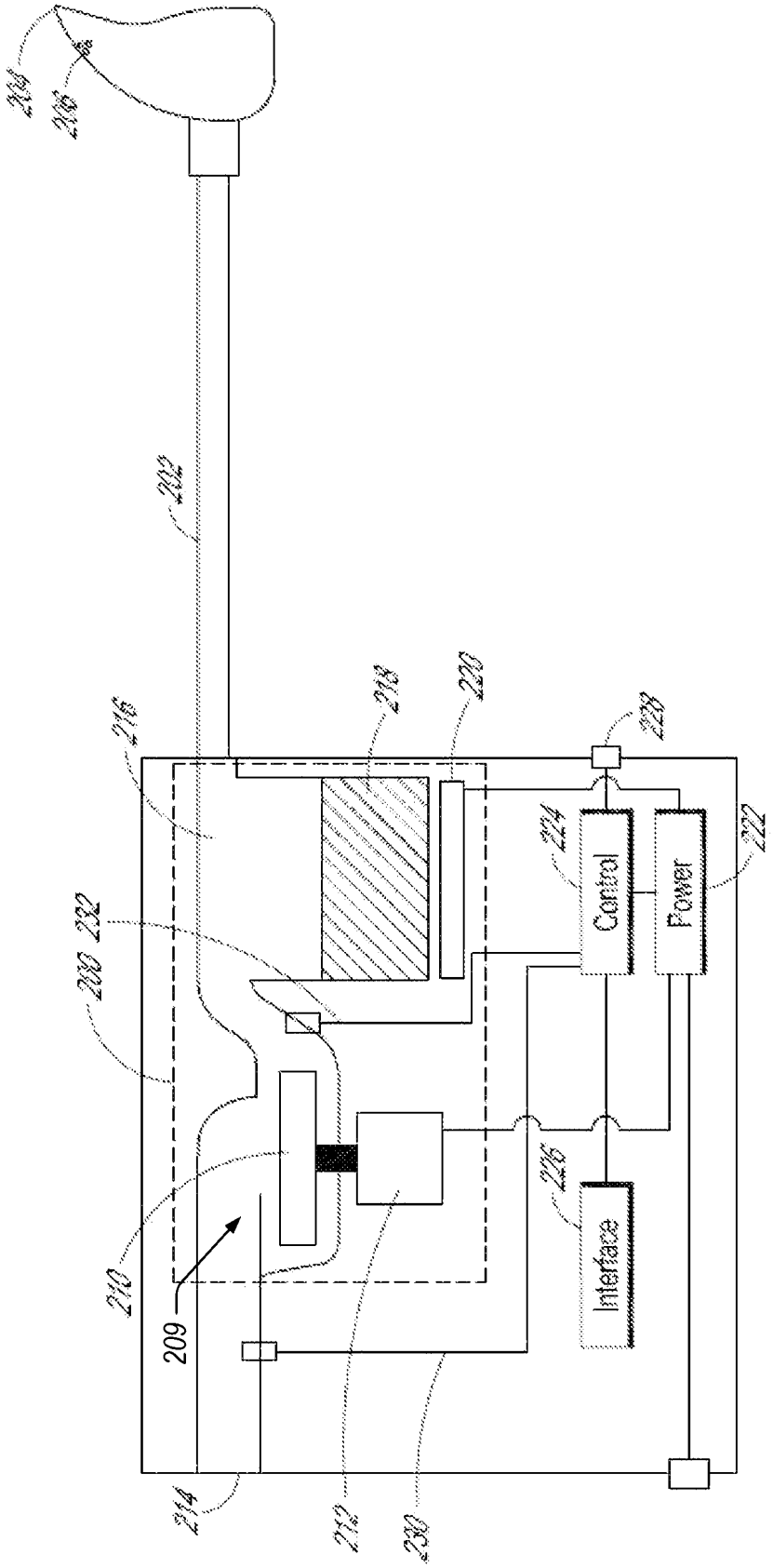
204
206
202
216
218
220
228
224
Control
Power
222
208
232
210
209
226
Interface
214
212
230

