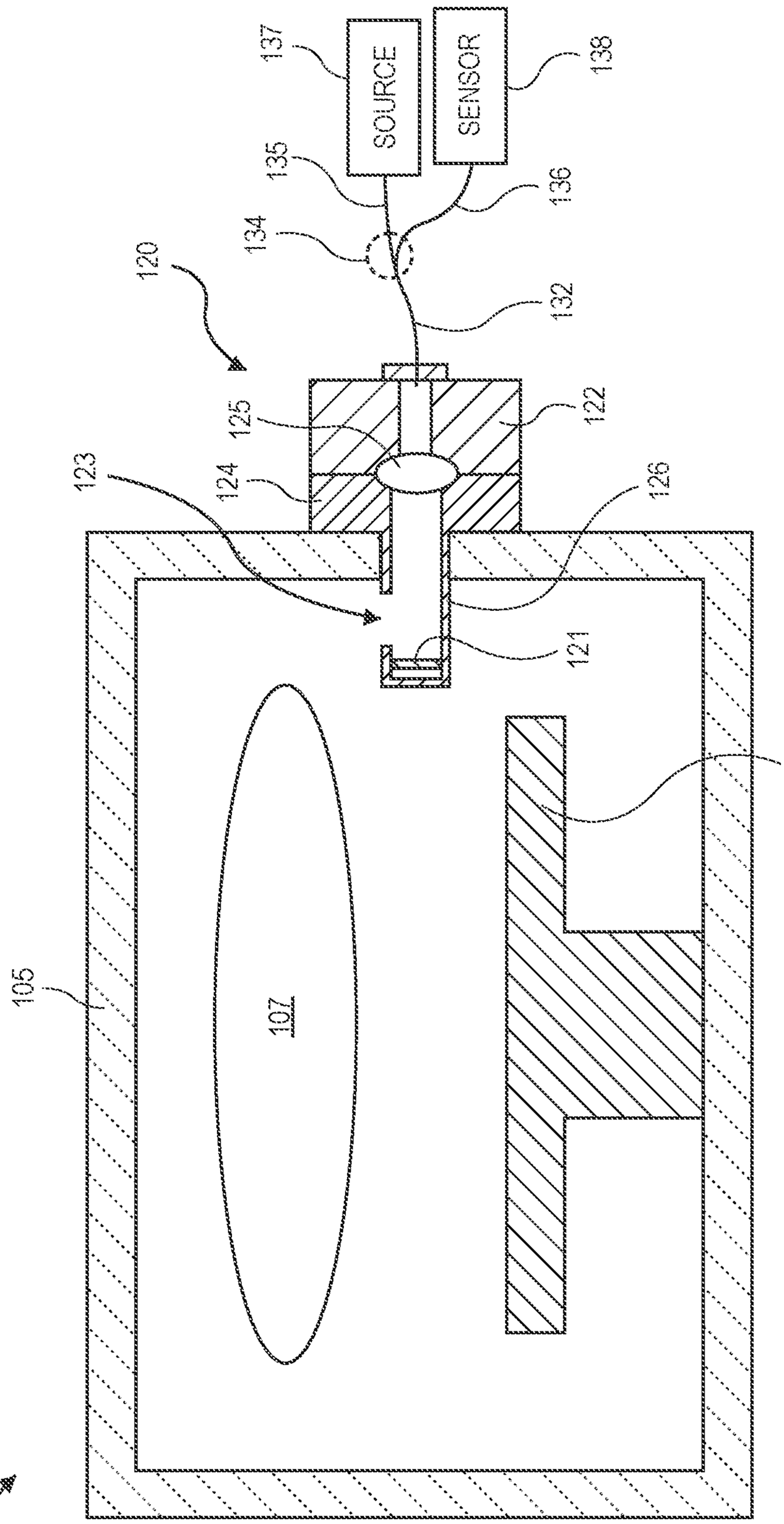

100
105
107
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136
137
138
SOURCE
SENSOR

