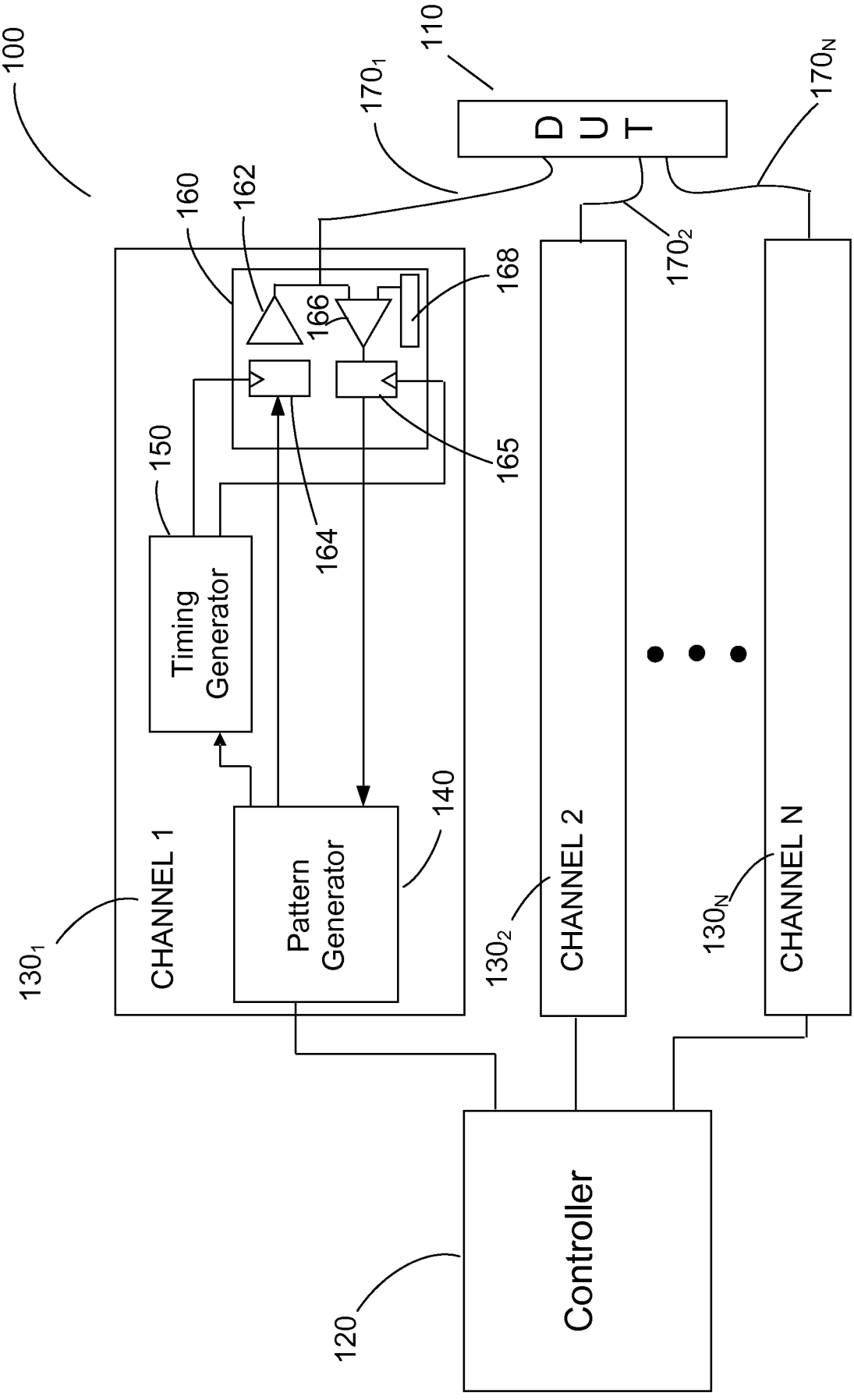
100
110
170_1
170_N
170_2
D U T
160
162
166
168
165
150
164
Timing Generator
Pattern Generator
140
CHANNEL 1
CHANNEL 2
CHANNEL N
130_1
130_2
130_N
Controller
120

