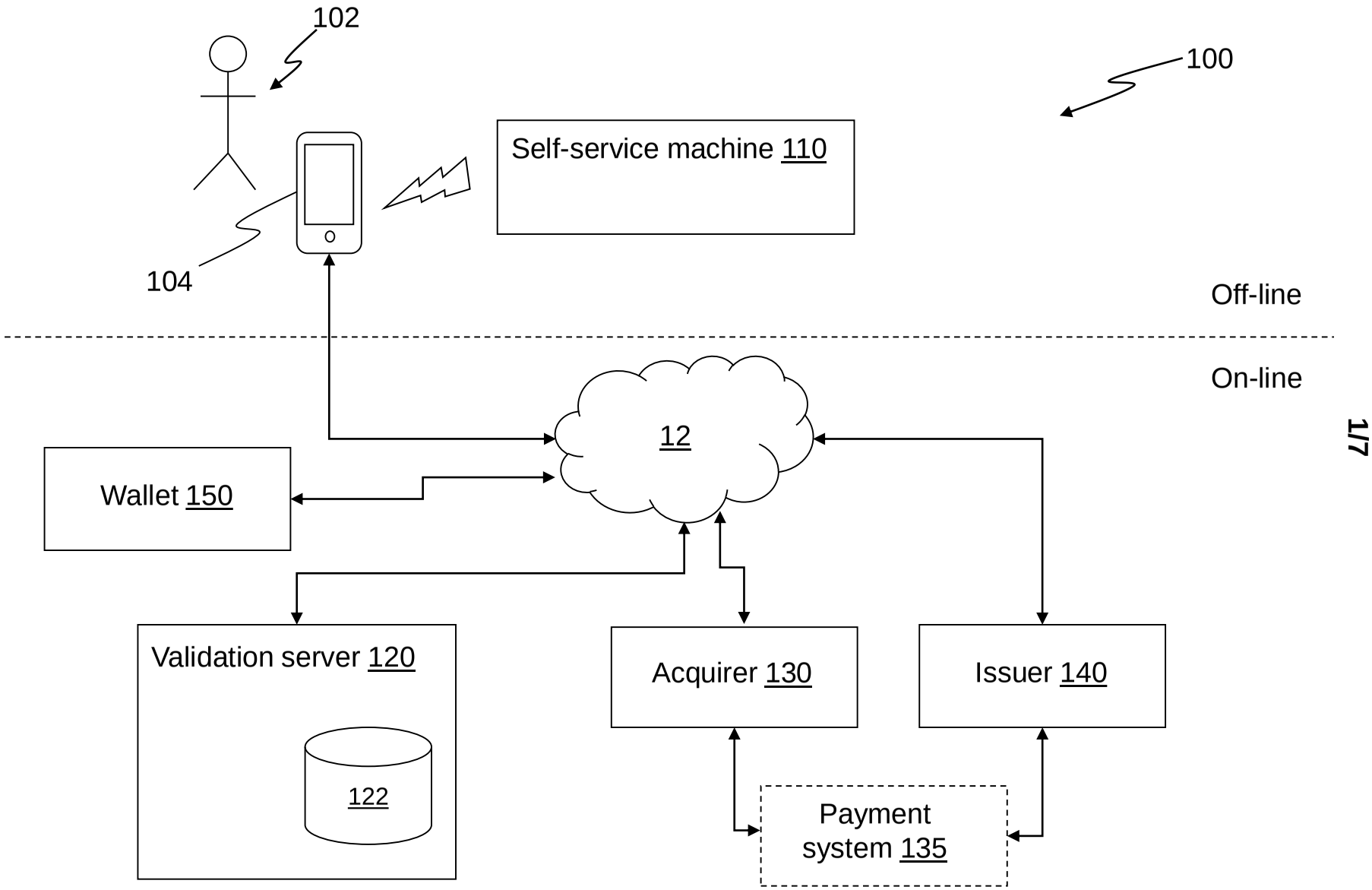

102
100
Self-service machine 110
104
Off-line
On-line
12
Wallet 150
Validation server 120
122
Acquirer 130
Issuer 140
Payment system 135
17