FIG. 1

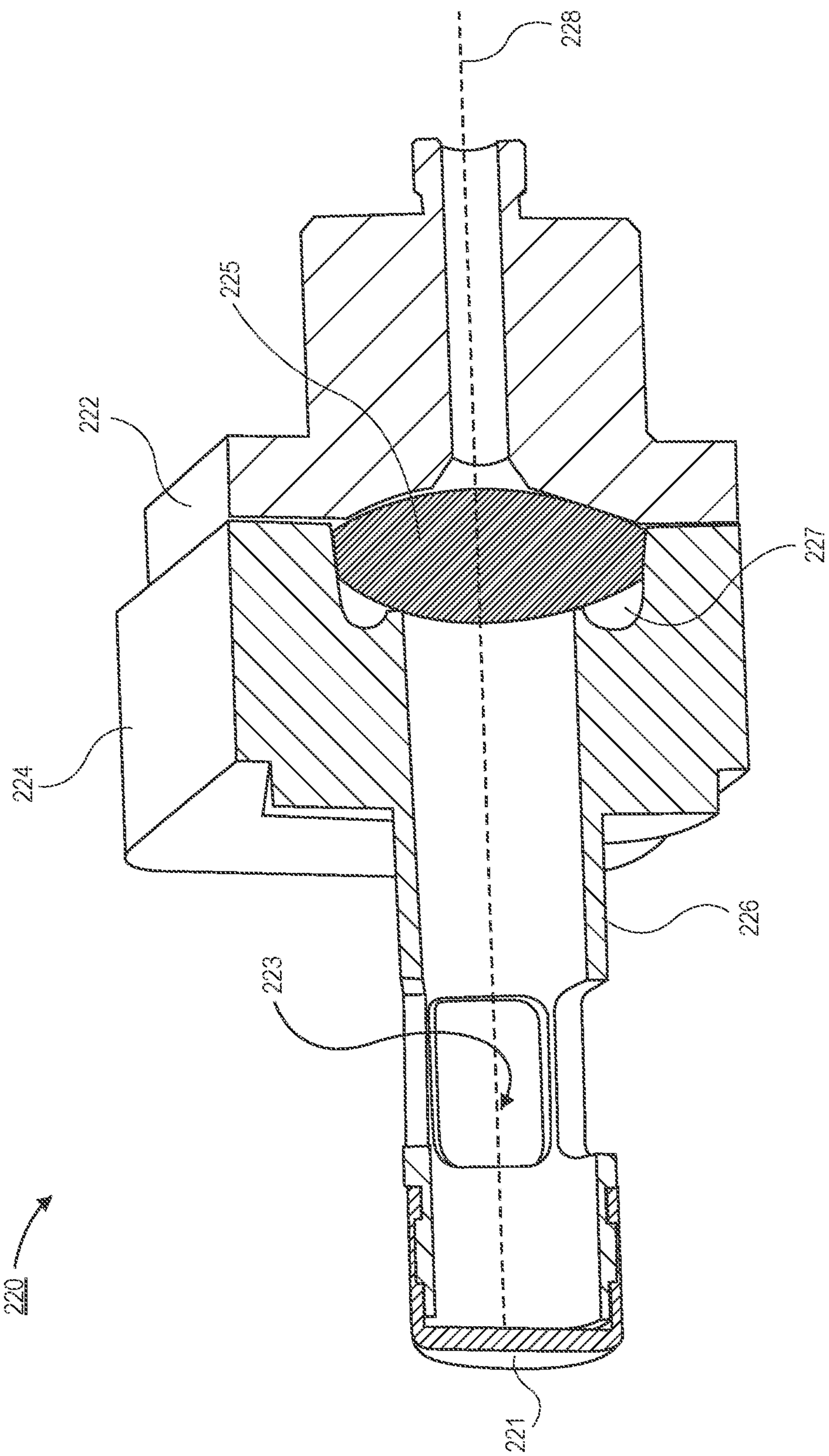


FIG. 2

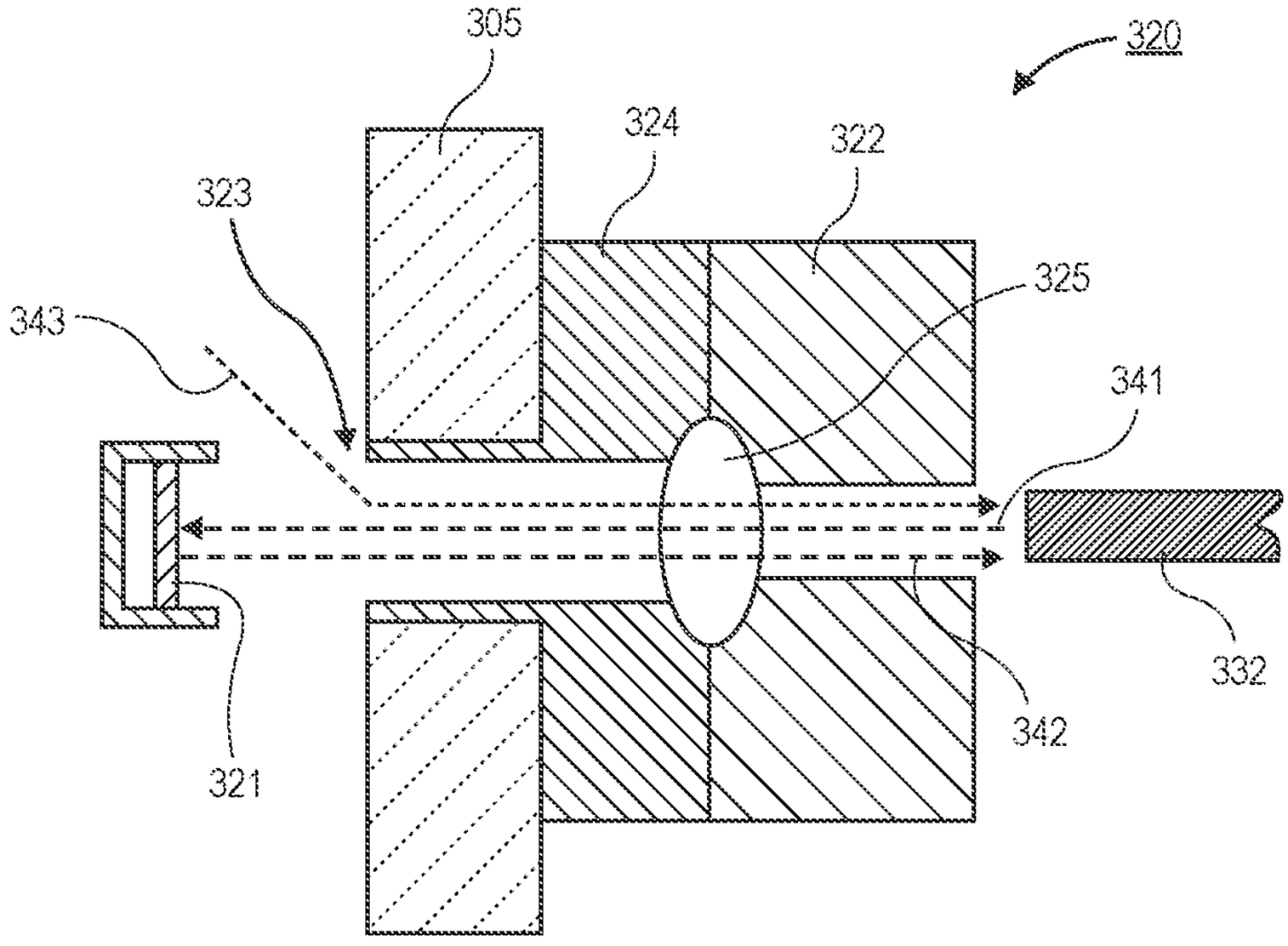

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324
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FIG. 3A

