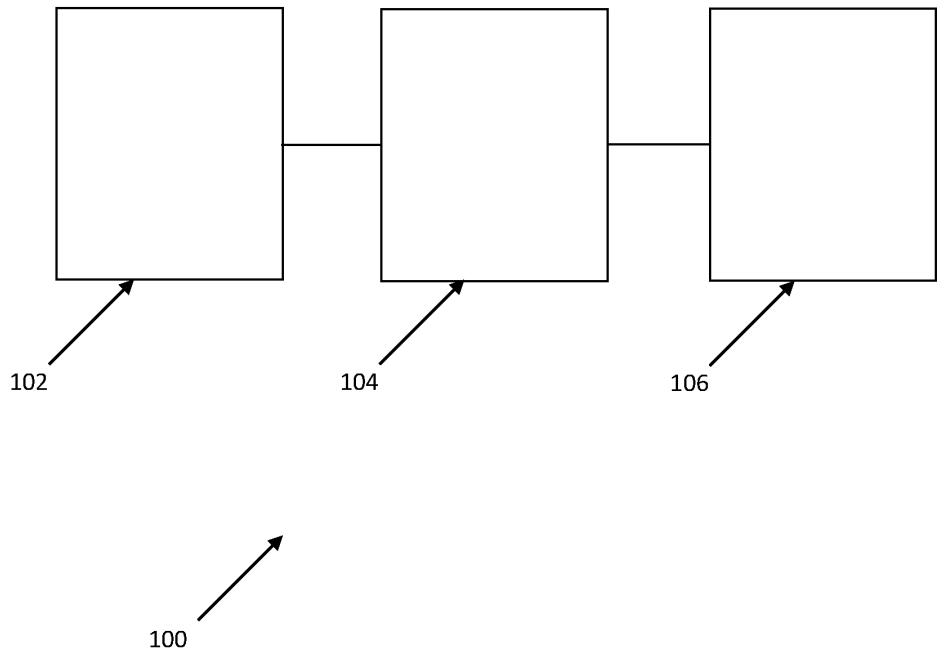

FIG. 1

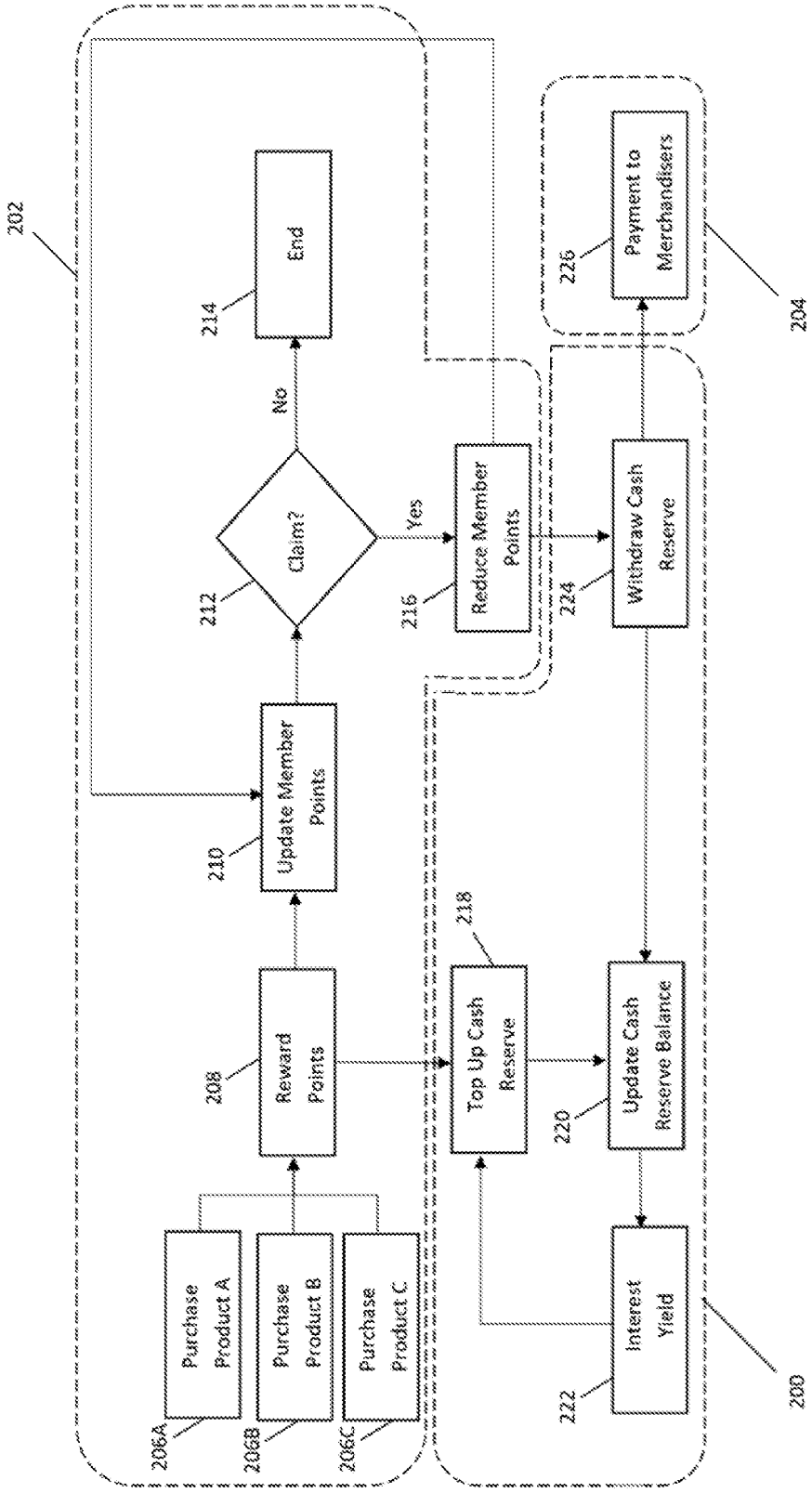
202
End
214
No
Claim?
212
Yes
Reduce Member Points
216
Withdraw Cash Reserve
224
Payment to Merchandisers
226
204
Update Member Points
210
Reward Points
208
Top Up Cash Reserve
218
Update Cash Reserve Balance
220
Interest Yield
222
200
Purchase Product A
206A
Purchase Product B
206B
Purchase Product C
206C

