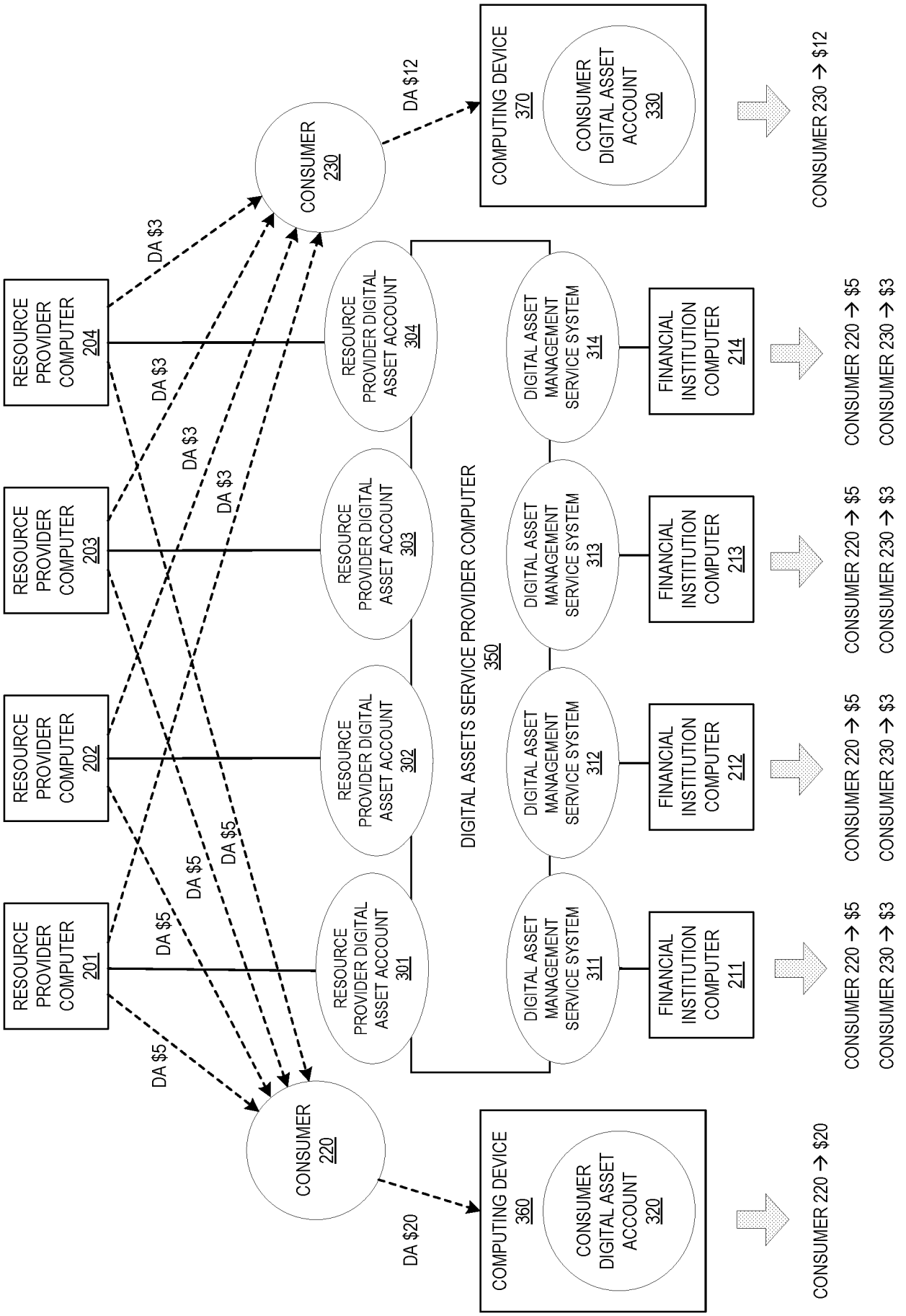

RESOURCE PROVIDER COMPUTER 201
RESOURCE PROVIDER COMPUTER 202
RESOURCE PROVIDER COMPUTER 203
RESOURCE PROVIDER COMPUTER 204
CONSUMER 220
CONSUMER 230
DA $5
DA $3
DA $20
DA $12
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 301
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 302
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 303
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 304
DIGITAL ASSETS SERVICE PROVIDER COMPUTER 350
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 311
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 312
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 313
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 314
FINANCIAL INSTITUTION COMPUTER 211
FINANCIAL INSTITUTION COMPUTER 212
FINANCIAL INSTITUTION COMPUTER 213
FINANCIAL INSTITUTION COMPUTER 214
COMPUTING DEVICE 360
CONSUMER DIGITAL ASSET ACCOUNT 320
COMPUTING DEVICE 370
CONSUMER DIGITAL ASSET ACCOUNT 330
CONSUMER 220 → $20
CONSUMER 220 → $5
CONSUMER 230 → $3
CONSUMER 220 → $5
CONSUMER 230 → $3
CONSUMER 220 → $5
CONSUMER 230 → $3
CONSUMER 230 → $12