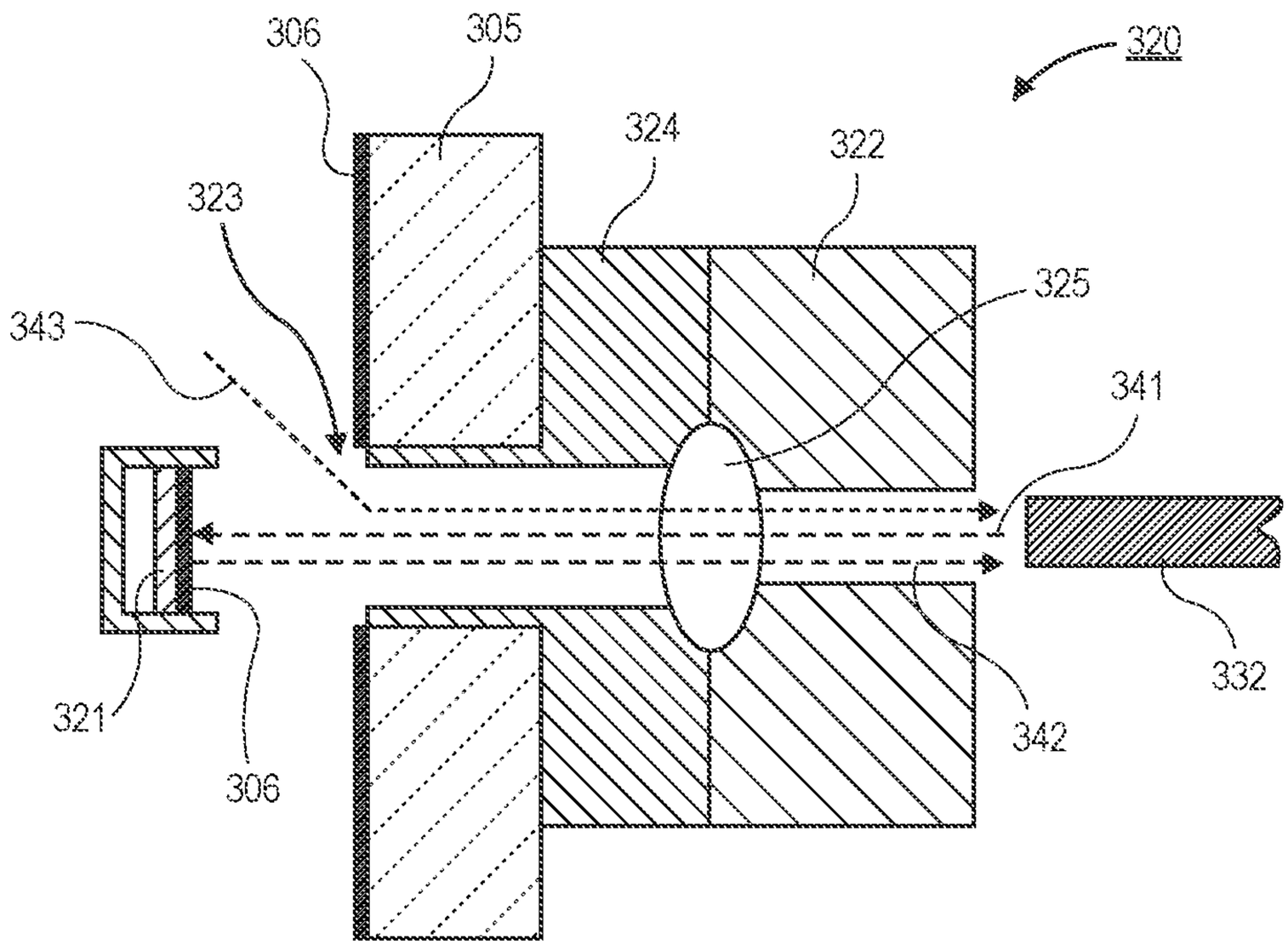

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305
320
324
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323
325
343
341
332
342
321
306