FIG. 1

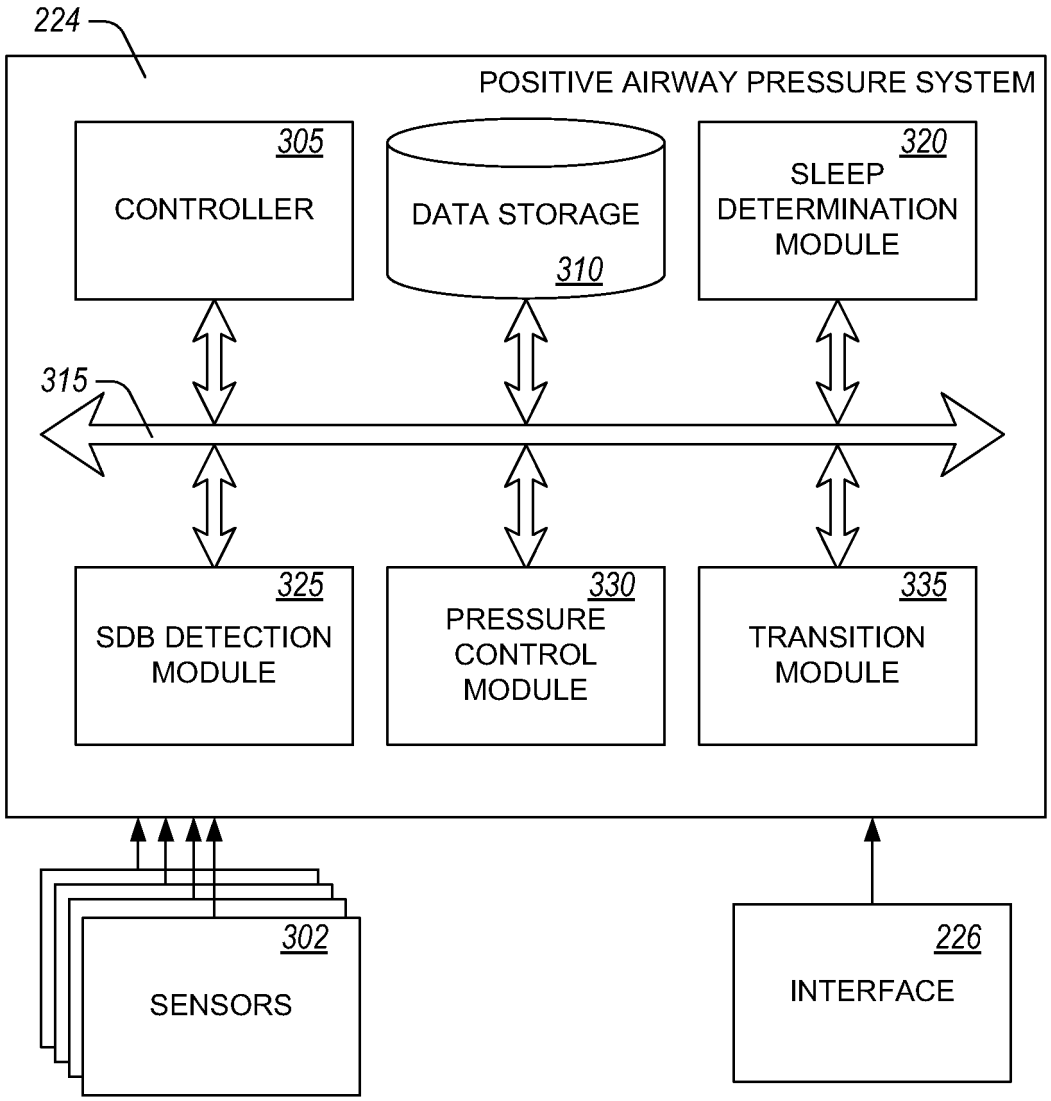
224
POSITIVE AIRWAY PRESSURE SYSTEM
305
CONTROLLER
DATA STORAGE
310
320
SLEEP DETERMINATION MODULE
315
325
SDB DETECTION MODULE
330
PRESSURE CONTROL MODULE
335
TRANSITION MODULE
302
SENSORS
226
INTERFACE