FIG. 3

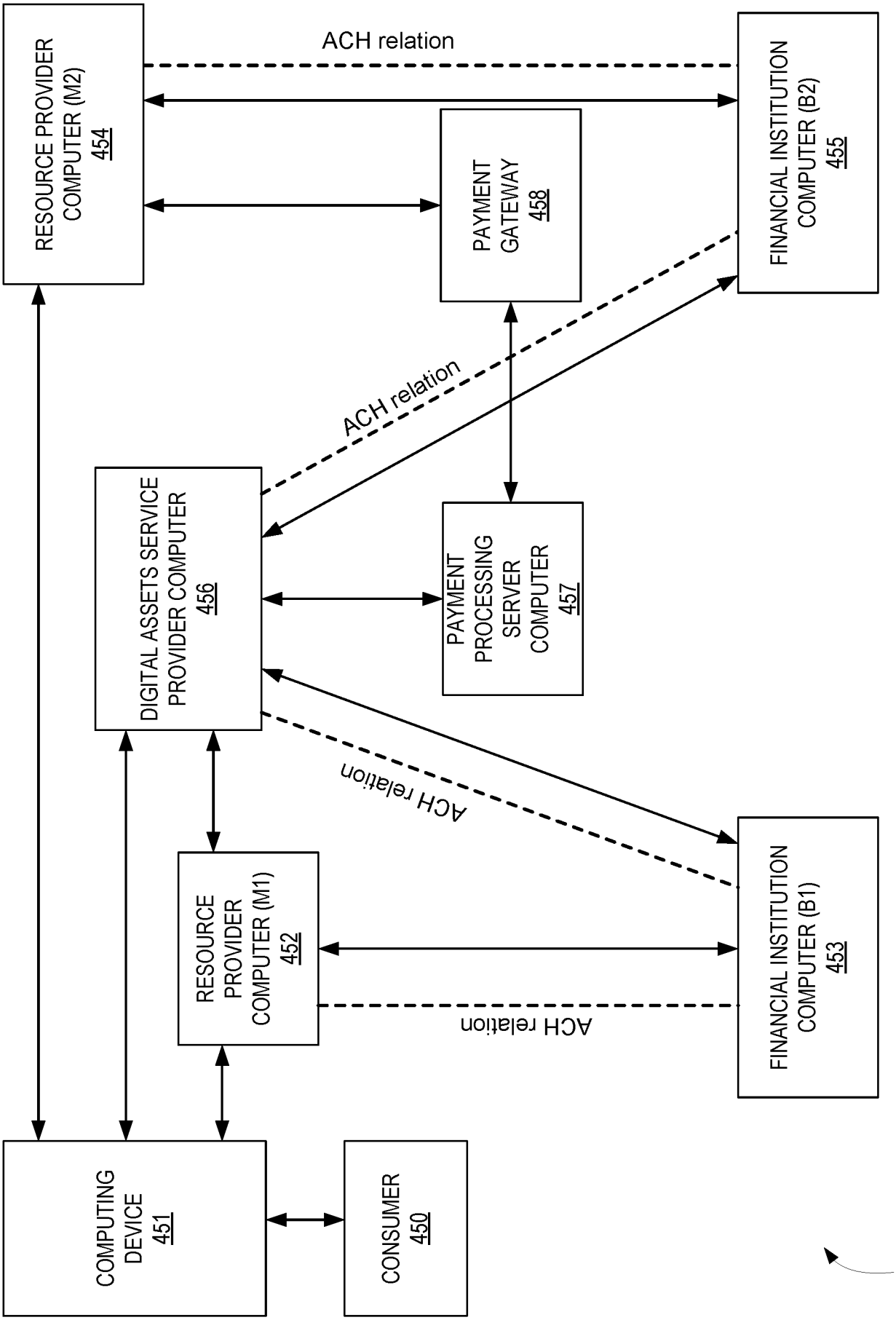

RESOURCE PROVIDER COMPUTER (M2) 454
ACH relation
FINANCIAL INSTITUTION COMPUTER (B2) 455
PAYMENT GATEWAY 458
ACH relation
DIGITAL ASSETS SERVICE PROVIDER COMPUTER 456
PAYMENT PROCESSING SERVER COMPUTER 457
ACH relation
RESOURCE PROVIDER COMPUTER (M1) 452
FINANCIAL INSTITUTION COMPUTER (B1) 453
ACH relation
COMPUTING DEVICE 451
CONSUMER 450
400