FIG. 3B

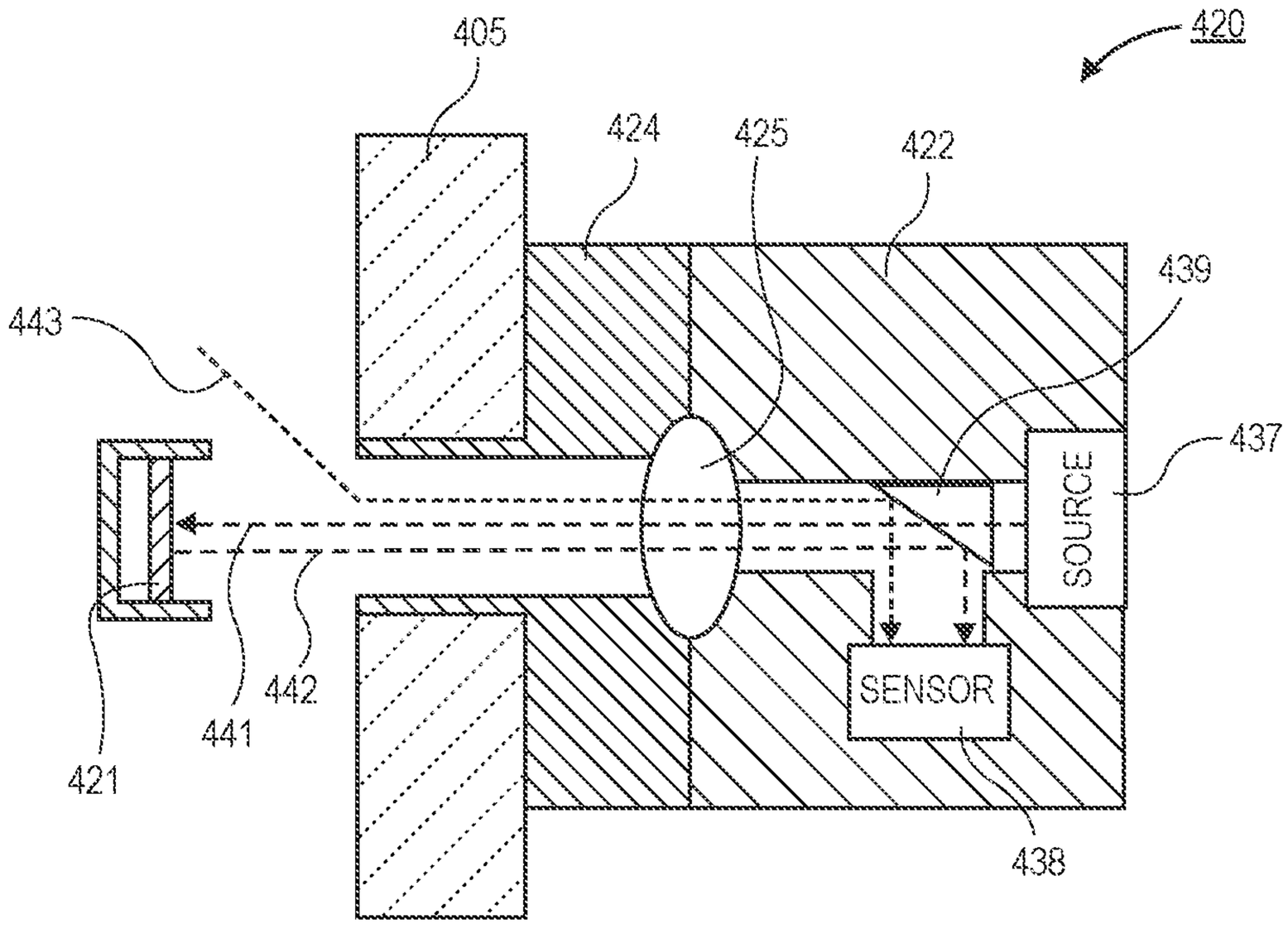

405
420
424
425
422
439
443
437
SOURCE
SENSOR
442
441
421
438

FIG. 4A

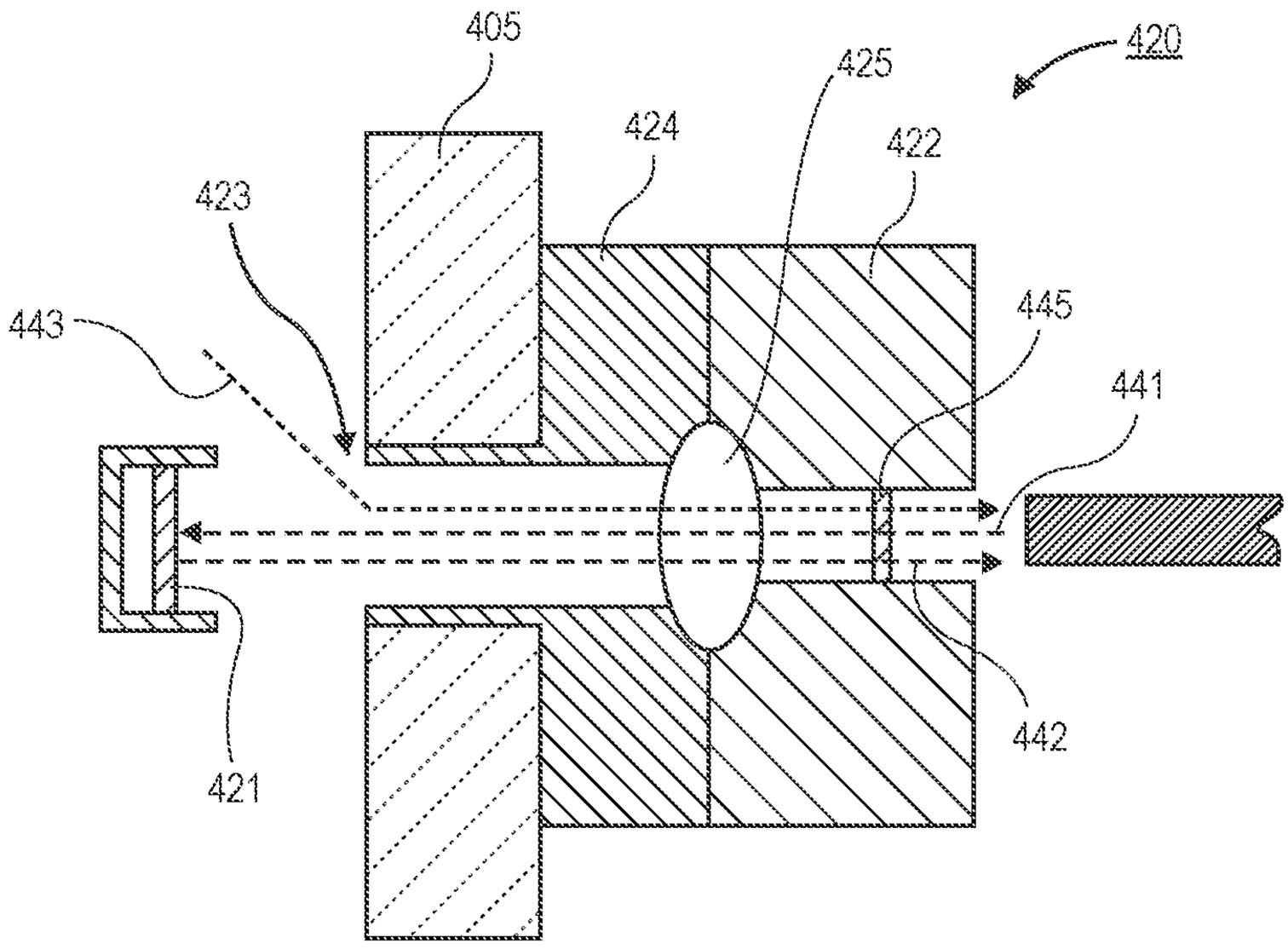

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FIG. 4B

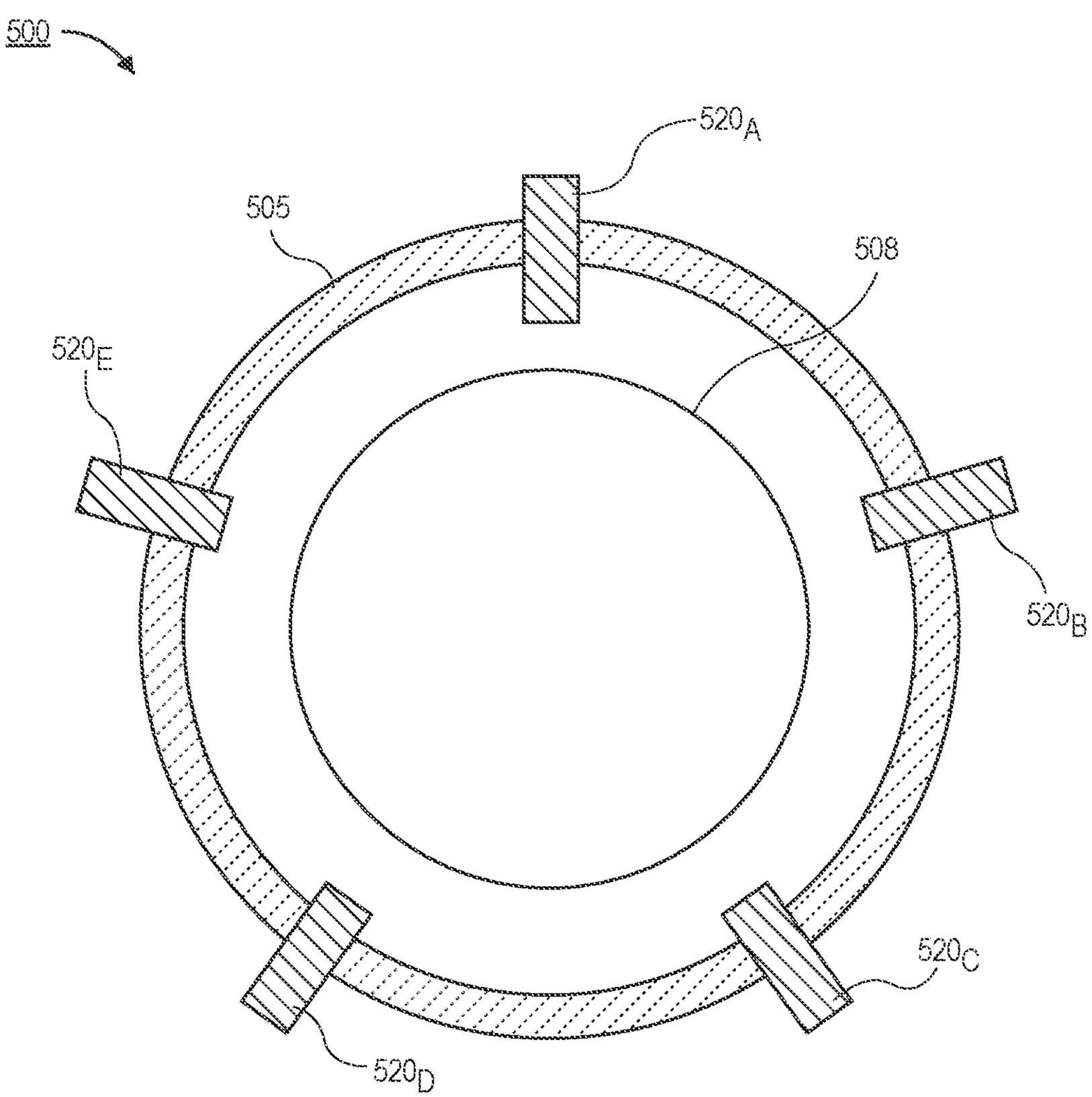


FIG. 5

