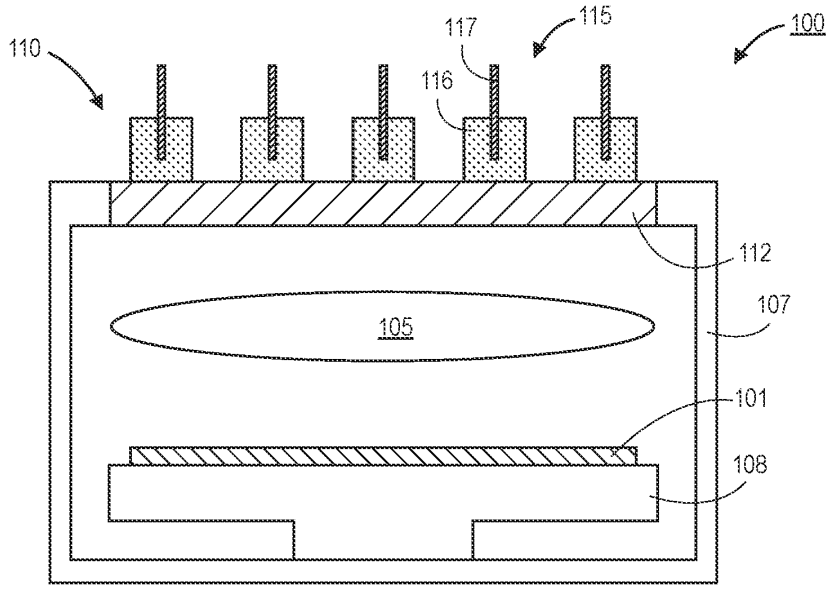


FIG. 1A

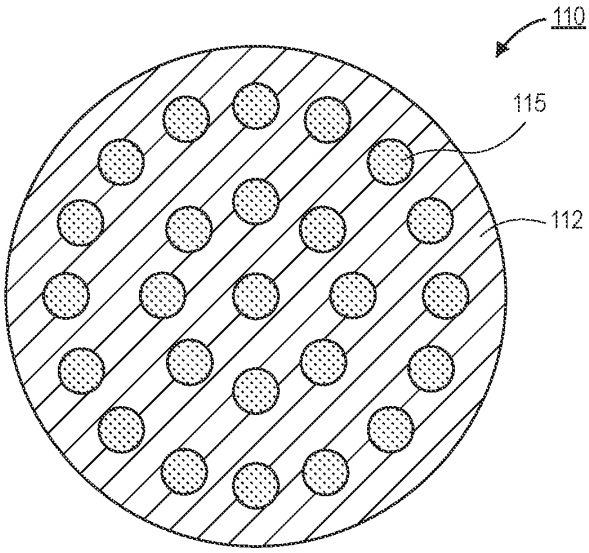


FIG. 1B

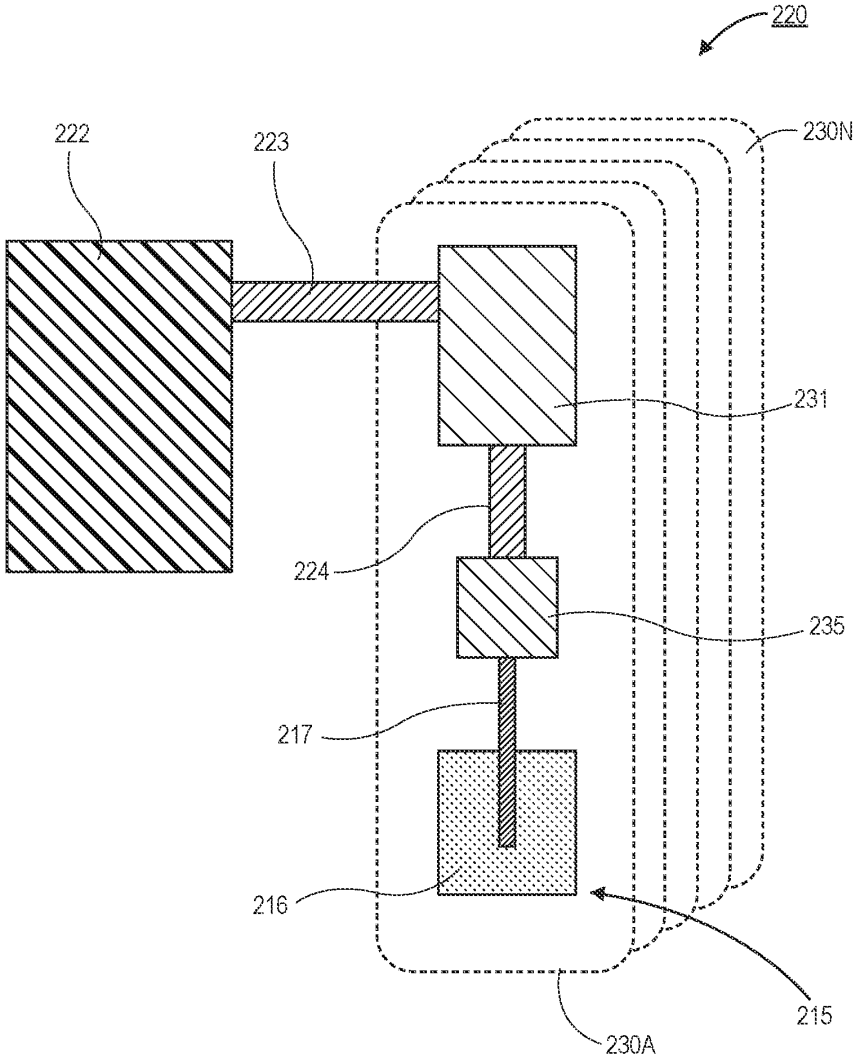


FIG. 2

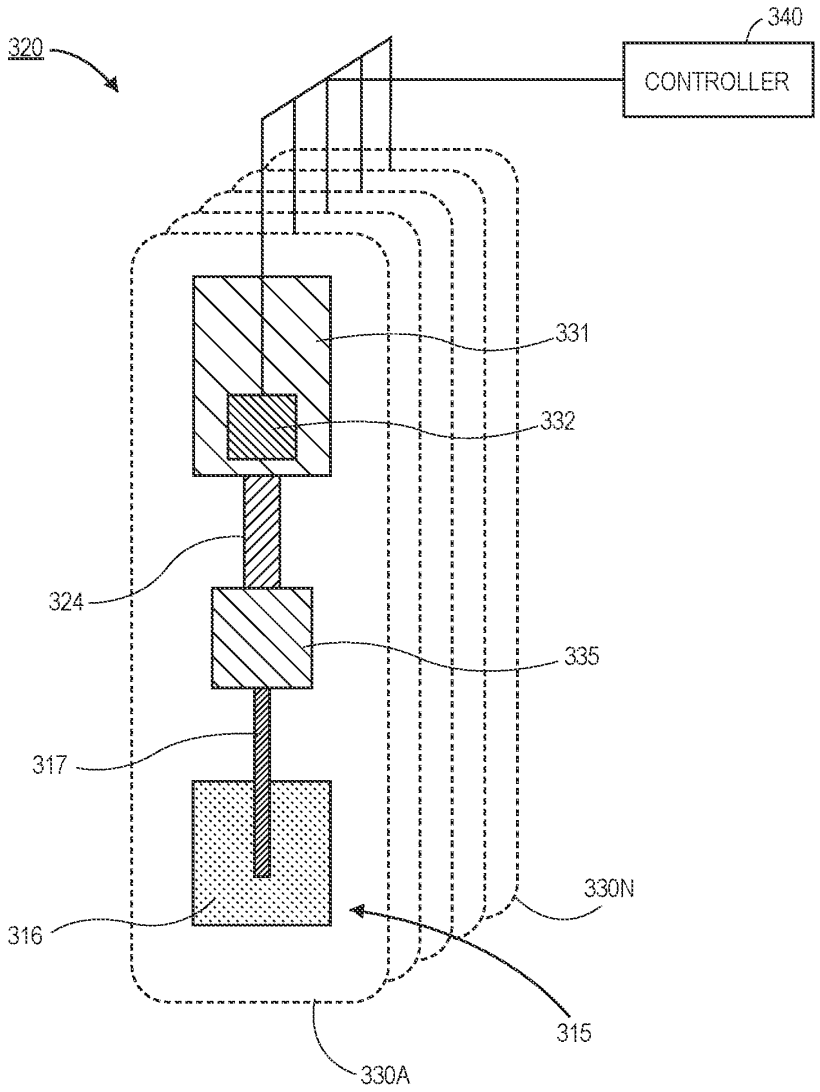


FIG. 3

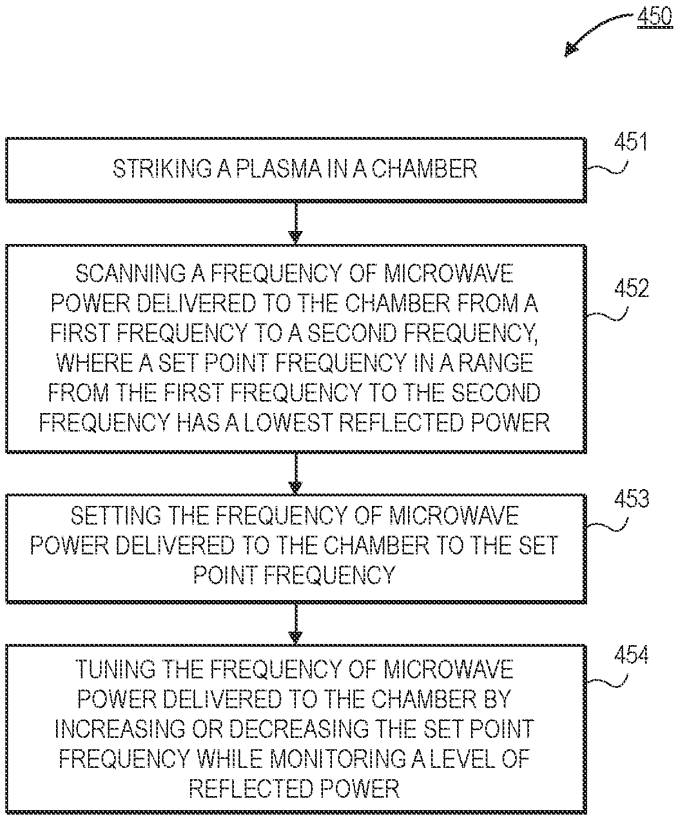

450
STRIKING A PLASMA IN A CHAMBER
451
SCANNING A FREQUENCY OF MICROWAVE POWER DELIVERED TO THE CHAMBER FROM A FIRST FREQUENCY TO A SECOND FREQUENCY, WHERE A SET POINT FREQUENCY IN A RANGE FROM THE FIRST FREQUENCY TO THE SECOND FREQUENCY HAS A LOWEST REFLECTED POWER
452
SETTING THE FREQUENCY OF MICROWAVE POWER DELIVERED TO THE CHAMBER TO THE SET POINT FREQUENCY
453
TUNING THE FREQUENCY OF MICROWAVE POWER DELIVERED TO THE CHAMBER BY INCREASING OR DECREASING THE SET POINT FREQUENCY WHILE MONITORING A LEVEL OF REFLECTED POWER
454

