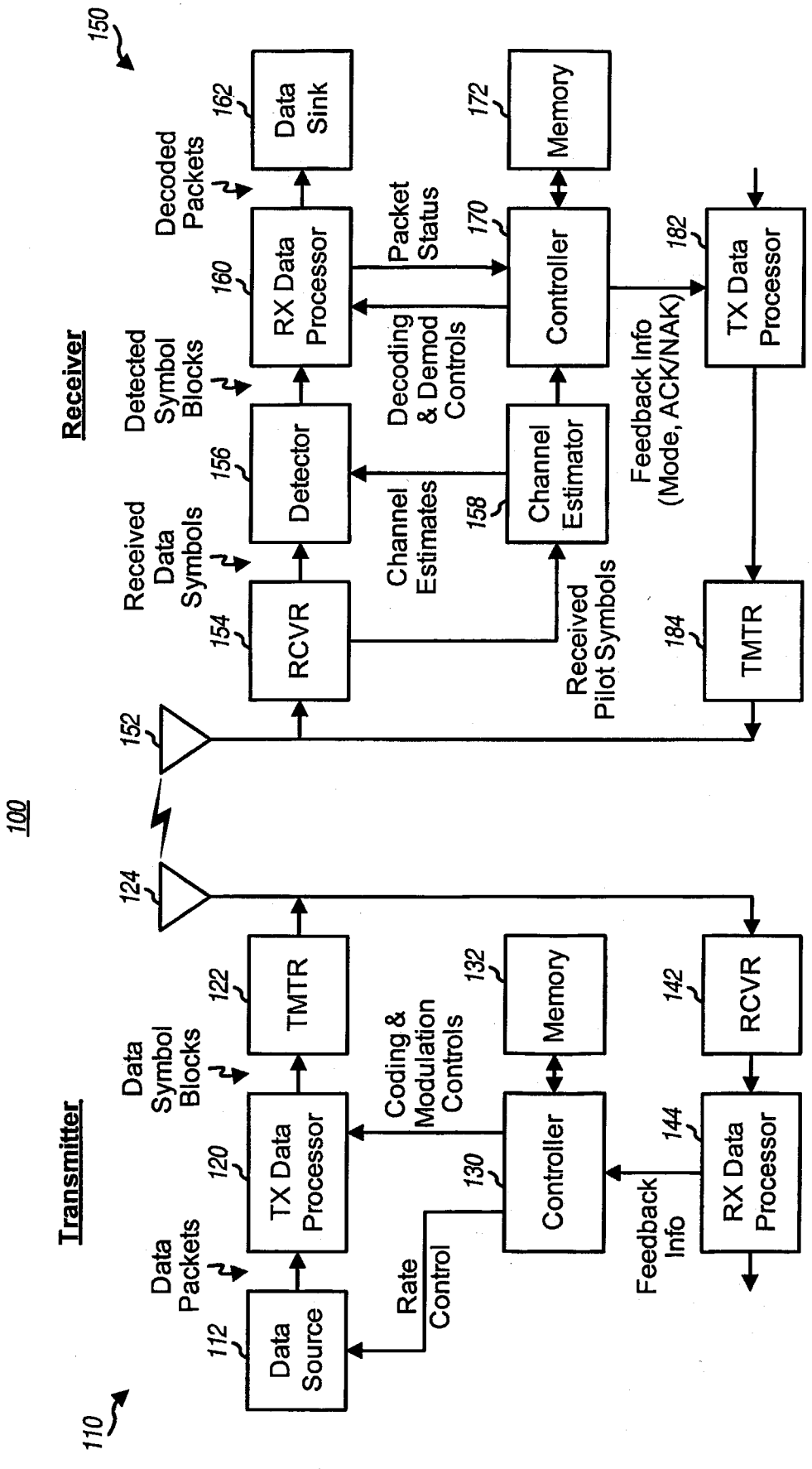

100
110
Transmitter
Data Source
112
Data Packets
TX Data Processor
120
Data Symbol Blocks
TMTR
122
124
Rate Control
Coding & Modulation Controls
Controller
130
Memory
132
Feedback Info
RX Data Processor
144
RCVR
142
150
Receiver
152
RCVR
154
Received Data Symbols
Detector
156
Detected Symbol Blocks
RX Data Processor
160
Decoded Packets
Data Sink
162
Channel Estimates
Channel Estimator
158
Received Pilot Symbols
Decoding & Demod Controls
Packet Status
Controller
170
Memory
172
Feedback Info (Mode, ACK/NAK)
TX Data Processor
182
TMTR
184