FIGURE 1

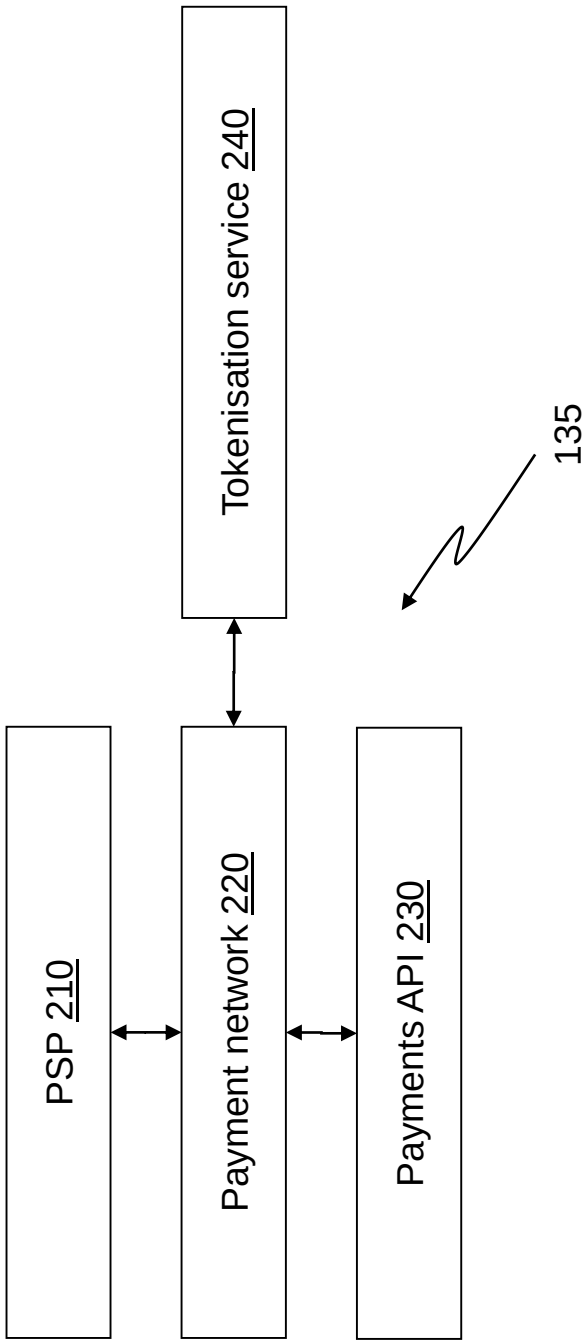

PSP 210
Payment network 220
Payments API 230
Tokenisation service 240
135

FIGURE 2

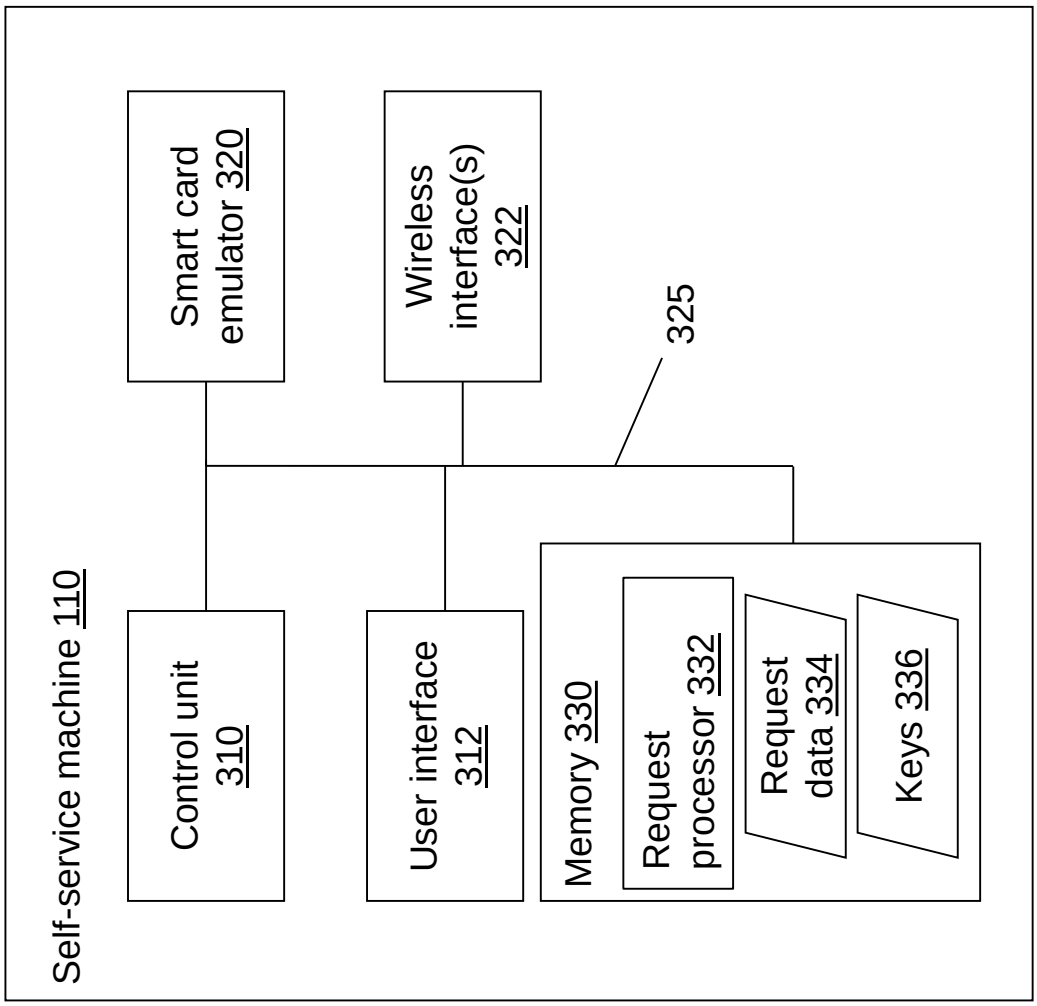

Self-service machine 110
Control unit 310
Smart card emulator 320
User interface 312
Wireless interface(s) 322
325
Memory 330
Request processor 332
Request data 334
Keys 336