FIG. 1

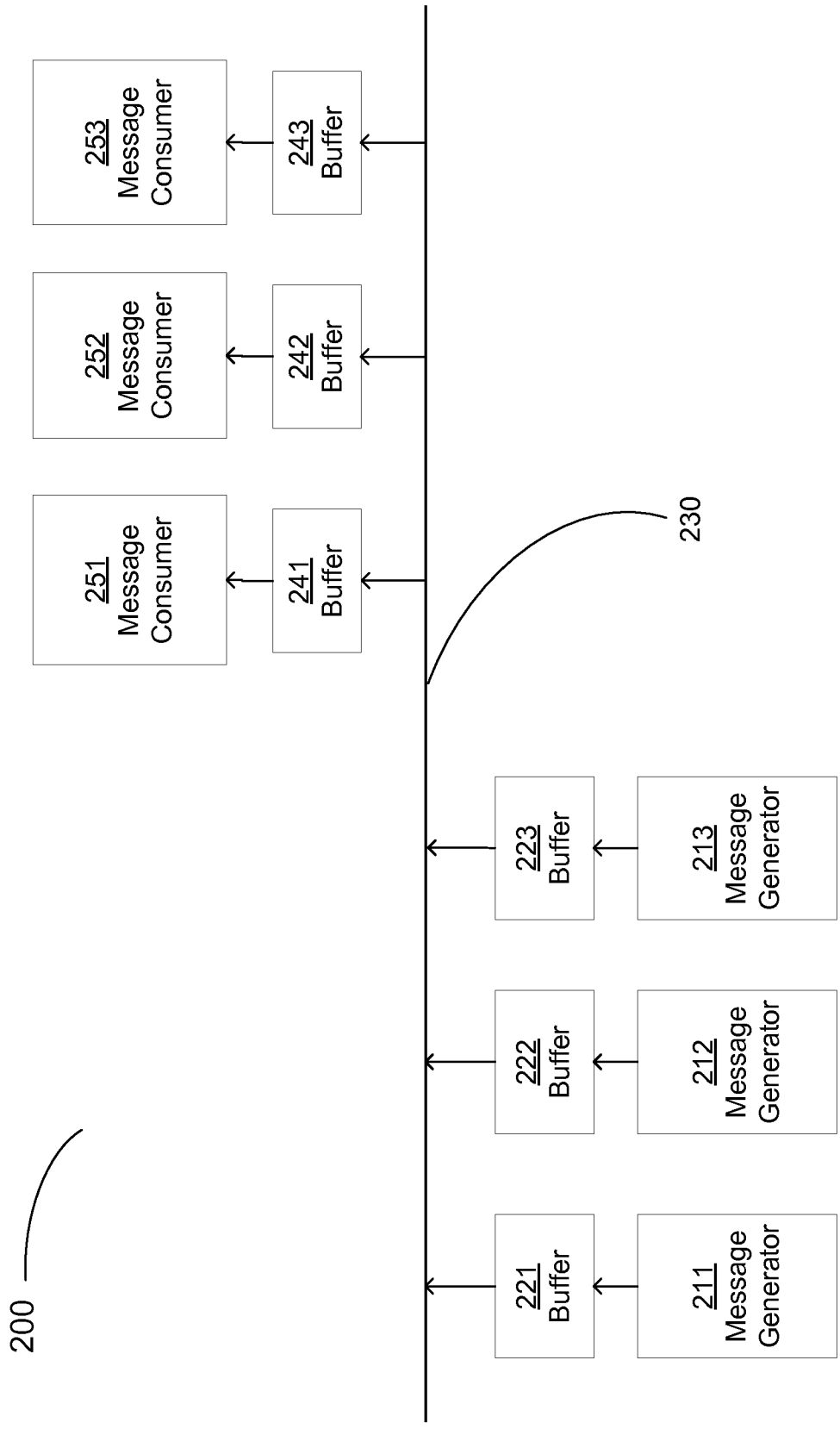
200
211 Message Generator
212 Message Generator
213 Message Generator
221 Buffer
222 Buffer
223 Buffer
230
241 Buffer
242 Buffer
243 Buffer
251 Message Consumer
252 Message Consumer
253 Message Consumer