FIG. 4

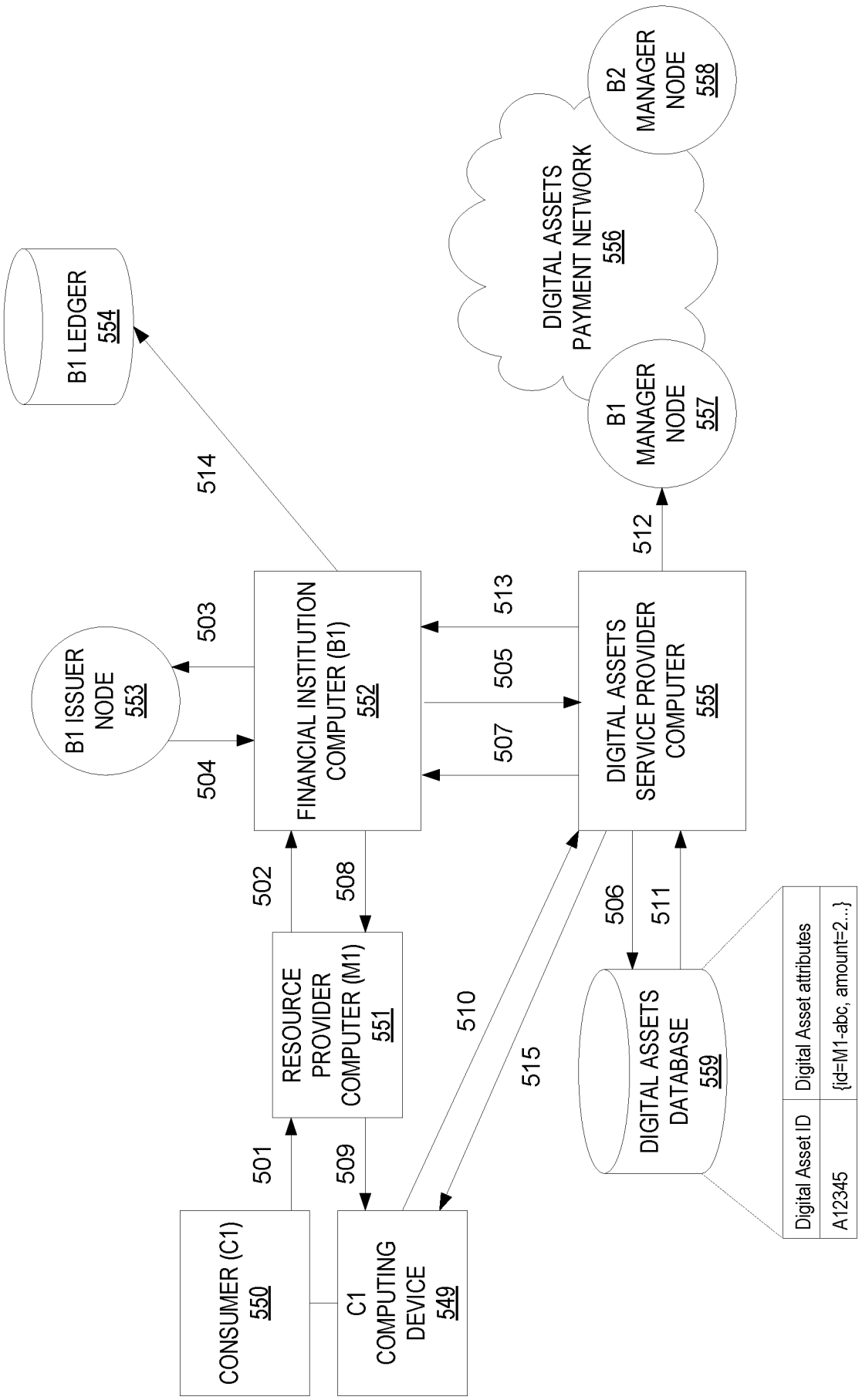

B1 LEDGER 554
DIGITAL ASSETS PAYMENT NETWORK 556
B2 MANAGER NODE 558
B1 MANAGER NODE 557
514
512
B1 ISSUER NODE 553
503
504
FINANCIAL INSTITUTION COMPUTER (B1) 552
513
505
507
DIGITAL ASSETS SERVICE PROVIDER COMPUTER 555
502
508
RESOURCE PROVIDER COMPUTER (M1) 551
510
515
506
511
DIGITAL ASSETS DATABASE 559
Digital Asset ID
Digital Asset attributes
A12345
{id=M1-abc, amount=2...}
501
509
CONSUMER (C1) 550
C1 COMPUTING DEVICE 549
500