FIG. 2

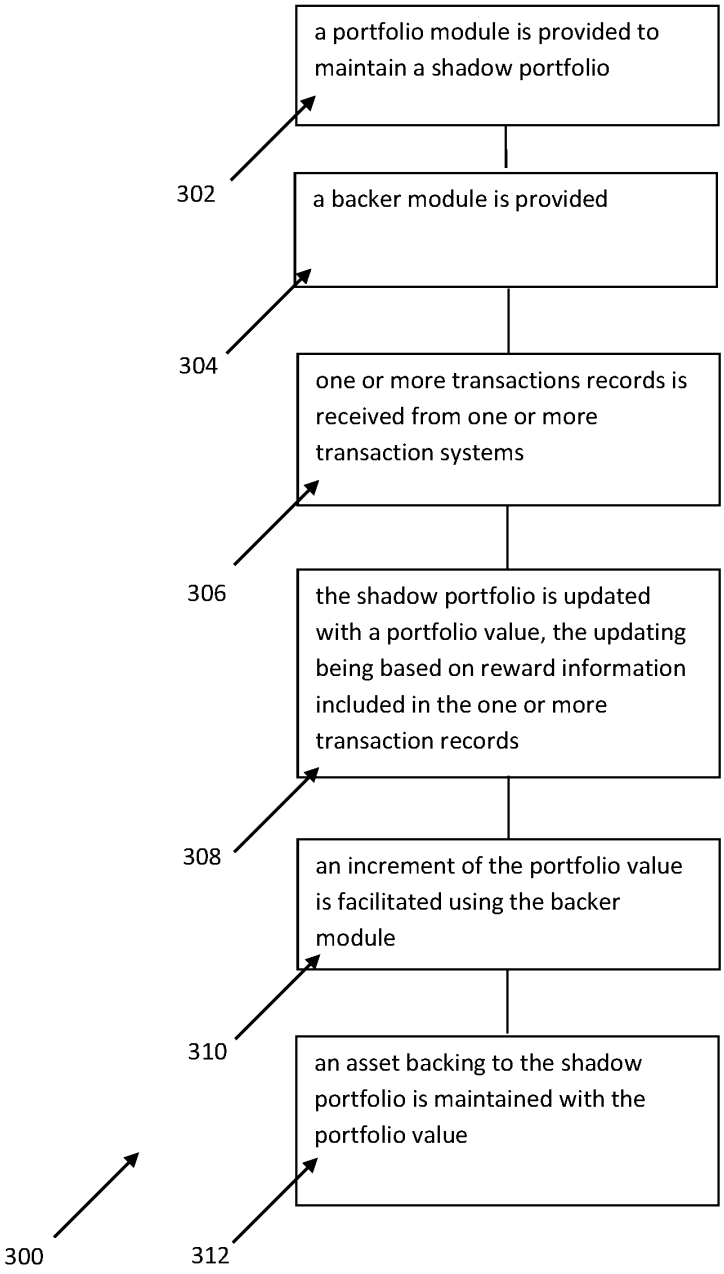
a portfolio module is provided to maintain a shadow portfolio
302
a backer module is provided
304
one or more transactions records is received from one or more transaction systems
306
the shadow portfolio is updated with a portfolio value, the updating being based on reward information included in the one or more transaction records
308
an increment of the portfolio value is facilitated using the backer module
310
an asset backing to the shadow portfolio is maintained with the portfolio value
312
300