FIG. 1

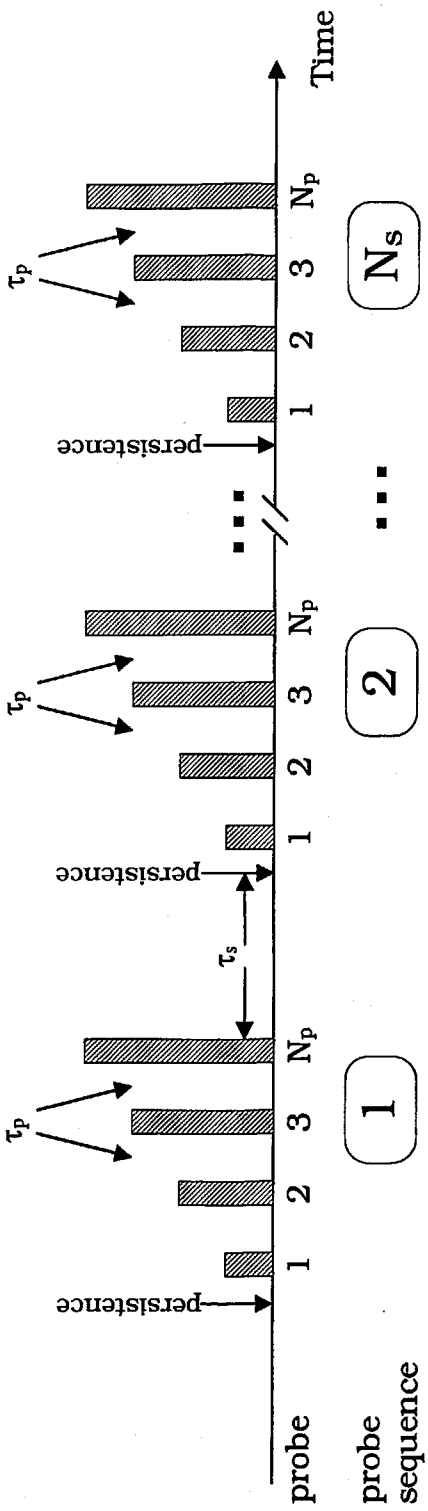

Time
probe
probe sequence
persistence
persistence
persistence
1
2
3
N_p
N_s
τ_p
τ_s