FIG. 5

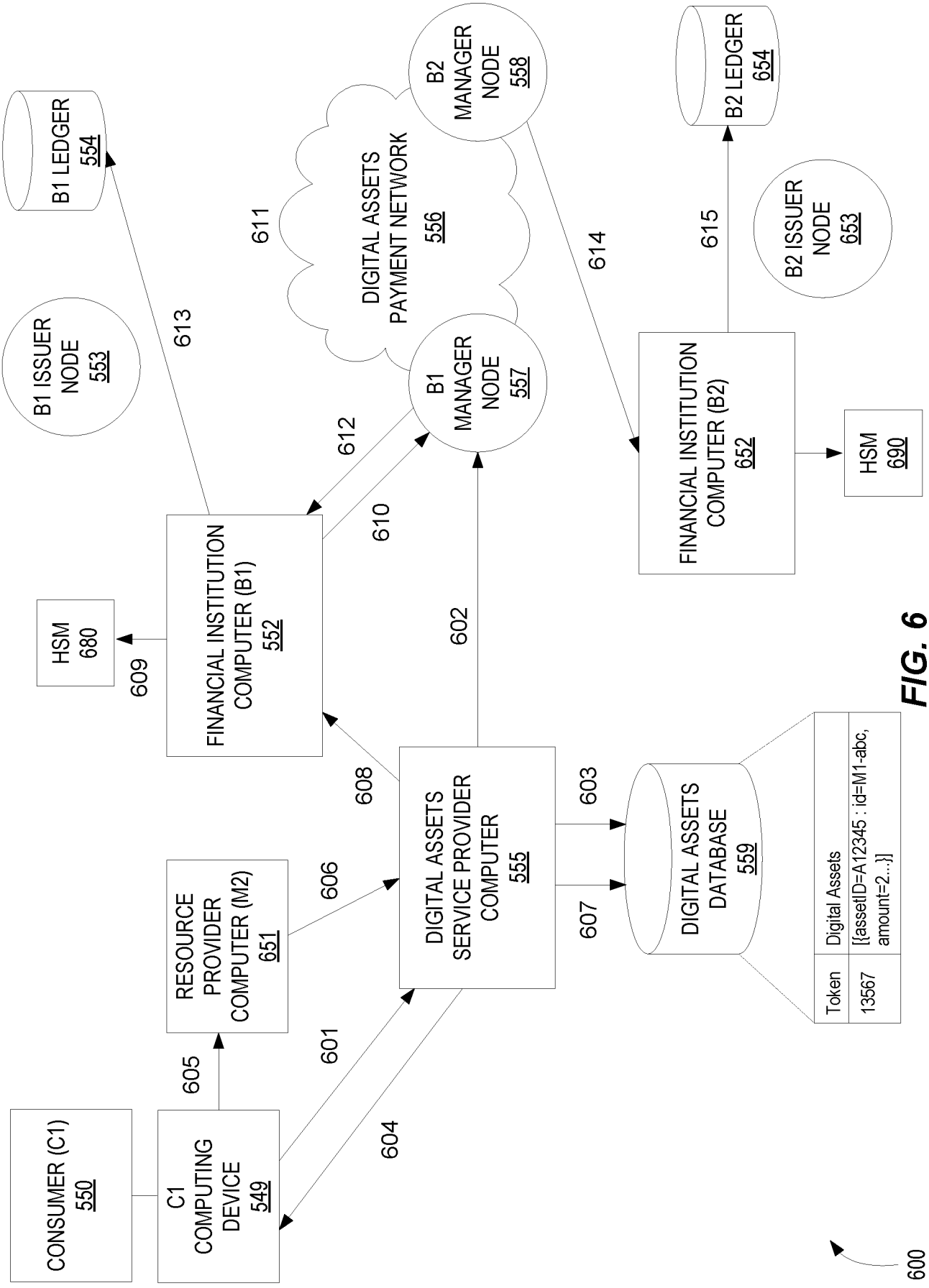

CONSUMER (C1) 550
C1 COMPUTING DEVICE 549
RESOURCE PROVIDER COMPUTER (M2) 651
FINANCIAL INSTITUTION COMPUTER (B1) 552
HSM 680
B1 ISSUER NODE 553
B1 LEDGER 554
DIGITAL ASSETS SERVICE PROVIDER COMPUTER 555
DIGITAL ASSETS PAYMENT NETWORK 556
B1 MANAGER NODE 557
B2 MANAGER NODE 558
DIGITAL ASSETS DATABASE 559
FINANCIAL INSTITUTION COMPUTER (B2) 652
HSM 690
B2 ISSUER NODE 653
B2 LEDGER 654
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
600
Token
13567
Digital Assets
[{assetID=A12345 : id=M1-abc, amount=2...}]