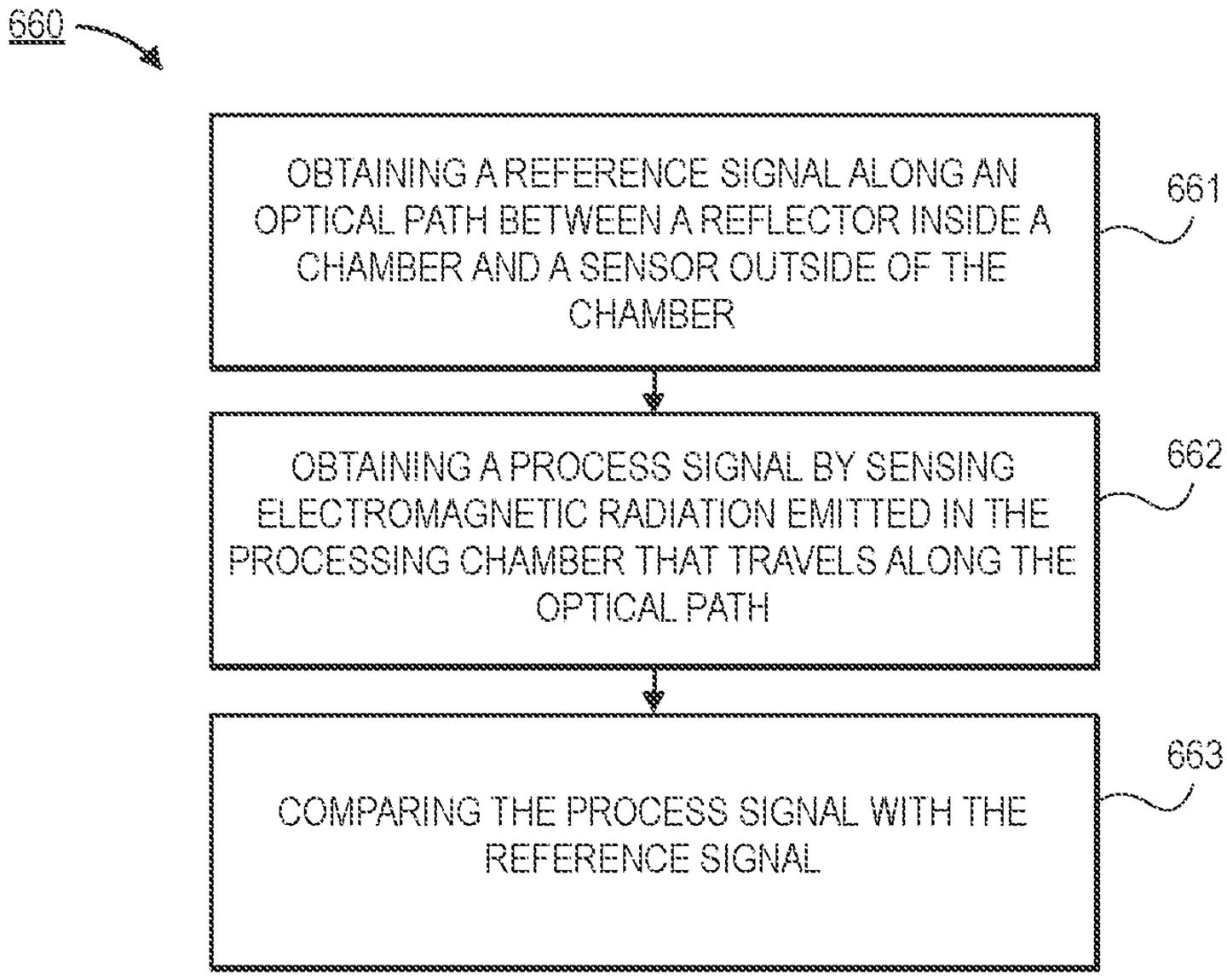

660
OBTAINING A REFERENCE SIGNAL ALONG AN OPTICAL PATH BETWEEN A REFLECTOR INSIDE A CHAMBER AND A SENSOR OUTSIDE OF THE CHAMBER
661
OBTAINING A PROCESS SIGNAL BY SENSING ELECTROMAGNETIC RADIATION EMITTED IN THE PROCESSING CHAMBER THAT TRAVELS ALONG THE OPTICAL PATH