Fig. 2

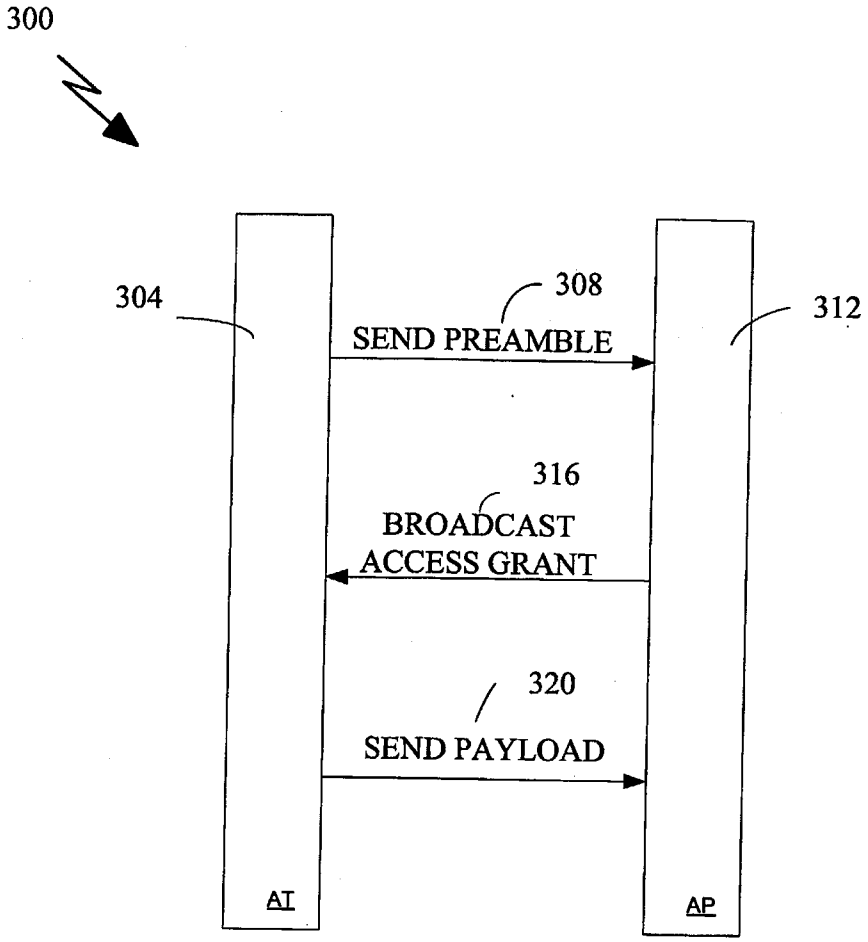

300
304
308
SEND PREAMBLE
312
316
BROADCAST
ACCESS GRANT
320
SEND PAYLOAD
AT
AP

FIG. 3

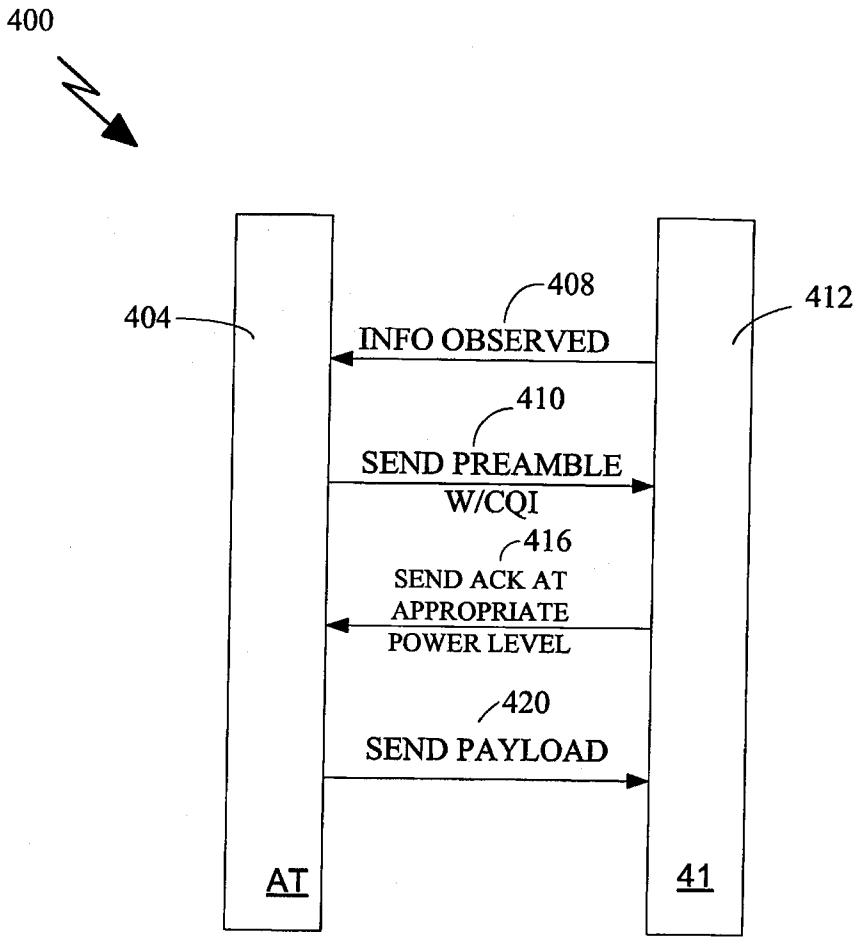

400
404
408
INFO OBSERVED
412
410
SEND PREAMBLE
W/CQI
416
SEND ACK AT
APPROPRIATE
POWER LEVEL
420
SEND PAYLOAD
AT
41

FIG. 4