FIG. 6

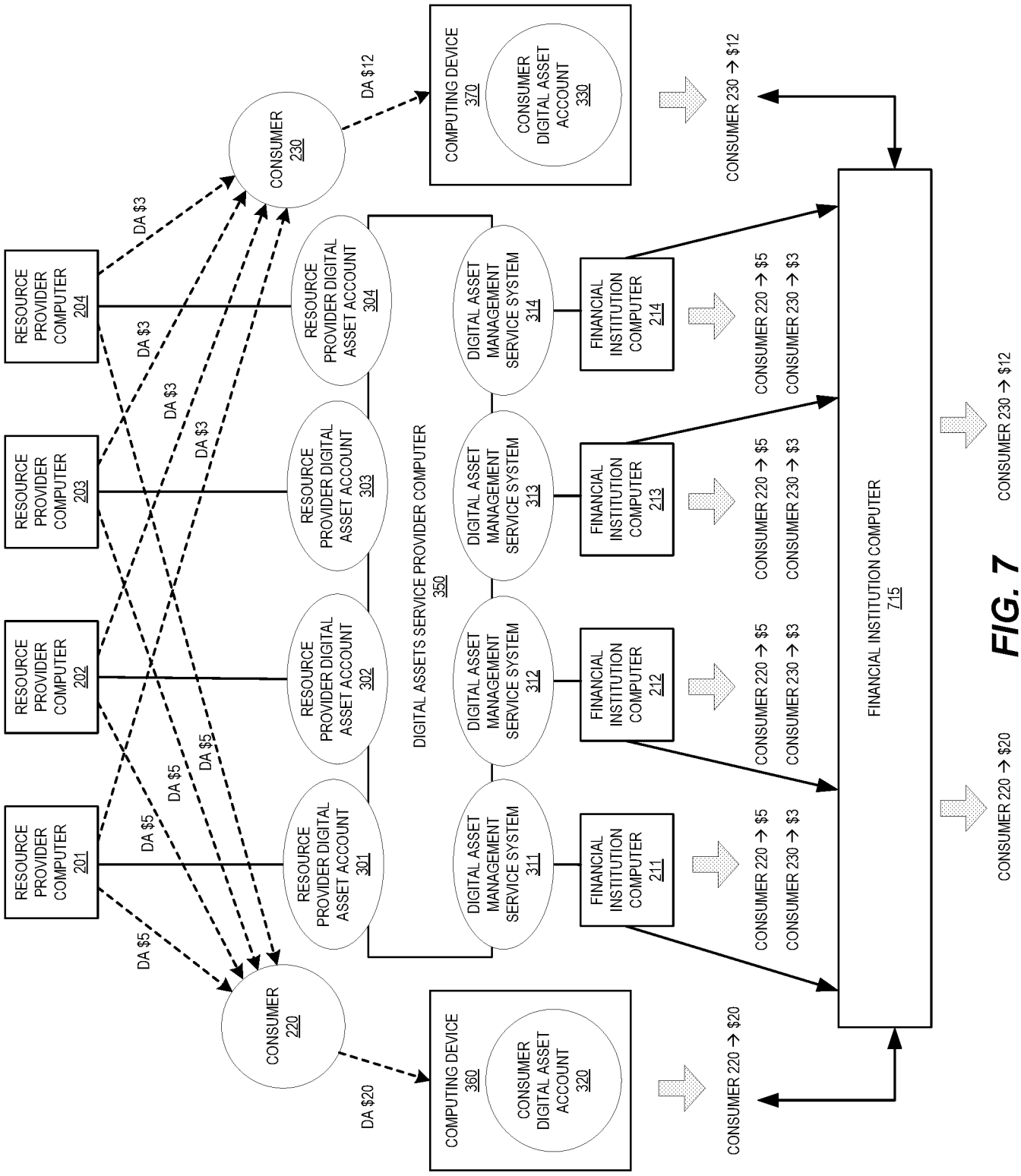

RESOURCE PROVIDER COMPUTER 201
RESOURCE PROVIDER COMPUTER 202
RESOURCE PROVIDER COMPUTER 203
RESOURCE PROVIDER COMPUTER 204
CONSUMER 220
CONSUMER 230
DA $5
DA $3
DA $20
DA $12
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 301
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 302
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 303
RESOURCE PROVIDER DIGITAL ASSET ACCOUNT 304
DIGITAL ASSETS SERVICE PROVIDER COMPUTER 350
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 311
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 312
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 313
DIGITAL ASSET MANAGEMENT SERVICE SYSTEM 314
FINANCIAL INSTITUTION COMPUTER 211
FINANCIAL INSTITUTION COMPUTER 212
FINANCIAL INSTITUTION COMPUTER 213
FINANCIAL INSTITUTION COMPUTER 214
COMPUTING DEVICE 360
CONSUMER DIGITAL ASSET ACCOUNT 320
COMPUTING DEVICE 370
CONSUMER DIGITAL ASSET ACCOUNT 330
FINANCIAL INSTITUTION COMPUTER 715
CONSUMER 220 → $5
CONSUMER 230 → $3
CONSUMER 220 → $20
CONSUMER 230 → $12