FIG. 4

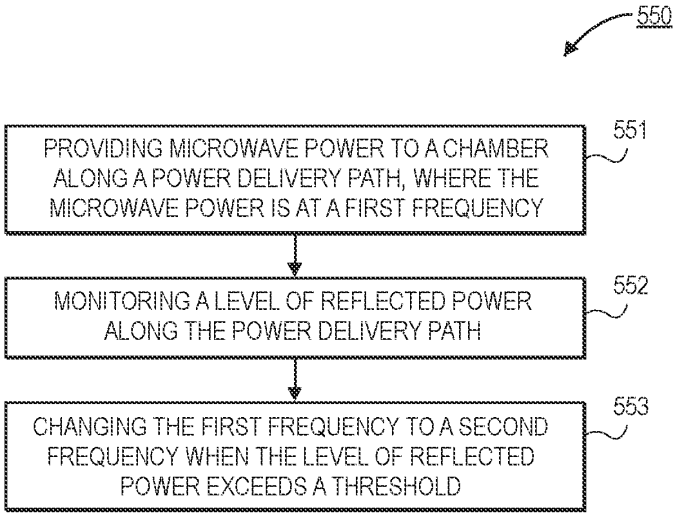

550
PROVIDING MICROWAVE POWER TO A CHAMBER ALONG A POWER DELIVERY PATH, WHERE THE MICROWAVE POWER IS AT A FIRST FREQUENCY
551
MONITORING A LEVEL OF REFLECTED POWER ALONG THE POWER DELIVERY PATH
552
CHANGING THE FIRST FREQUENCY TO A SECOND FREQUENCY WHEN THE LEVEL OF REFLECTED POWER EXCEEDS A THRESHOLD
553