FIG. 2

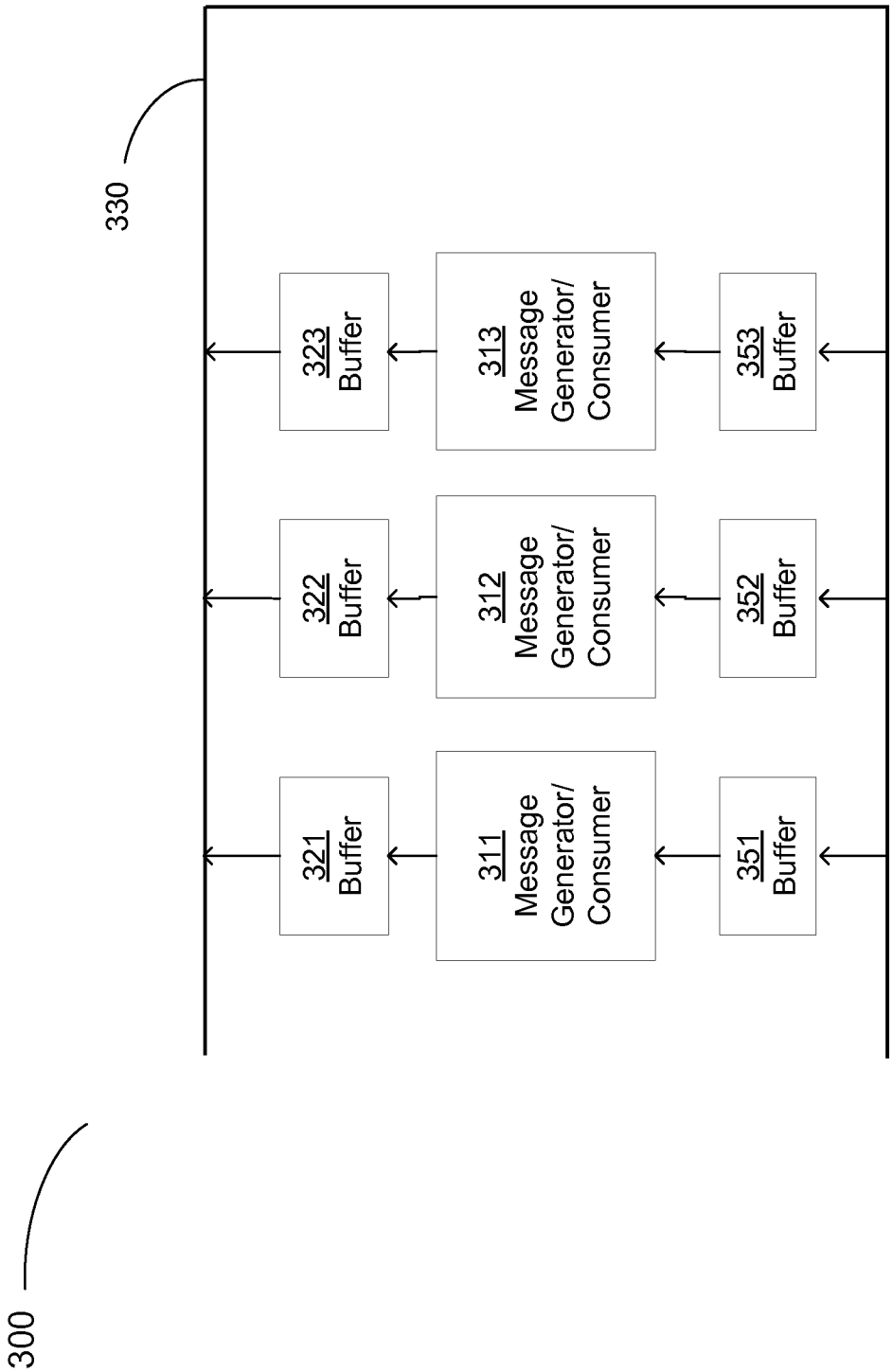
300
330
321 Buffer
311 Message Generator/ Consumer
351 Buffer
322 Buffer
312 Message Generator/ Consumer
352 Buffer
323 Buffer
313 Message Generator/ Consumer
353 Buffer