FIG. 3

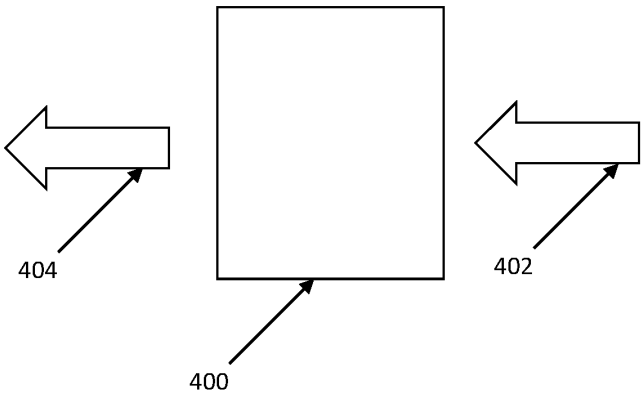

FIG. 4A

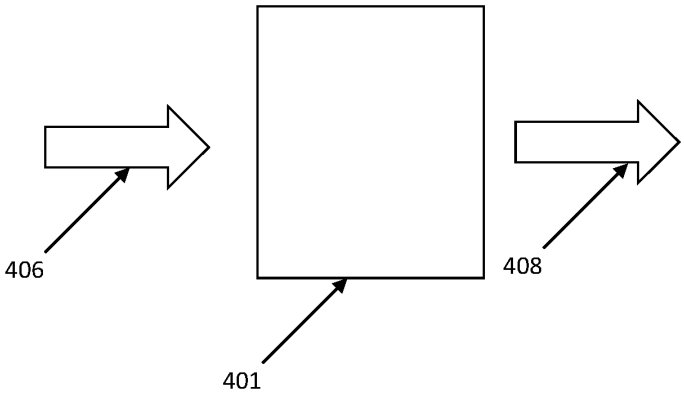

FIG. 4B

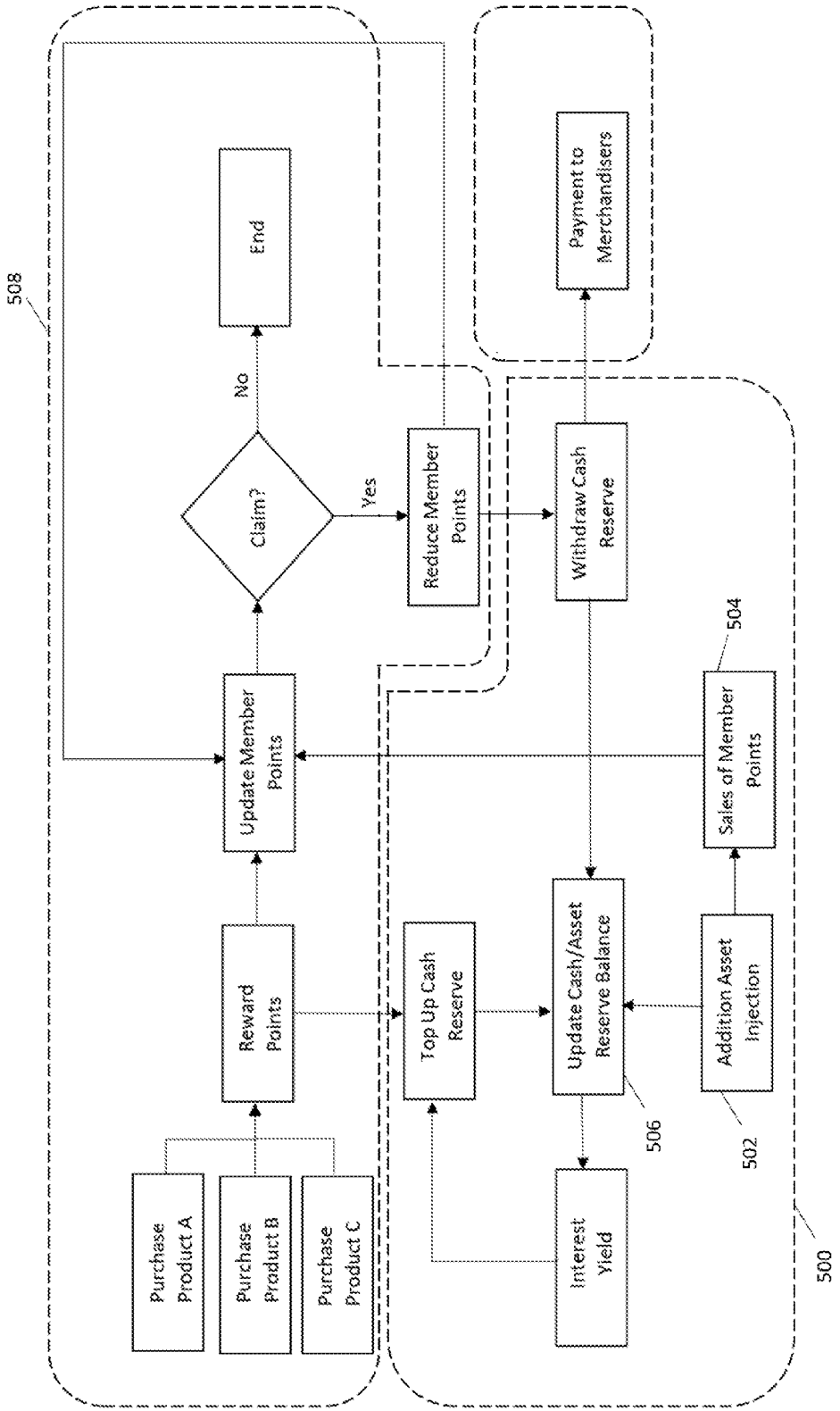
508
End
No
Claim?
Yes
Reduce Member Points
Withdraw Cash Reserve
Payment to Merchandisers
Update Member Points
Sales of Member Points
504
Reward Points
Top Up Cash Reserve
Update Cash/Asset Reserve Balance
Addition Asset Injection
Purchase Product A
Purchase Product B
Purchase Product C
Interest Yield
506
502
500