FIG. 7

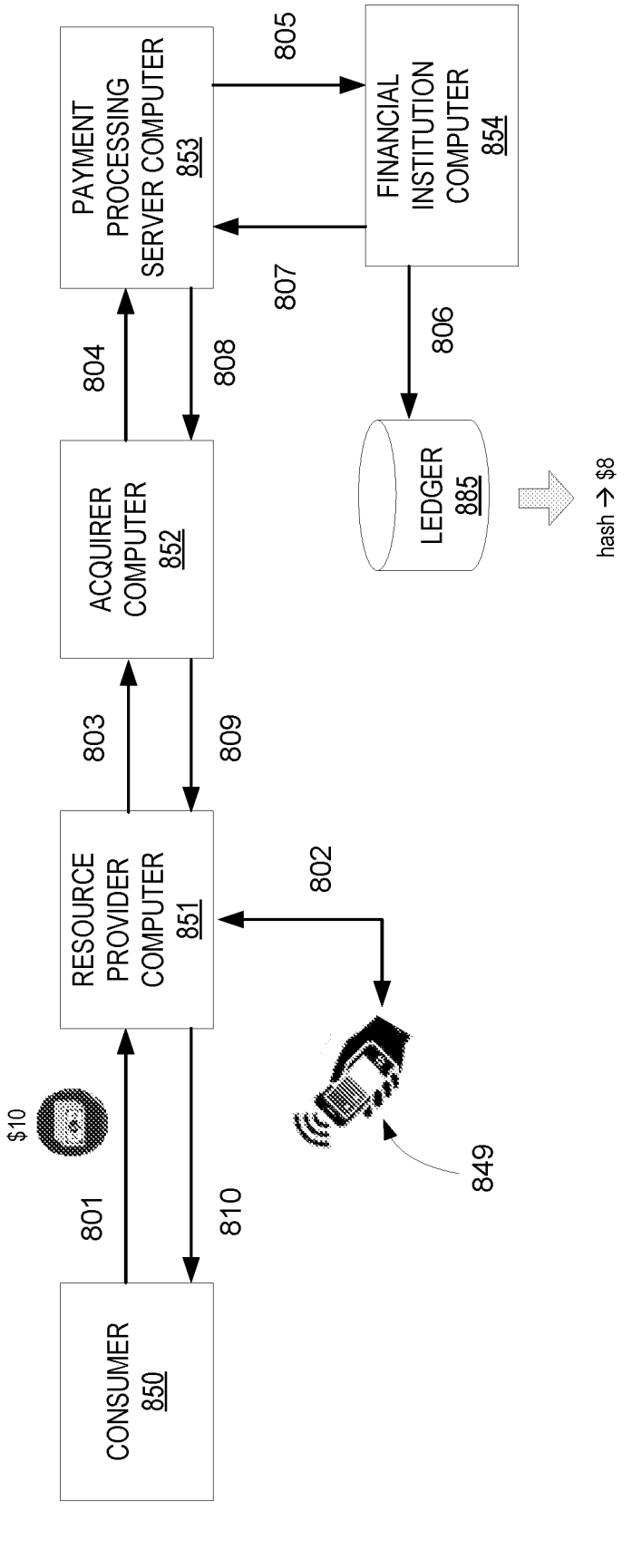

CONSUMER 850
RESOURCE PROVIDER COMPUTER 851
ACQUIRER COMPUTER 852
PAYMENT PROCESSING SERVER COMPUTER 853
FINANCIAL INSTITUTION COMPUTER 854
LEDGER 885
hash → $8
$10
801
802
803
804
805
806
807
808
809
810
849
800