662
COMPARING THE PROCESS SIGNAL WITH THE REFERENCE SIGNAL
663

FIG. 6A

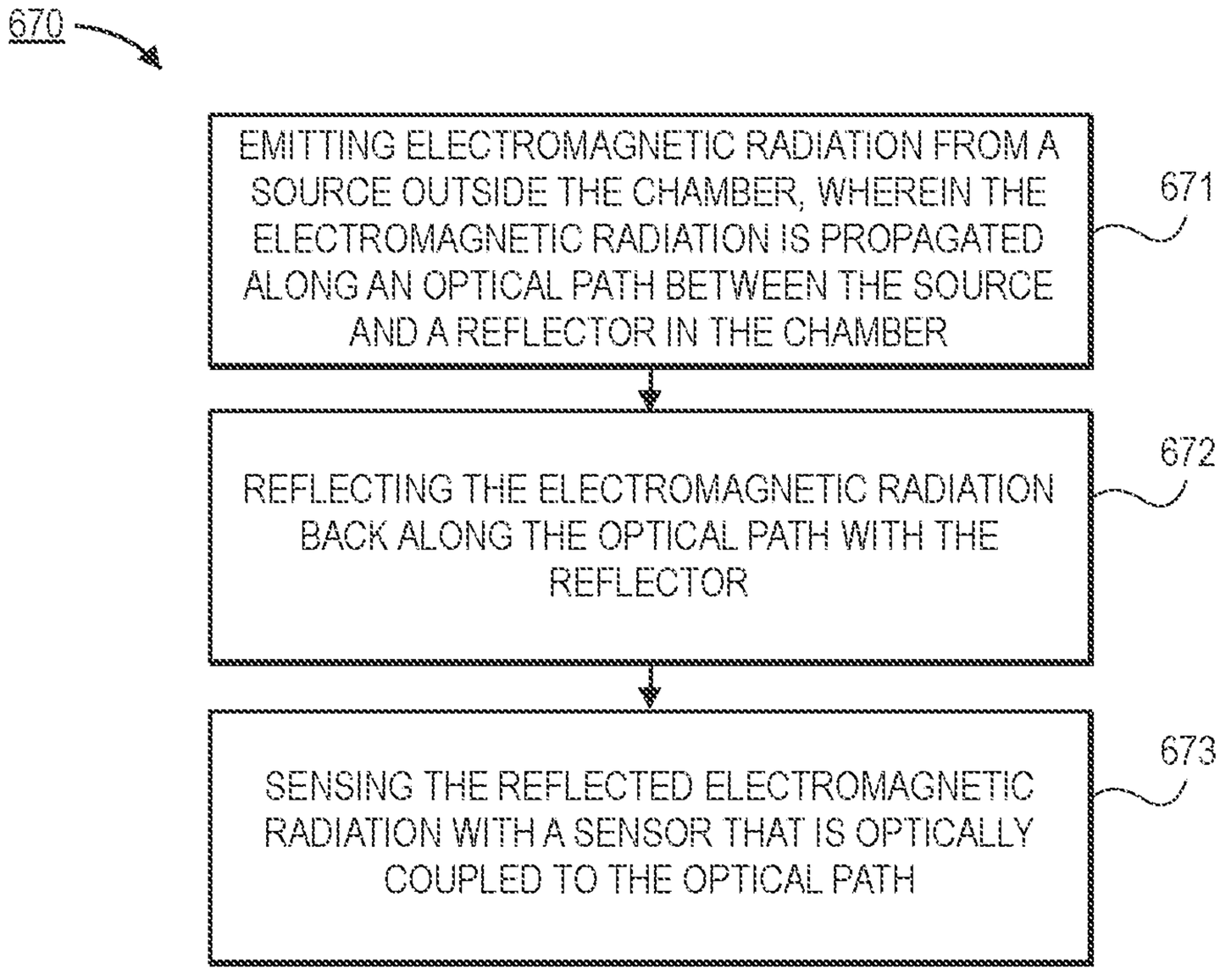

670
EMITTING ELECTROMAGNETIC RADIATION FROM A SOURCE OUTSIDE THE CHAMBER, WHEREIN THE ELECTROMAGNETIC RADIATION IS PROPAGATED ALONG AN OPTICAL PATH BETWEEN THE SOURCE AND A REFLECTOR IN THE CHAMBER
671
REFLECTING THE ELECTROMAGNETIC RADIATION BACK ALONG THE OPTICAL PATH WITH THE REFLECTOR
672
SENSING THE REFLECTED ELECTROMAGNETIC RADIATION WITH A SENSOR THAT IS OPTICALLY COUPLED TO THE OPTICAL PATH
673