FIG. 5

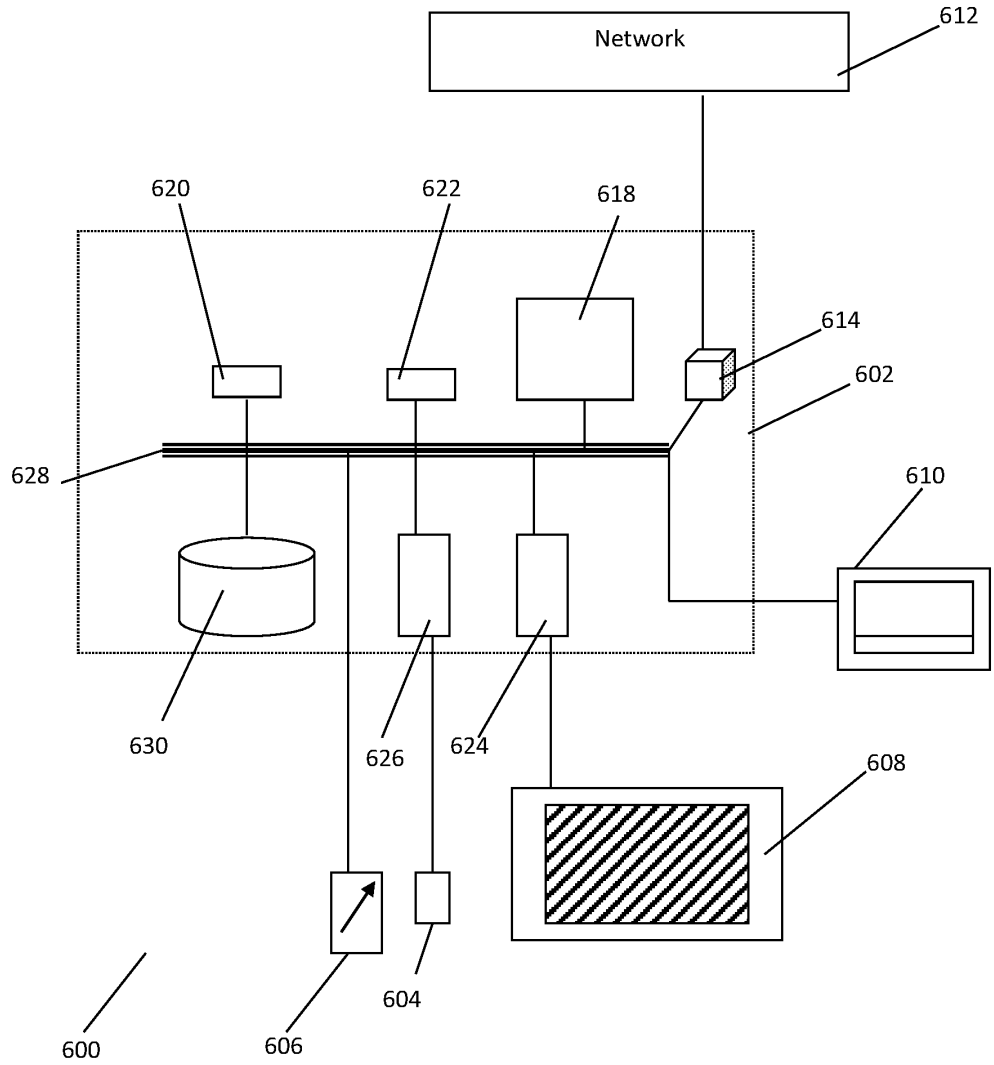
Network
612
620
622
618
614
602
628
610
630
626
624
608
604
606
600

FIG. 6