FIG. 5

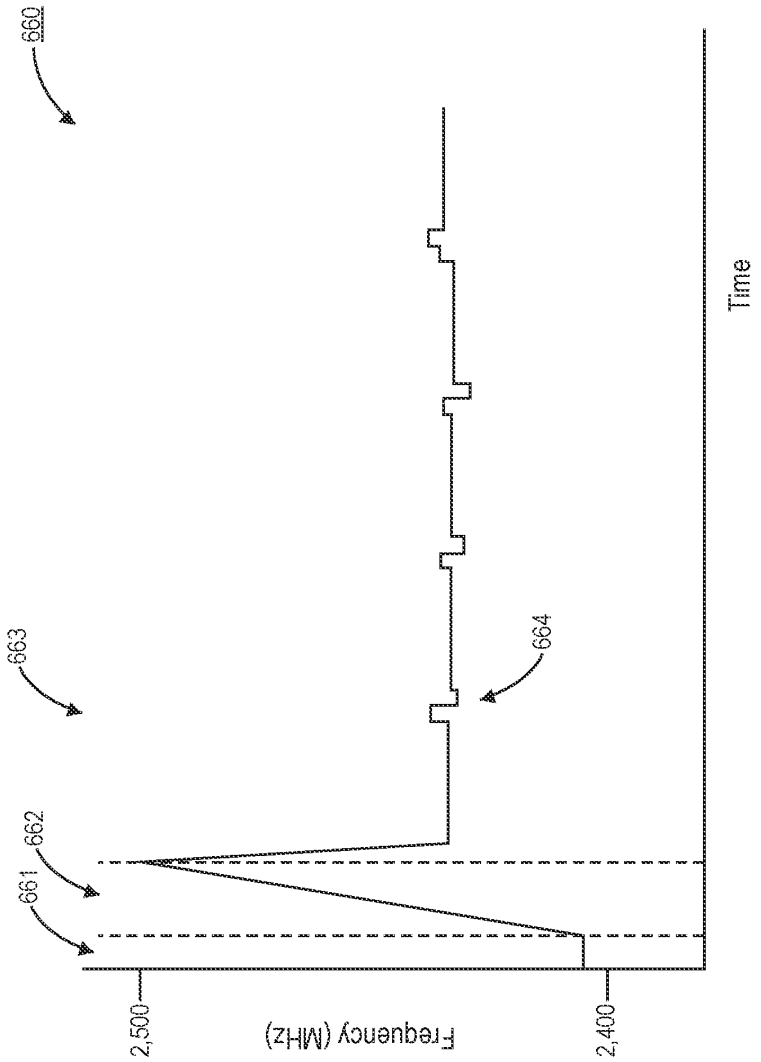


FIG. 6

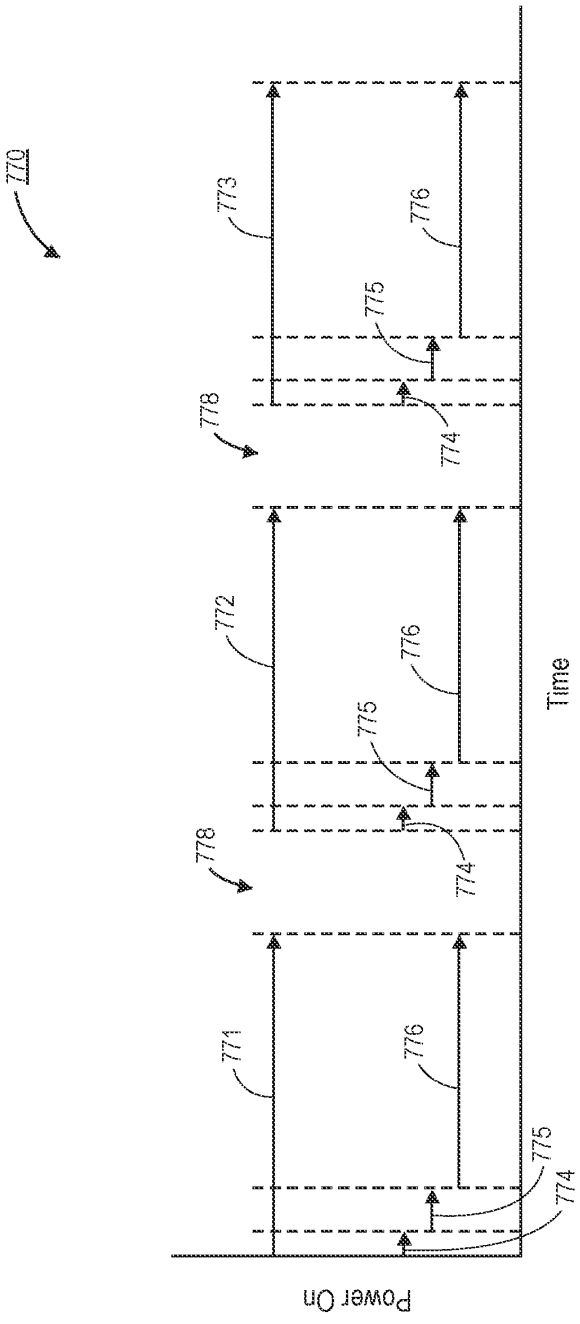


FIG. 7A

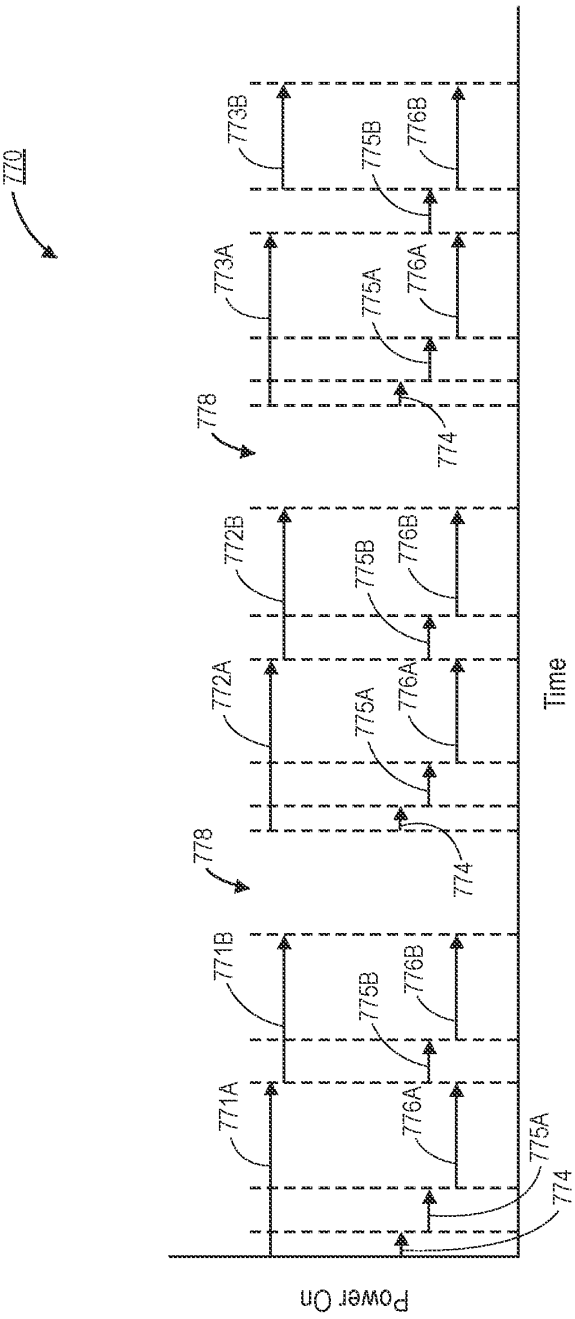

770
Power On
Time
771A
771B
772A
772B
773A
773B
774
775A
775B
776A