FIG. 2

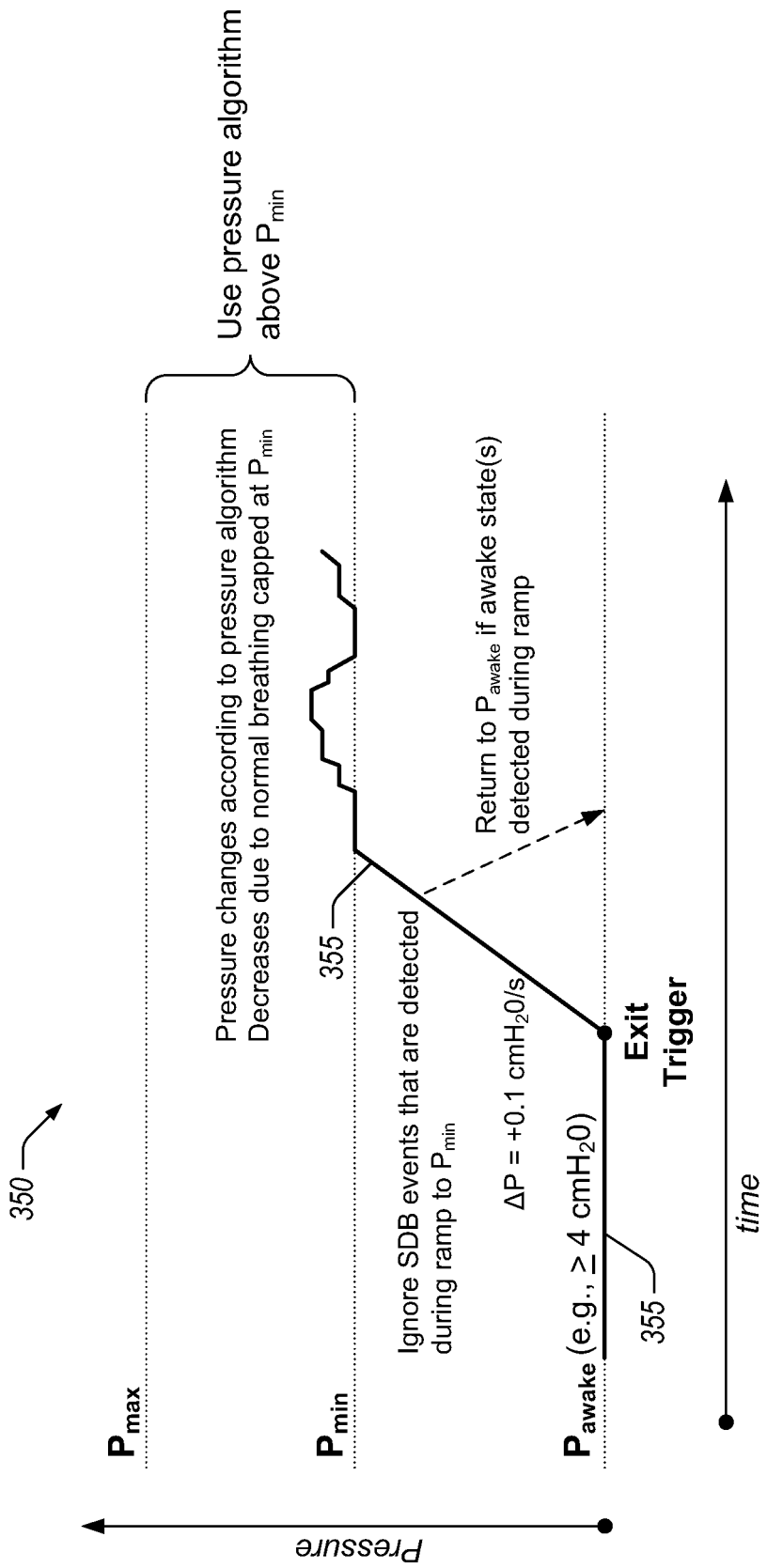
Use pressure algorithm above P_{min}
Pressure changes according to pressure algorithm Decreases due to normal breathing capped at P_{min}
355
Ignore SDB events that are detected during ramp to P_{min}
$\Delta P = +0.1\ cmH_20/s$
Return to P_{awake} if awake state(s) detected during ramp
Exit Trigger
355
P_{max}
P_{min}
P_{awake} (e.g., $\geq$ 4 cmH_20)
350
Pressure
time