FIGURE 3

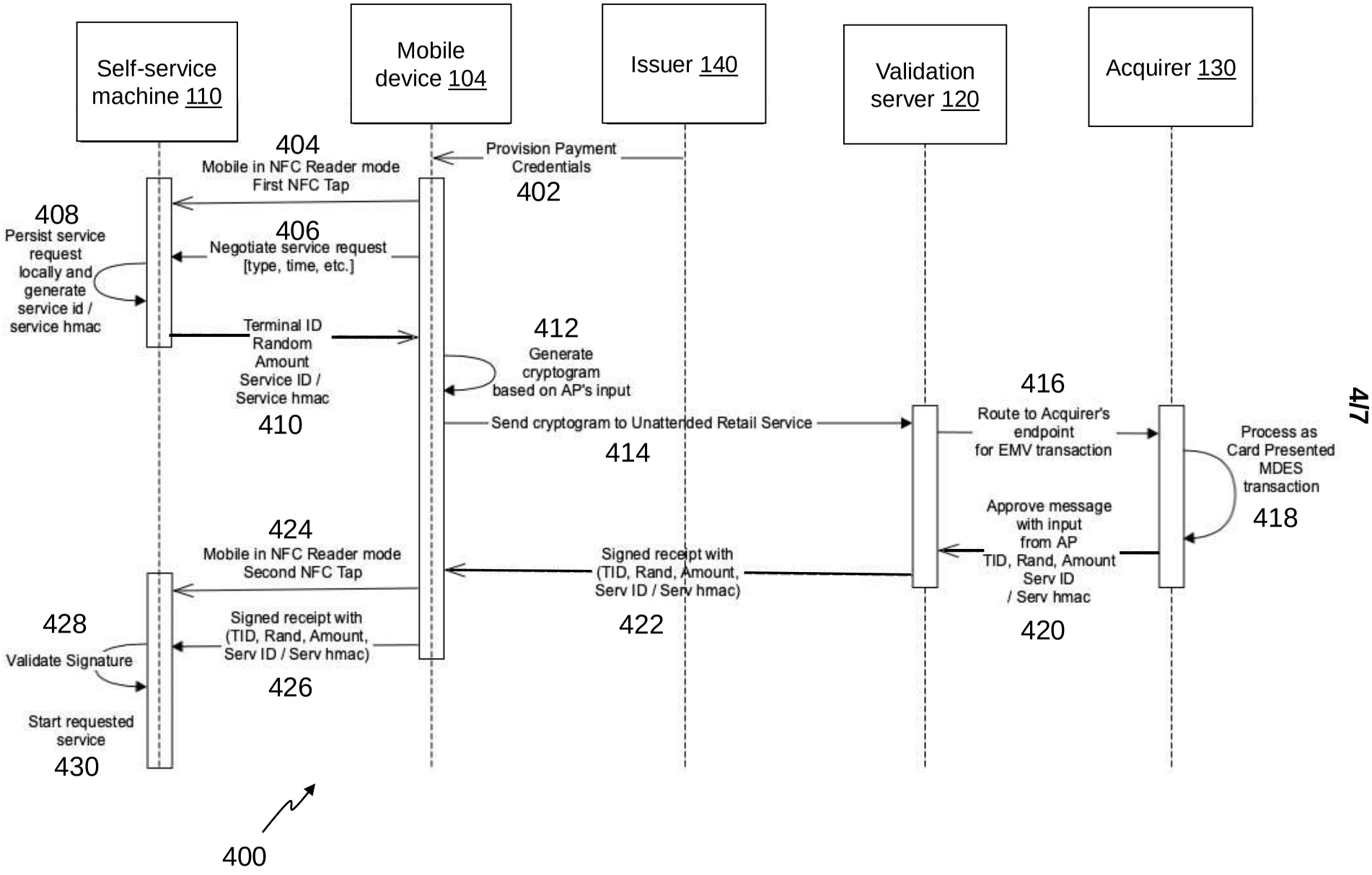

Self-service machine 110
Mobile device 104
Issuer 140
Validation server 120
Acquirer 130
404
Mobile in NFC Reader mode
First NFC Tap
Provision Payment Credentials
402
408
Persist service request locally and generate service id / service hmac
406
Negotiate service request [type, time, etc.]
Terminal ID
Random
Amount
Service ID / Service hmac
410
412
Generate cryptogram based on AP's input
Send cryptogram to Unattended Retail Service
414
416
Route to Acquirer's endpoint for EMV transaction
Process as Card Presented MDES transaction
418
Approve message with input from AP
TID, Rand, Amount
Serv ID
/ Serv hmac
420
Signed receipt with (TID, Rand, Amount, Serv ID / Serv hmac)
422
424
Mobile in NFC Reader mode
Second NFC Tap
Signed receipt with (TID, Rand, Amount, Serv ID / Serv hmac)
426
428
Validate Signature
Start requested service
430
400
417