FIG. 8

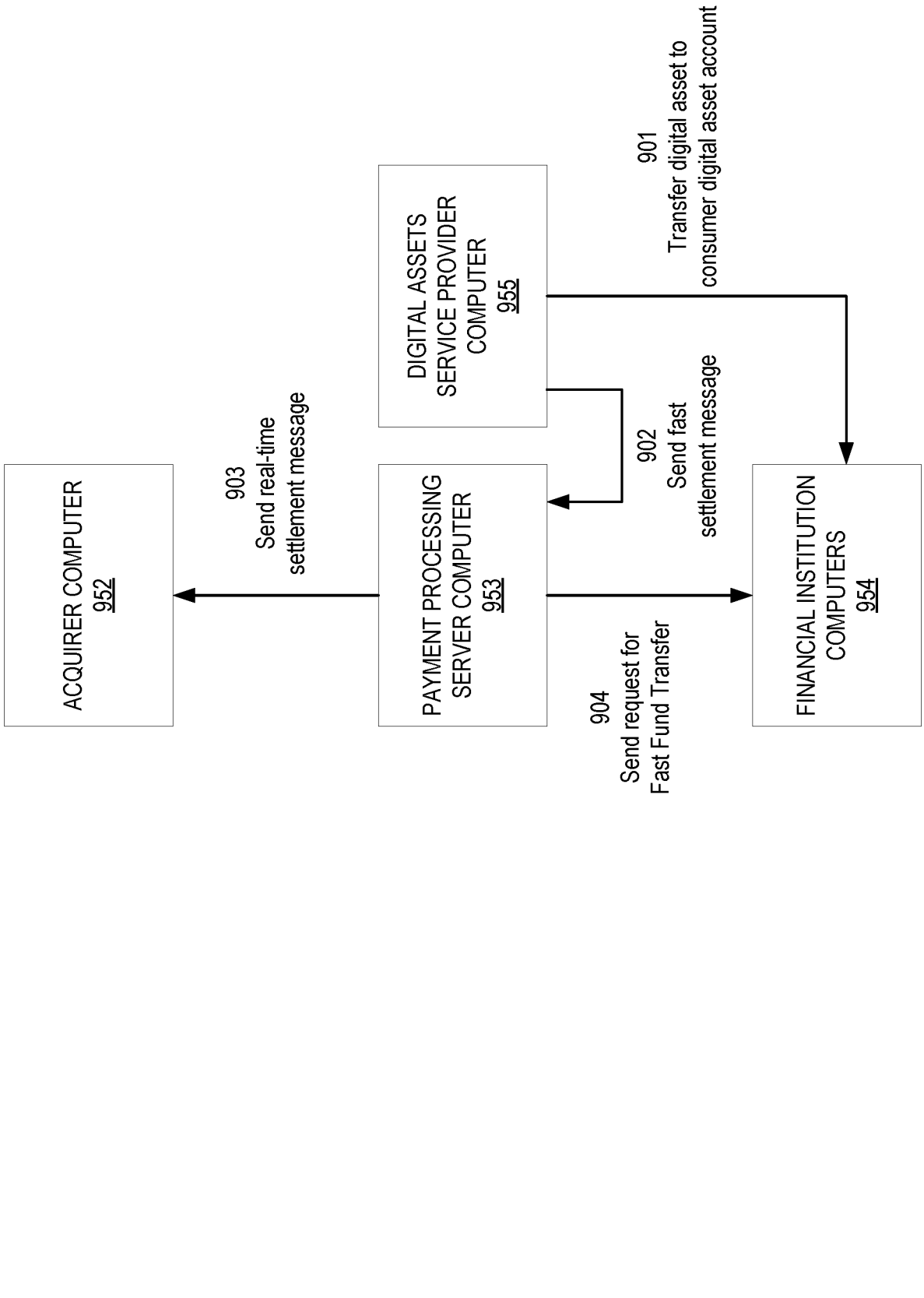

ACQUIRER COMPUTER
952
903
Send real-time
settlement message
PAYMENT PROCESSING
SERVER COMPUTER
953
902
Send fast
settlement message
DIGITAL ASSETS
SERVER PROVIDER
COMPUTER
955
901
Transfer digital asset to