FIG. 3

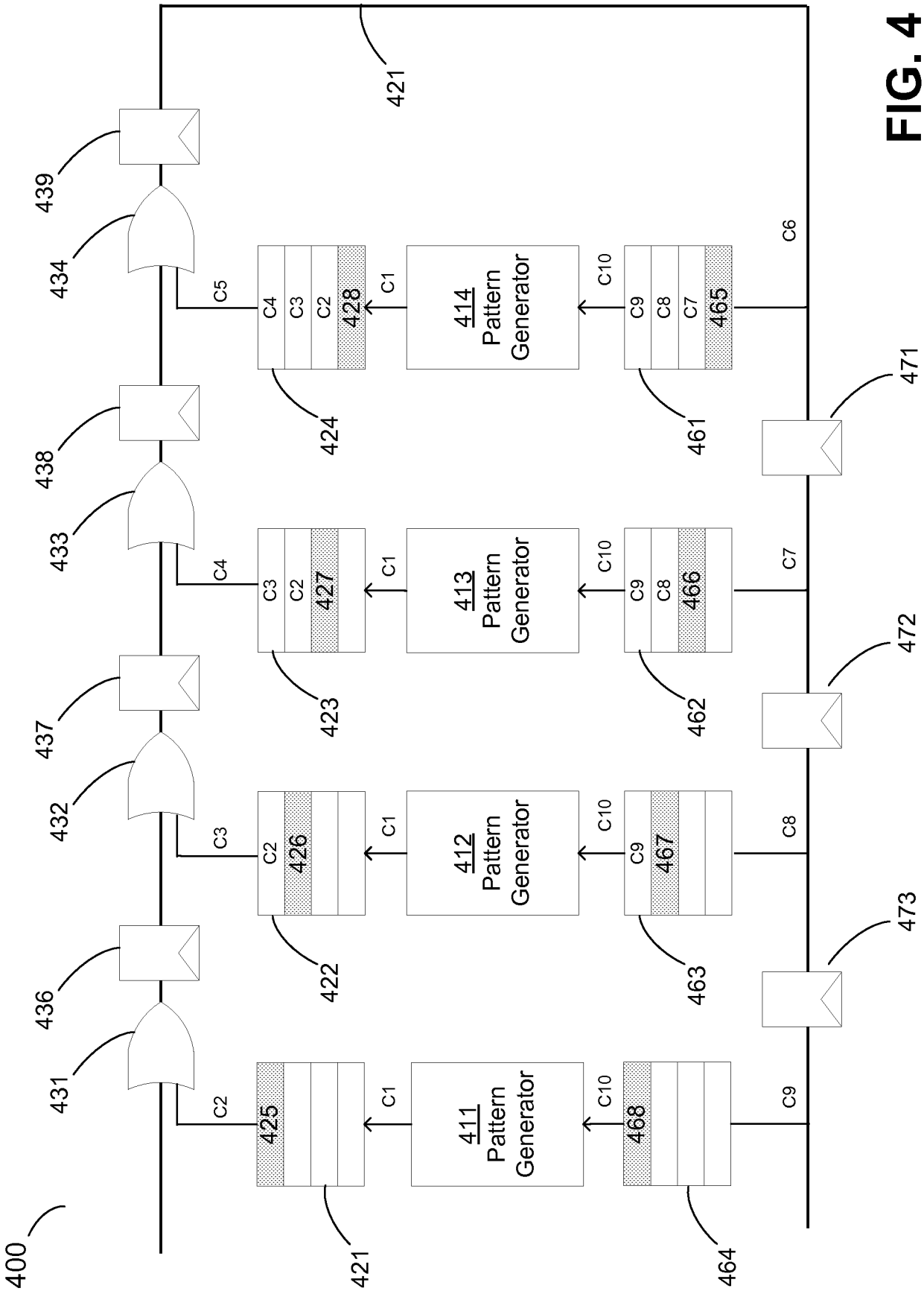
400
421
439
434
438
433
437
432
436
431
C5
C4
C3
C2
C6
C7
C8
C9
C1
C10
428
427
426
425
424
423
422
421
414 Pattern Generator
413 Pattern Generator
412 Pattern Generator
411 Pattern Generator
465
466
467
468
461
462
463
464
471
472
473