FIGURE 4

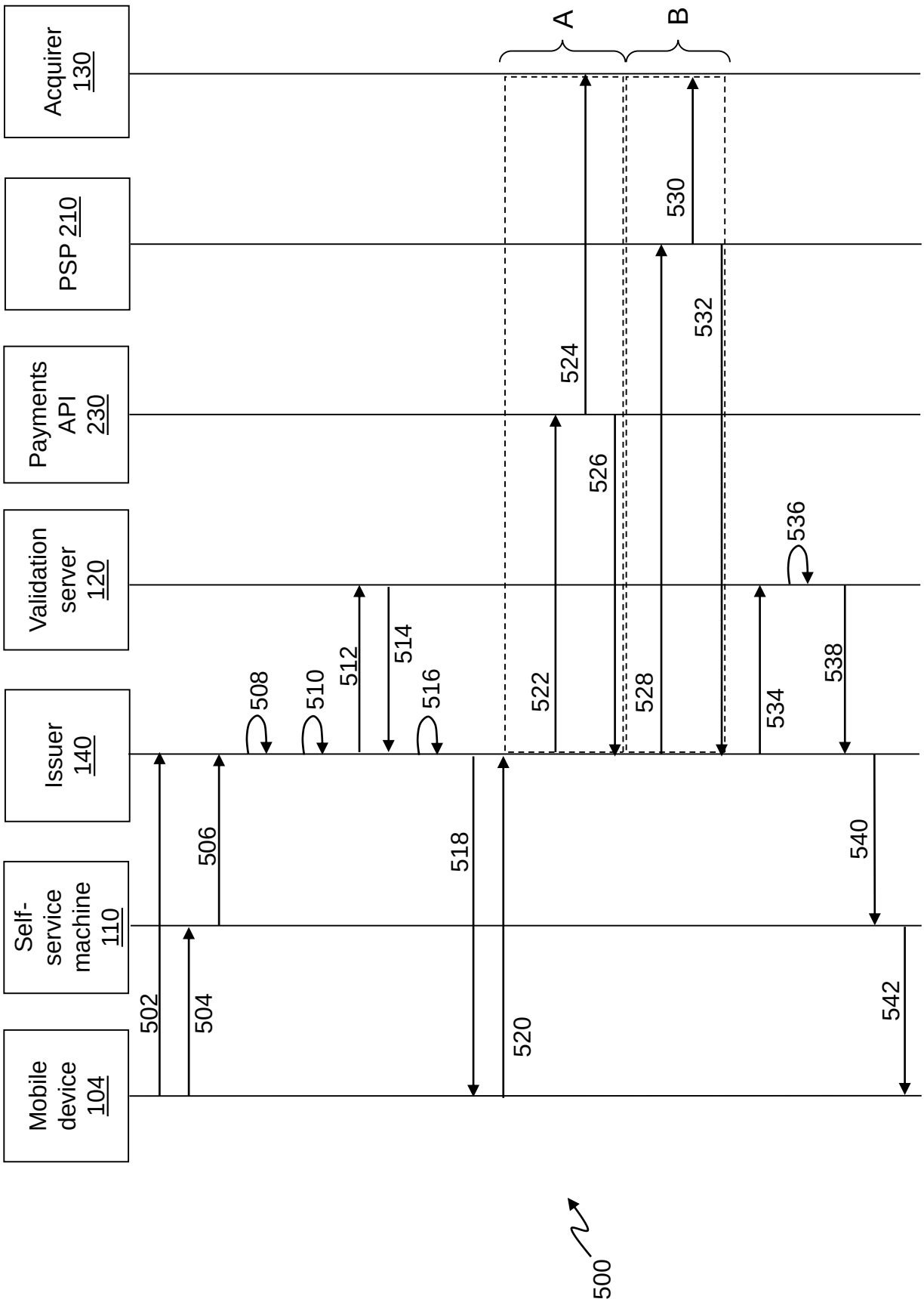