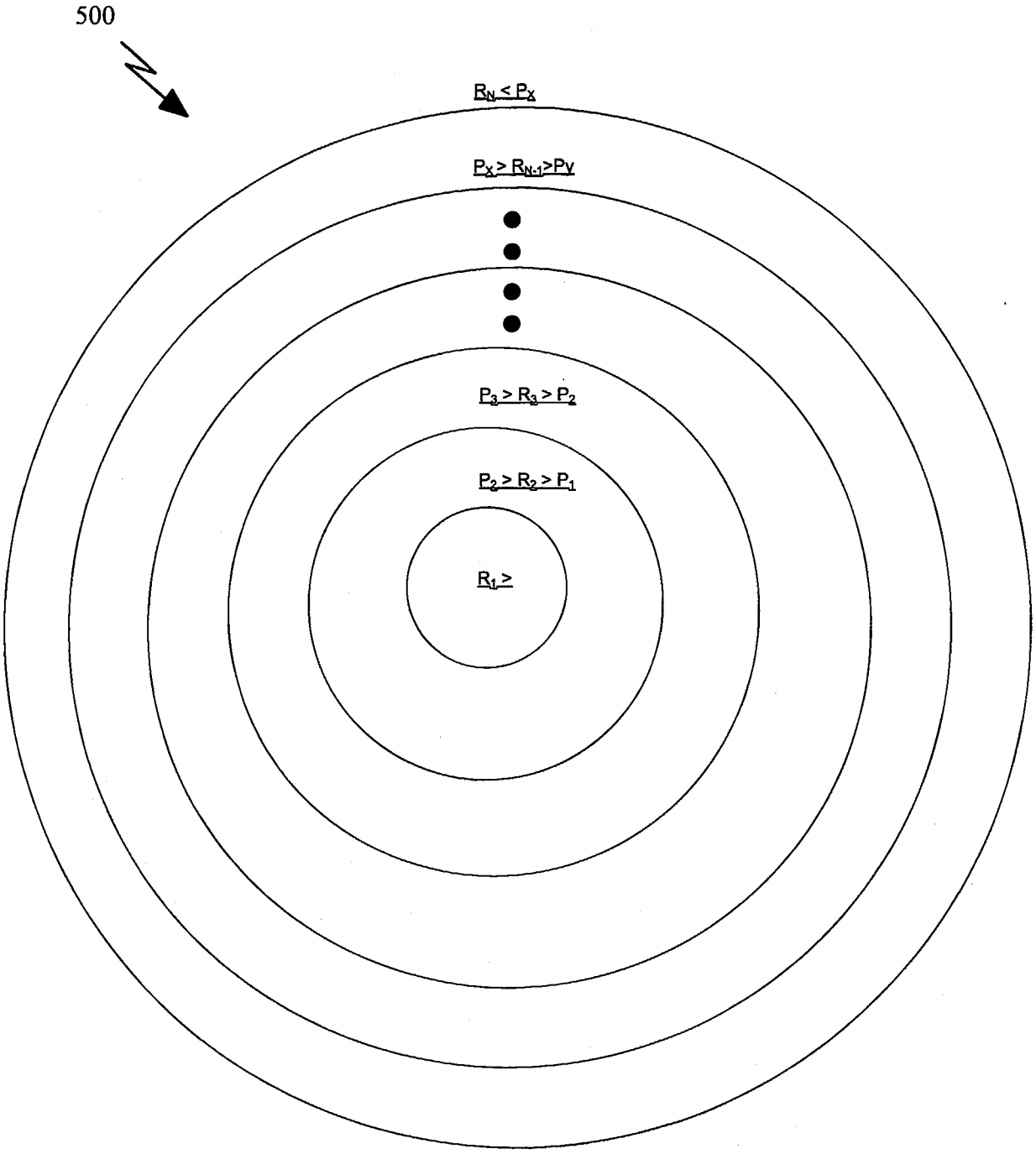


FIGURE 5

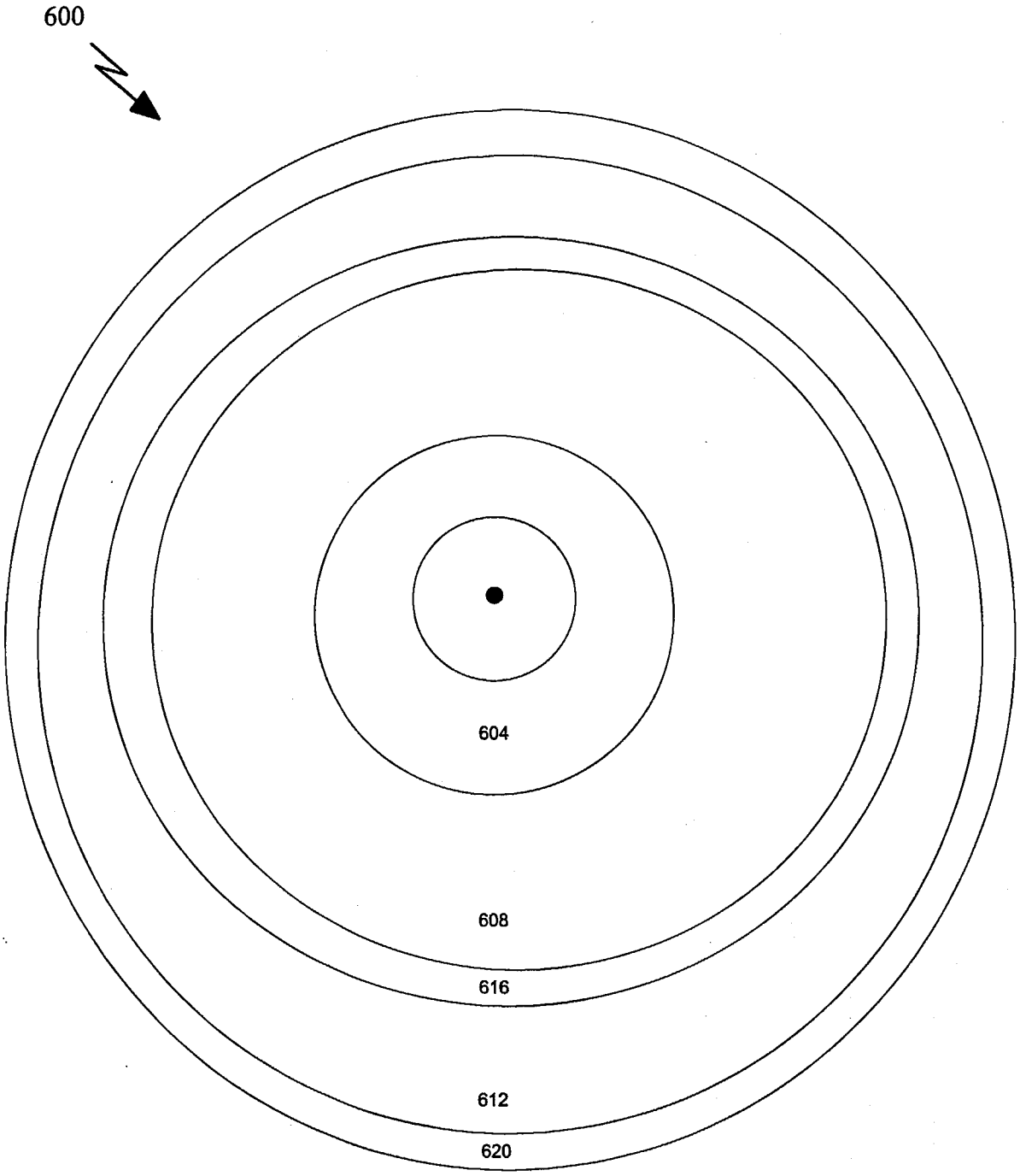


FIGURE 6

700

CQI	PACKET SIZE	TRAFFIC TYPE	BW REQUEST	. . .	QOS	BUFFER LEVEL
$R_1 > P_1$	$AS_{1,1}$	$AS_{2,1}$	$AS_{3,1}$	. . .	$AS_{M-1,1}$	$AS_{M,1}$
$P_2>R_2>P_1$	$AS_{1,2}$	$AS_{2,2}$	$AS_{2,2}$	. . .	$AS_{M-1,2}$	$AS_{M,2}$
$P_3>R_3>P_2$ . .	$AS_{1,3}$ . .	$AS_{2,3}$ . .	$AS_{3,3}$ . .	. . .	$AS_{M-1,3}$ . .	$AS_{M,3}$ . .
. $P_X>R_{N-1}>Py$	. $AS_{1,N-1}$	. $AS_{2,N-1}$	. $AS_{3,N-1}$	. . .	. $AS_{M-1,N-1}$	. $AS_{M,N-1}$
$R_N < Px$	$AS_{1,N}$	$AS_{2,N}$	$AS_{3,N}$	. . .	$AS_{M-1,N}$	$AS_{M,N}$