776B
778

FIG. 7B

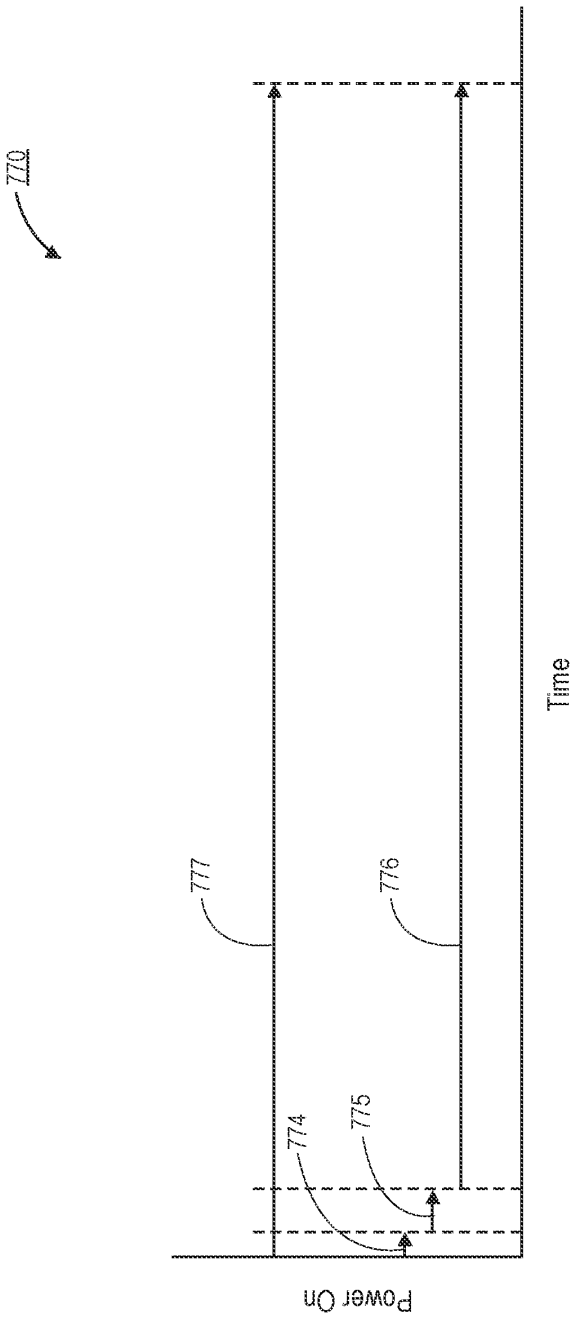


FIG. 7C

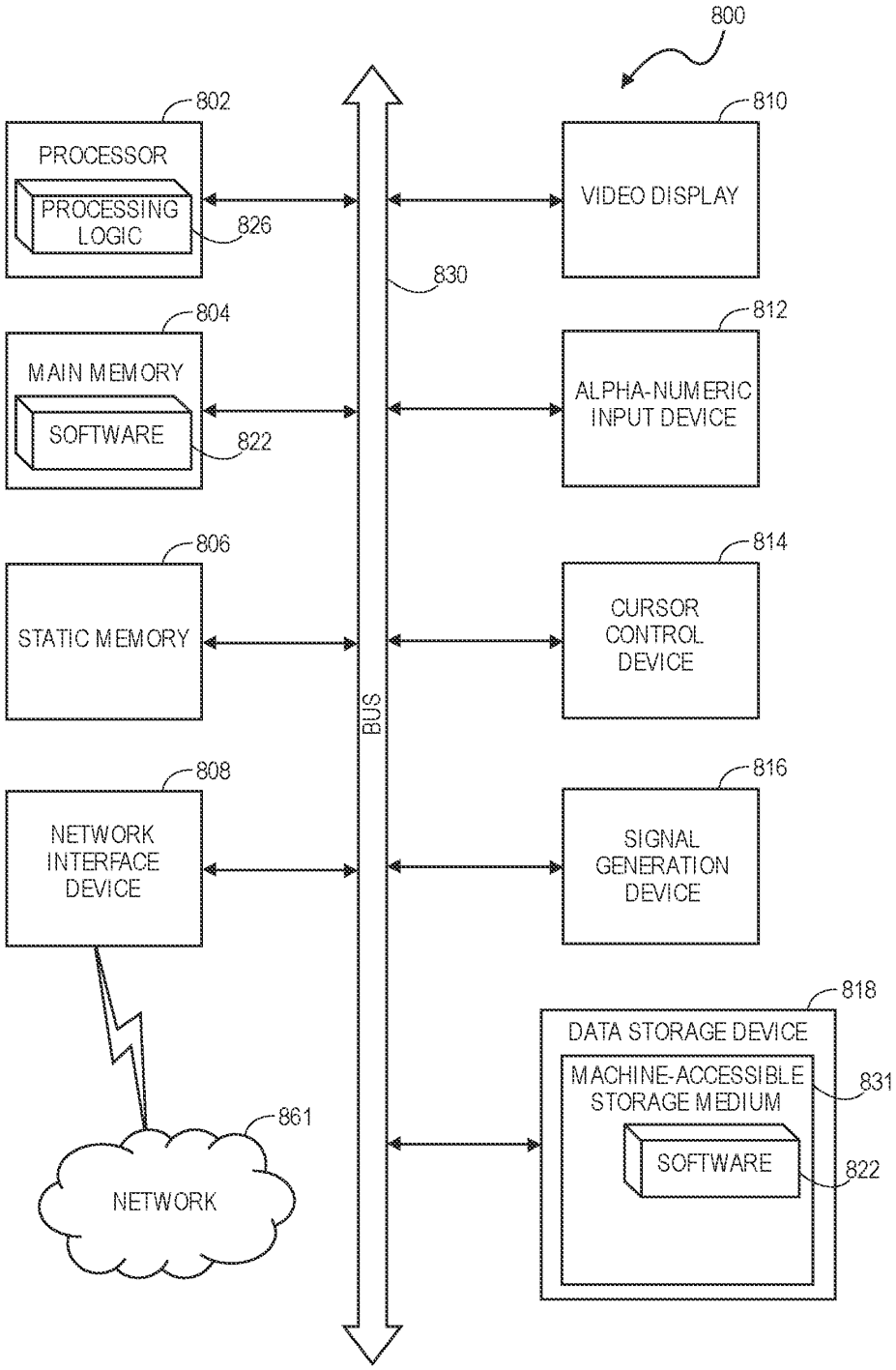

800
802
PROCESSOR
PROCESSING LOGIC
826
804
MAIN MEMORY
SOFTWARE
822
806
STATIC MEMORY
808
NETWORK INTERFACE DEVICE
861
NETWORK
BUS
830
810
VIDEO DISPLAY
812
ALPHA-NUMERIC INPUT DEVICE
814
CURSOR CONTROL DEVICE
816
SIGNAL GENERATION DEVICE
818
DATA STORAGE DEVICE
MACHINE-ACCESSIBLE STORAGE MEDIUM
831
SOFTWARE
822

FIG. 8