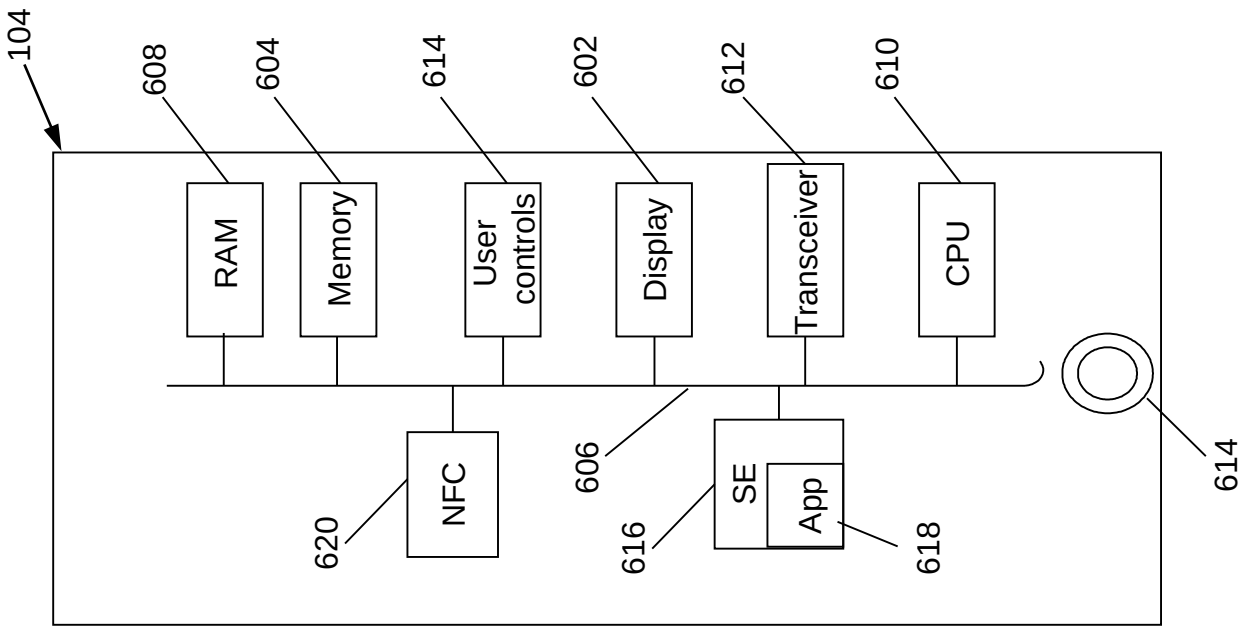