FIG. 4

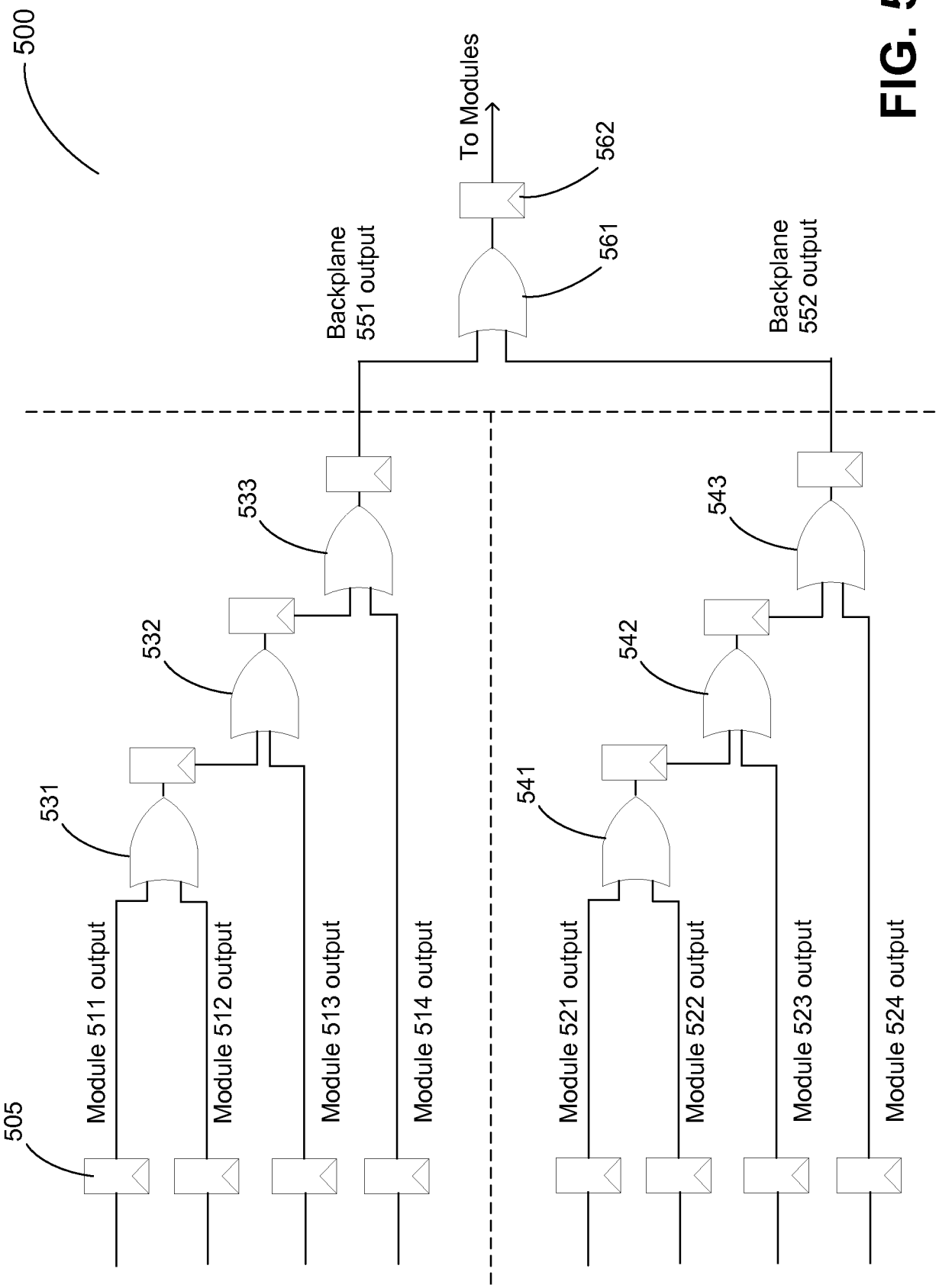
500
To Modules
562
561
Backplane
551 output
Backplane
552 output
533
543
532
542
531
541
505
Module 511 output
Module 512 output
Module 513 output
Module 514 output
Module 521 output
Module 522 output
Module 523 output
Module 524 output