FIGURE 7

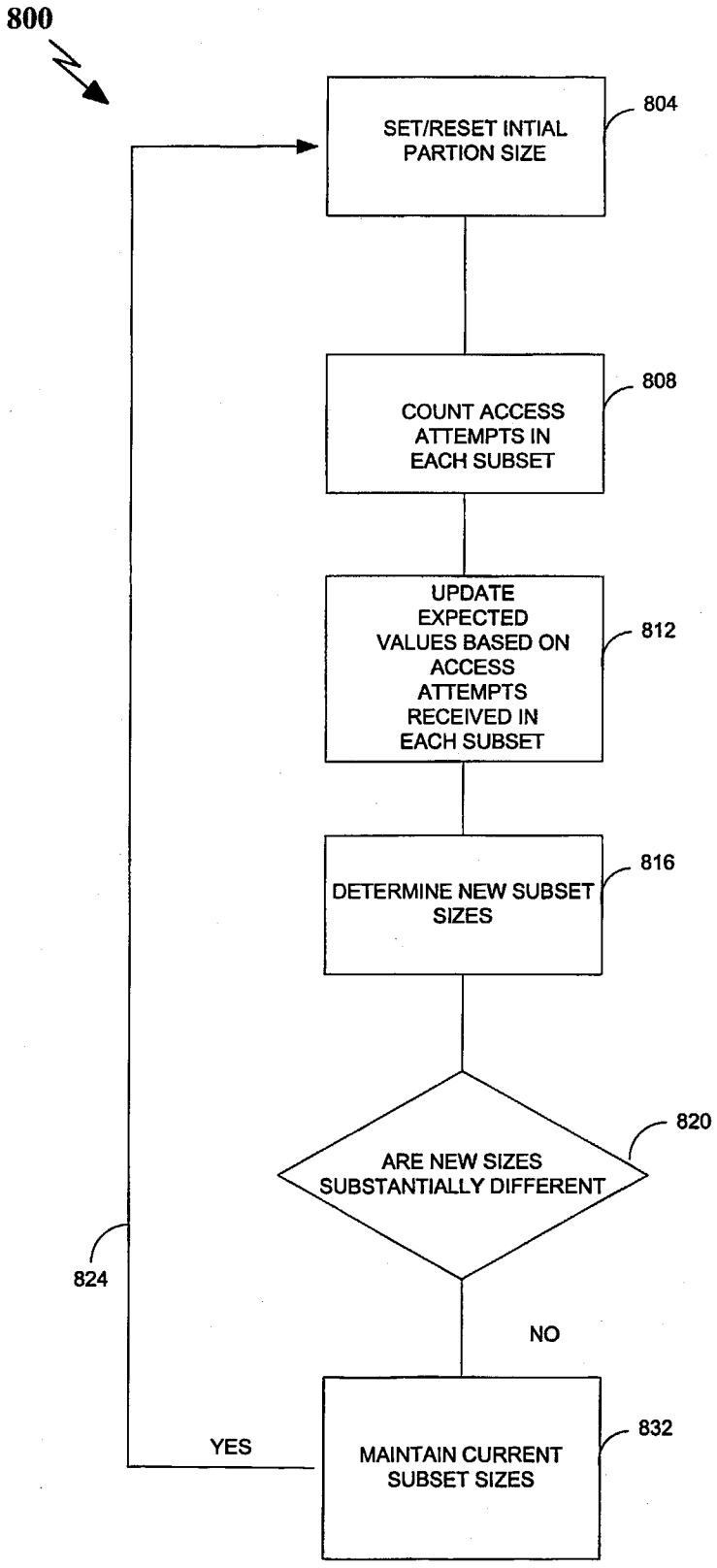

800
SET/RESET INTIAL PARTION SIZE
804
COUNT ACCESS ATTEMPTS IN EACH SUBSET
808
UPDATE EXPECTED VALUES BASED ON ACCESS ATTEMPTS RECEIVED IN EACH SUBSET
812
DETERMINE NEW SUBSET SIZES
816
ARE NEW SIZES SUBSTANTIALLY DIFFERENT
820
824
NO
YES
MAINTAIN CURRENT SUBSET SIZES
832

FIGURE 8