FIG. 3

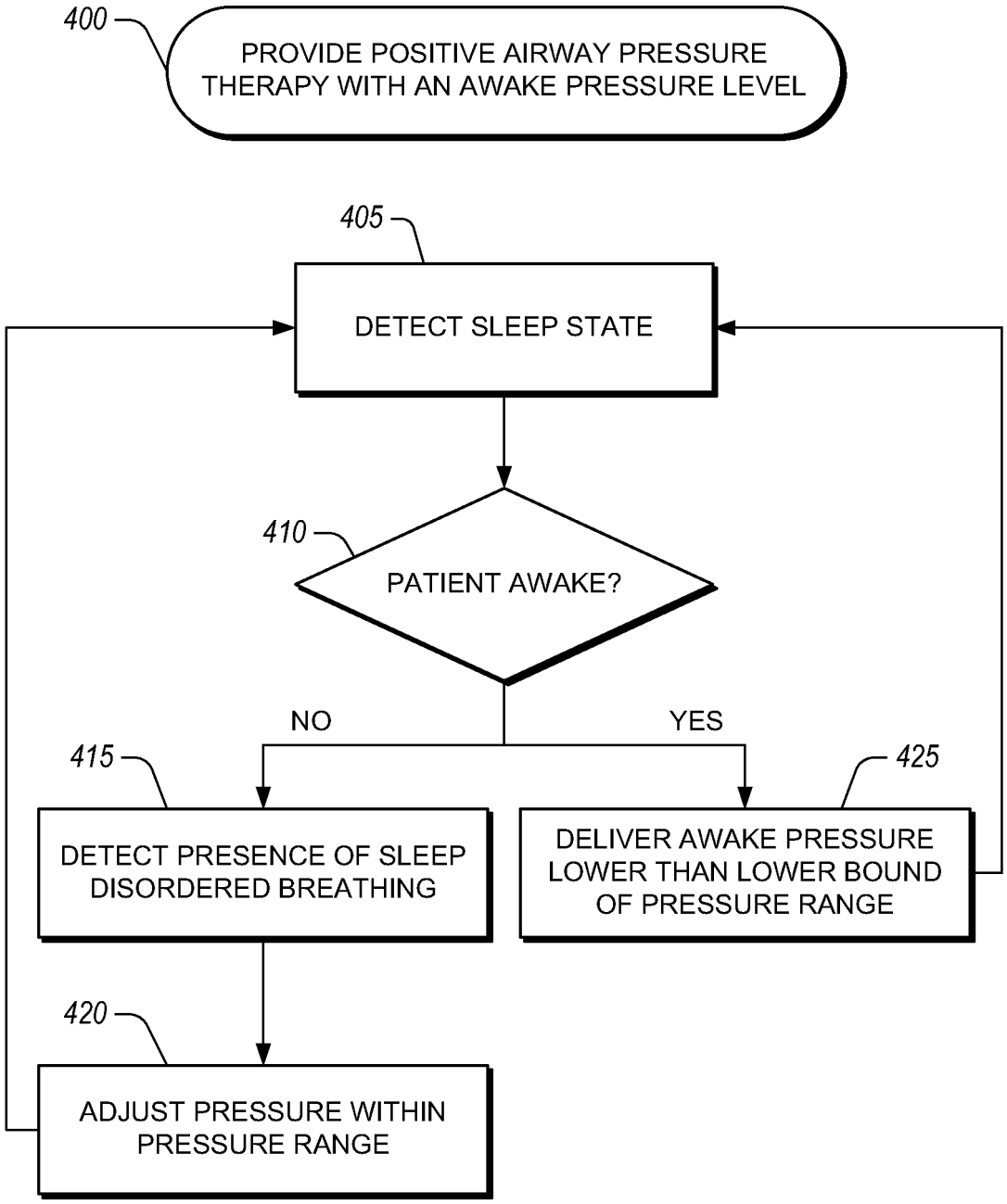
400
PROVIDE POSITIVE AIRWAY PRESSURE THERAPY WITH AN AWAKE PRESSURE LEVEL
405
DETECT SLEEP STATE
410
PATIENT AWAKE?
NO
YES
415
DETECT PRESENCE OF SLEEP DISORDERED BREATHING
425
DELIVER AWAKE PRESSURE LOWER THAN LOWER BOUND OF PRESSURE RANGE
420
ADJUST PRESSURE WITHIN PRESSURE RANGE

FIG. 4