FIG. 5

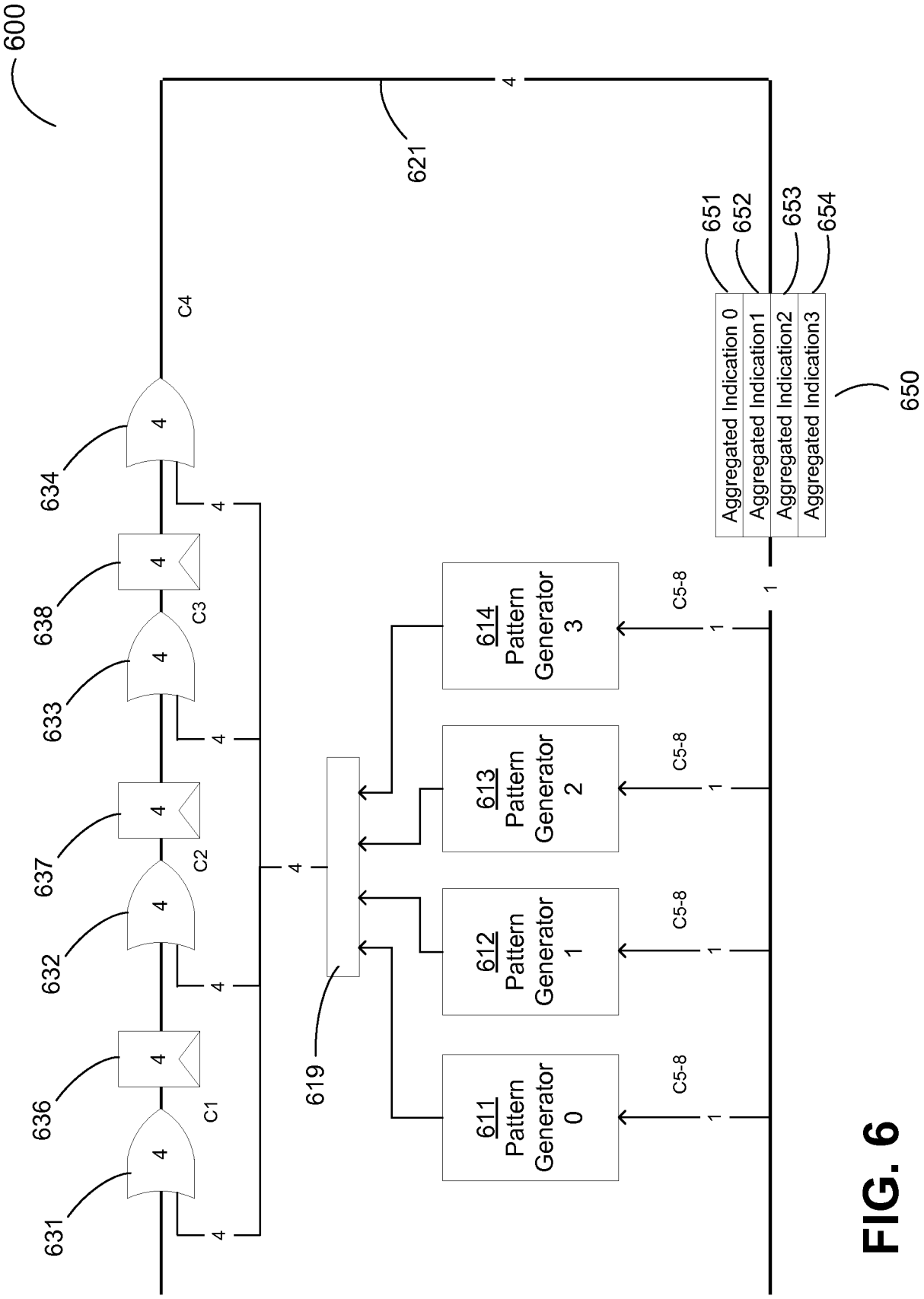
600
621
4
651
652
653
654
Aggregated Indication 0
Aggregated Indication1
Aggregated Indication2
Aggregated Indication3
650
C4
634
638
C3
633
637
C2
632
636
C1
631
619
611 Pattern Generator 0
612 Pattern Generator 1
613 Pattern Generator 2
614 Pattern Generator 3
C5-8
1