Mobile device 104
Self-service machine 110
Issuer 140
Validation server 120
Payments API 230
PSP 210
Acquirer 130
A
B
502
504
506
508
510
512
514
516
518
520
522
524
526
528
530
532
534
536
538
540
542
500

FIGURE 5

FIGURE 6


104
608
604
614
602
612
610
RAM
Memory
User controls
Display
Transceiver
CPU
NFC
SE
App
620
606
616
618
614

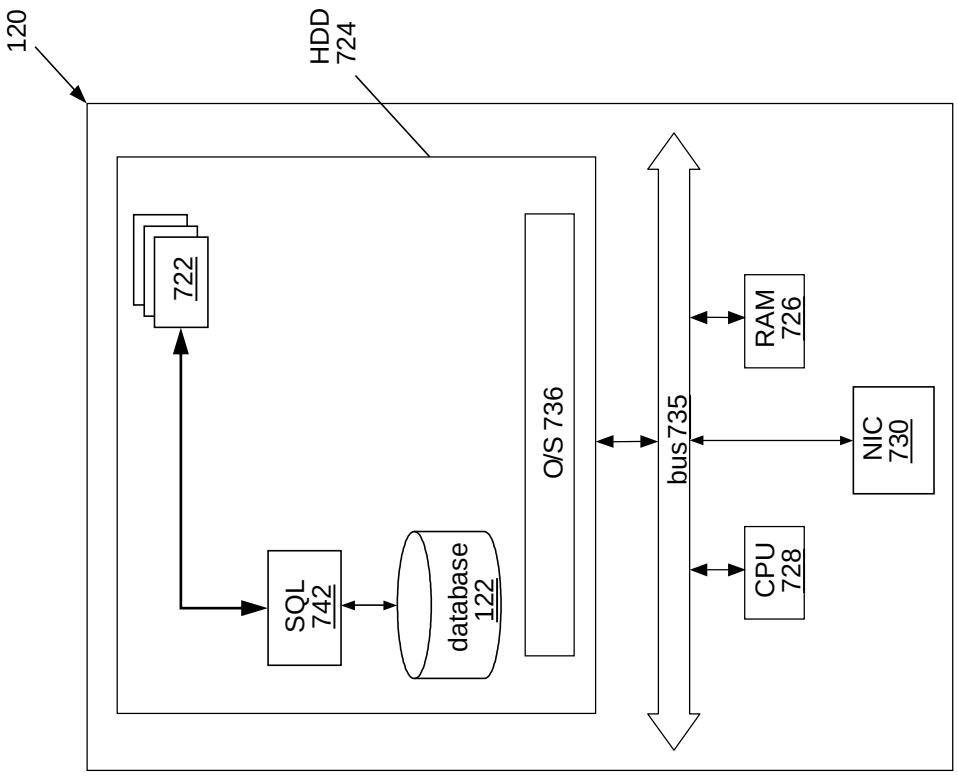

120
HDD
724
722
SQL
742
database
122
O/S 736
bus 735
RAM
726
CPU
728
NIC
730

FIGURE 7