consumer digital asset account
904
Send request for
Fast Fund Transfer
FINANCIAL INSTITUTION
COMPUTERS
954
900

FIG. 9

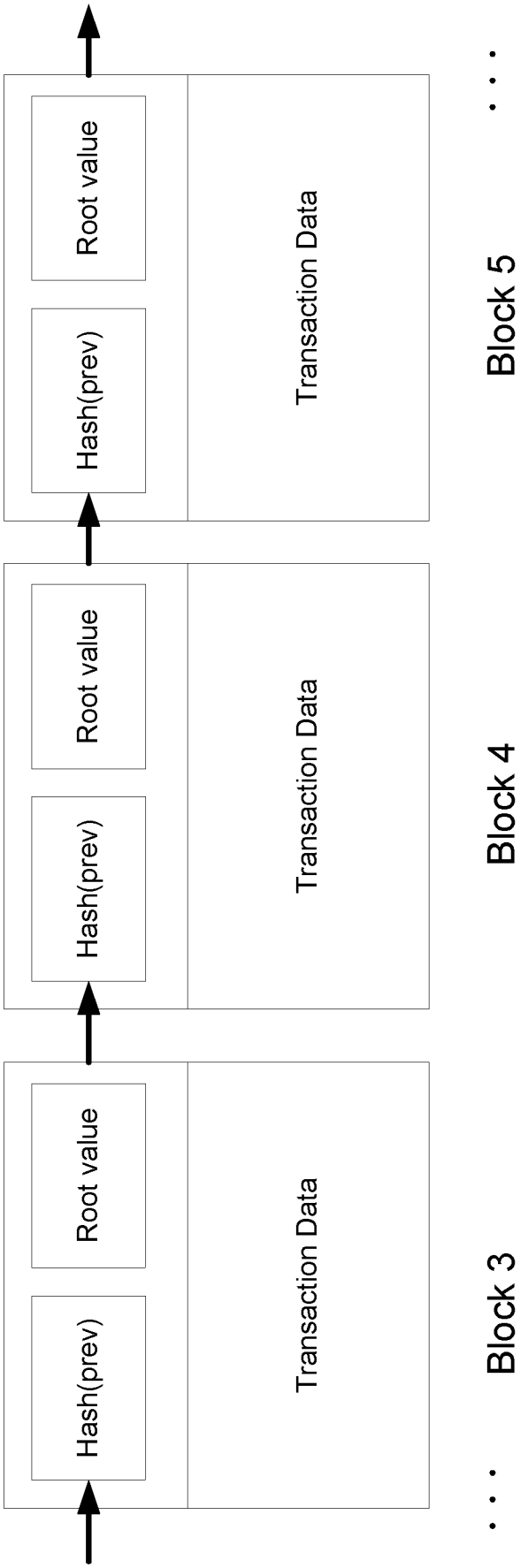

Hash(prev)
Root value
Transaction Data
Block 3
Block 4
Block 5

FIG. 10