FIG. 6

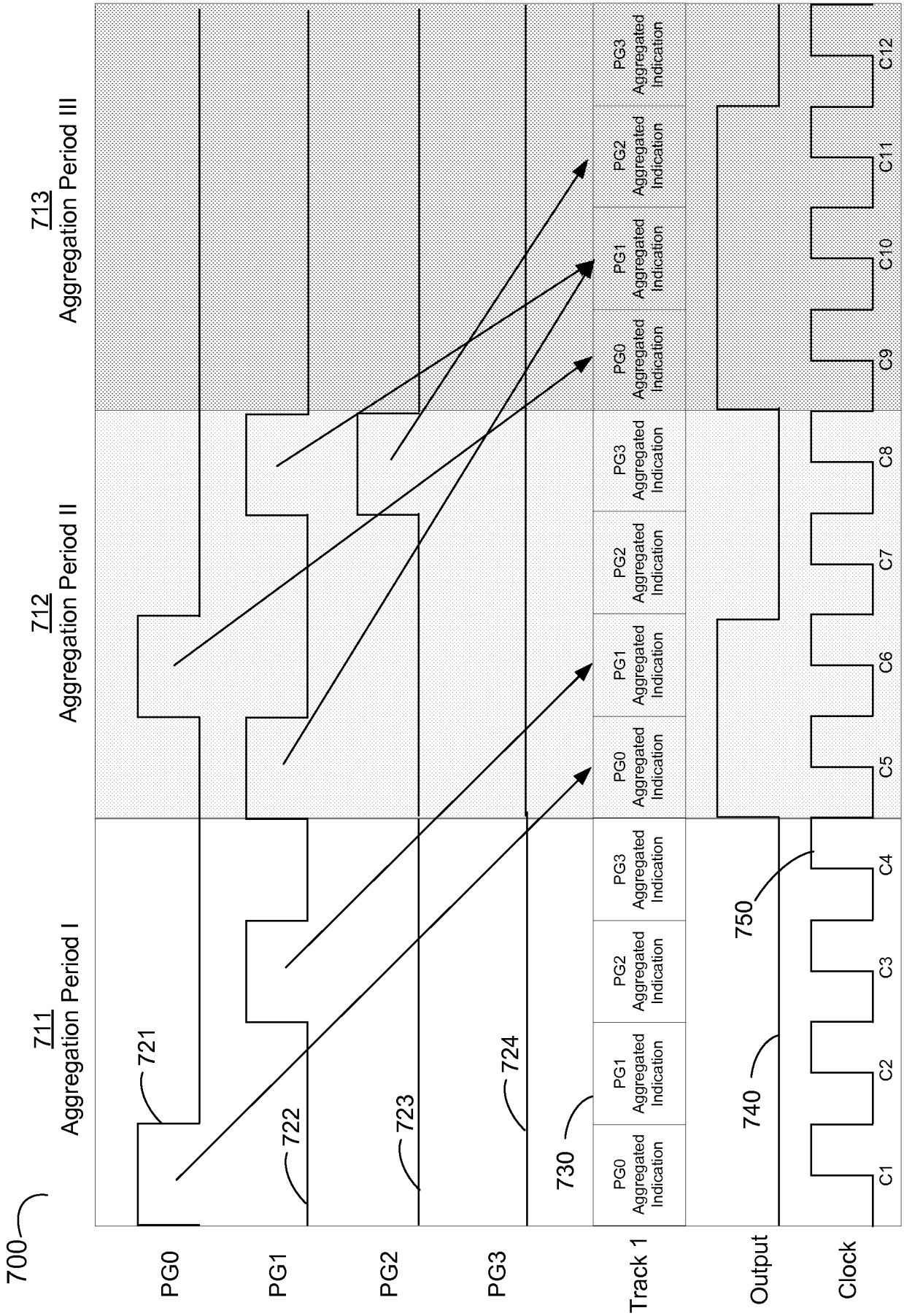
700
Z11
Aggregation Period I
Z12
Aggregation Period II
Z13
Aggregation Period III
721
722
723
724
730
740
750
PG0
PG1
PG2
PG3
Track 1
Output
Clock
PG0 Aggregated Indication
PG1 Aggregated Indication
PG2 Aggregated Indication
PG3 Aggregated Indication
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12