FIG. 6B

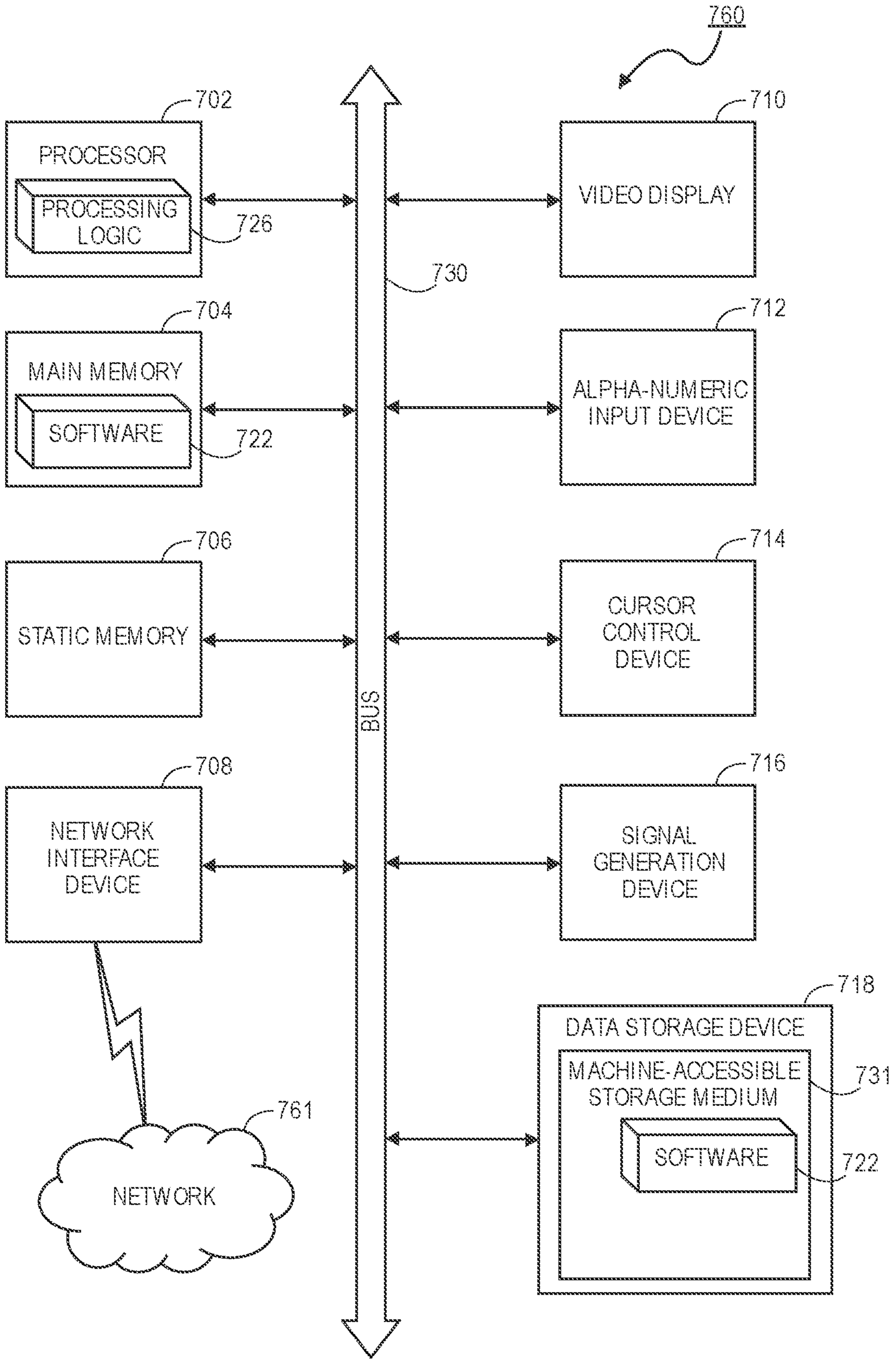

760
702
PROCESSOR
PROCESSING LOGIC
726
710
VIDEO DISPLAY
730
704
MAIN MEMORY
SOFTWARE
722
712
ALPHA-NUMERIC INPUT DEVICE
706
STATIC MEMORY
714
CURSOR CONTROL DEVICE
BUS
708
NETWORK INTERFACE DEVICE
716
SIGNAL GENERATION DEVICE
718
DATA STORAGE DEVICE
MACHINE-ACCESSIBLE STORAGE MEDIUM
731
SOFTWARE
722
761
NETWORK

FIG. 7