FIG. 7

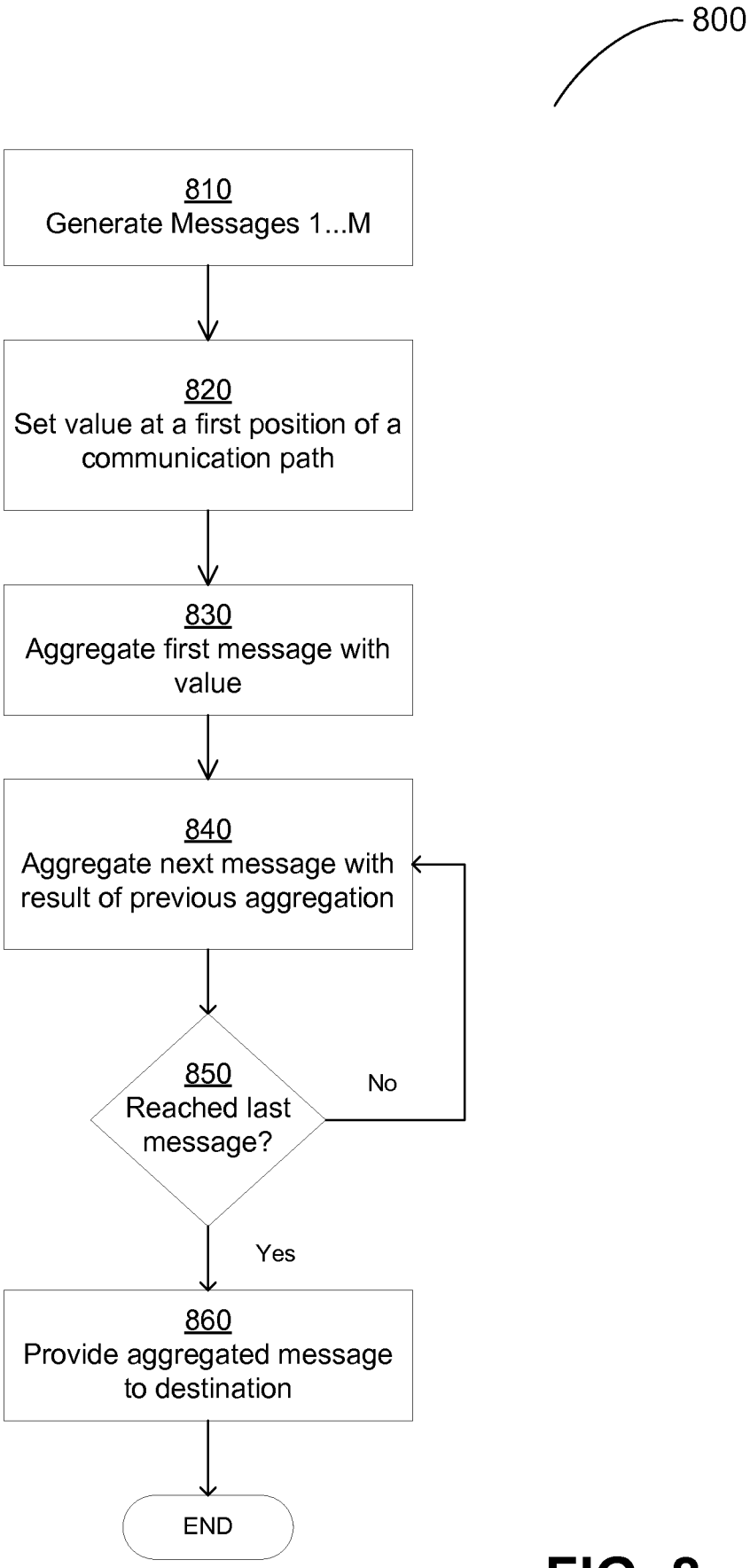
800
810
Generate Messages 1...M
820
Set value at a first position of a communication path
830
Aggregate first message with value
840
Aggregate next message with result of previous aggregation
850
Reached last message?
No
Yes
860
Provide aggregated message to destination
END

FIG. 8