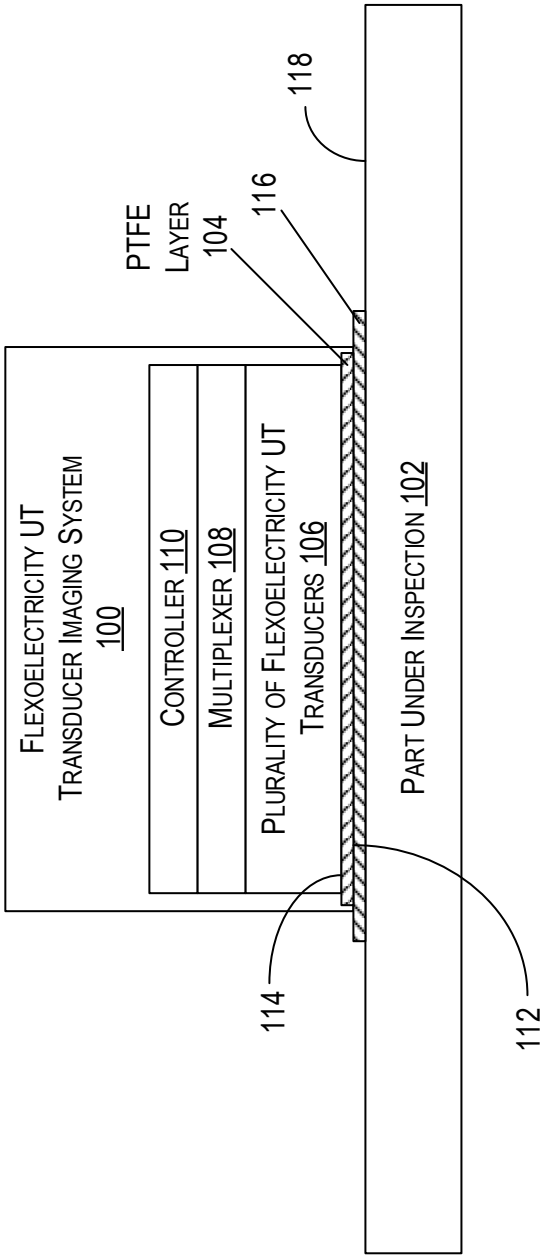
FLEXOELECTRICITY UT
TRANSDUCER IMAGING SYSTEM
100
CONTROLLER 110
MULTIPLEXER 108
PLURALITY OF FLEXOELECTRICITY UT
TRANSDUCERS 106
PTFE
LAYER
104
116
118
PART UNDER INSPECTION 102
114
112

FIG. 1

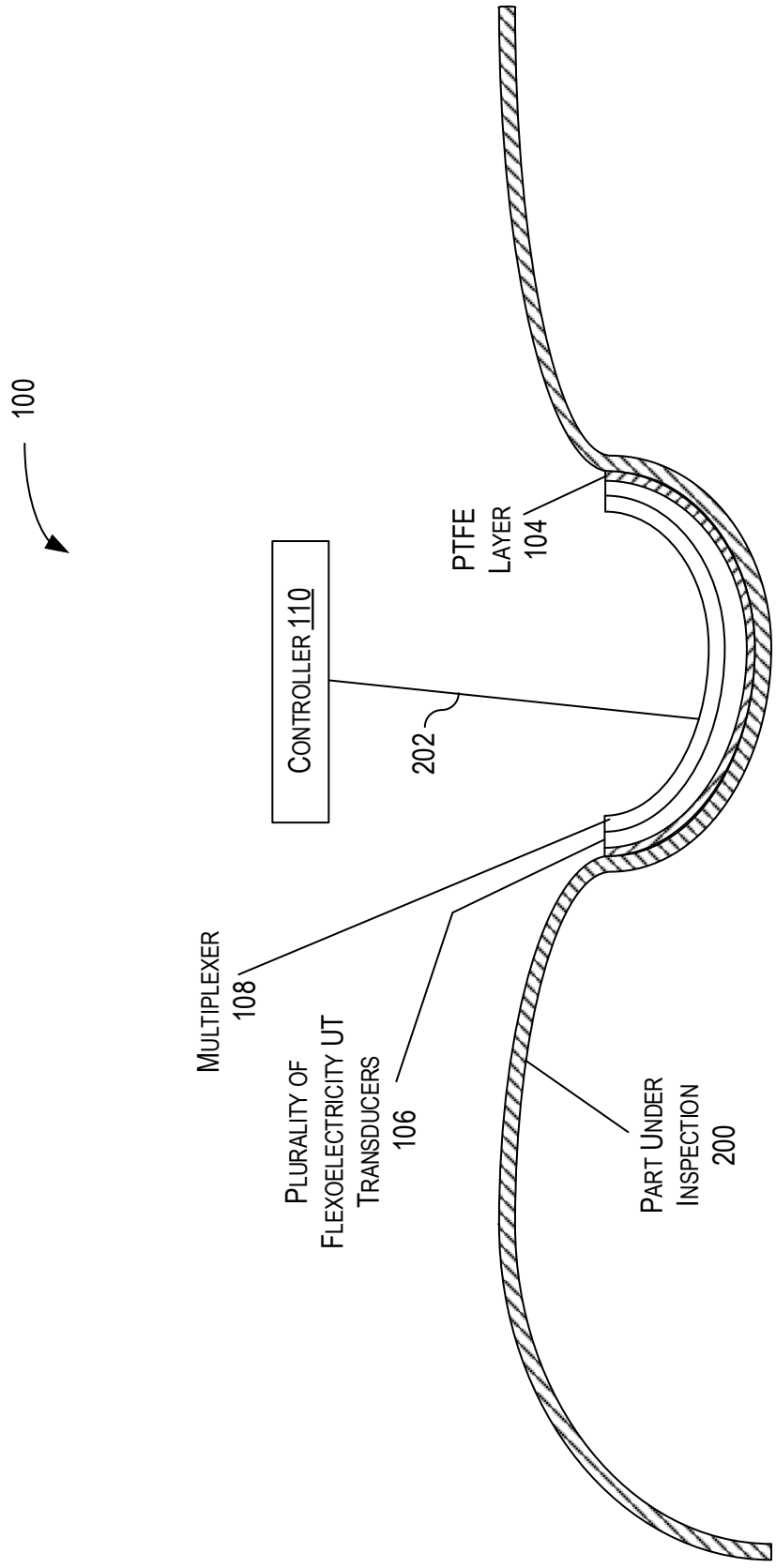
100
CONTROLLER 110
202
PTFE LAYER 104
MULTIPLEXER 108
PLURALITY OF FLEXOELECTRICITY UT TRANSDUCERS 106
PART UNDER INSPECTION 200

FIG. 2

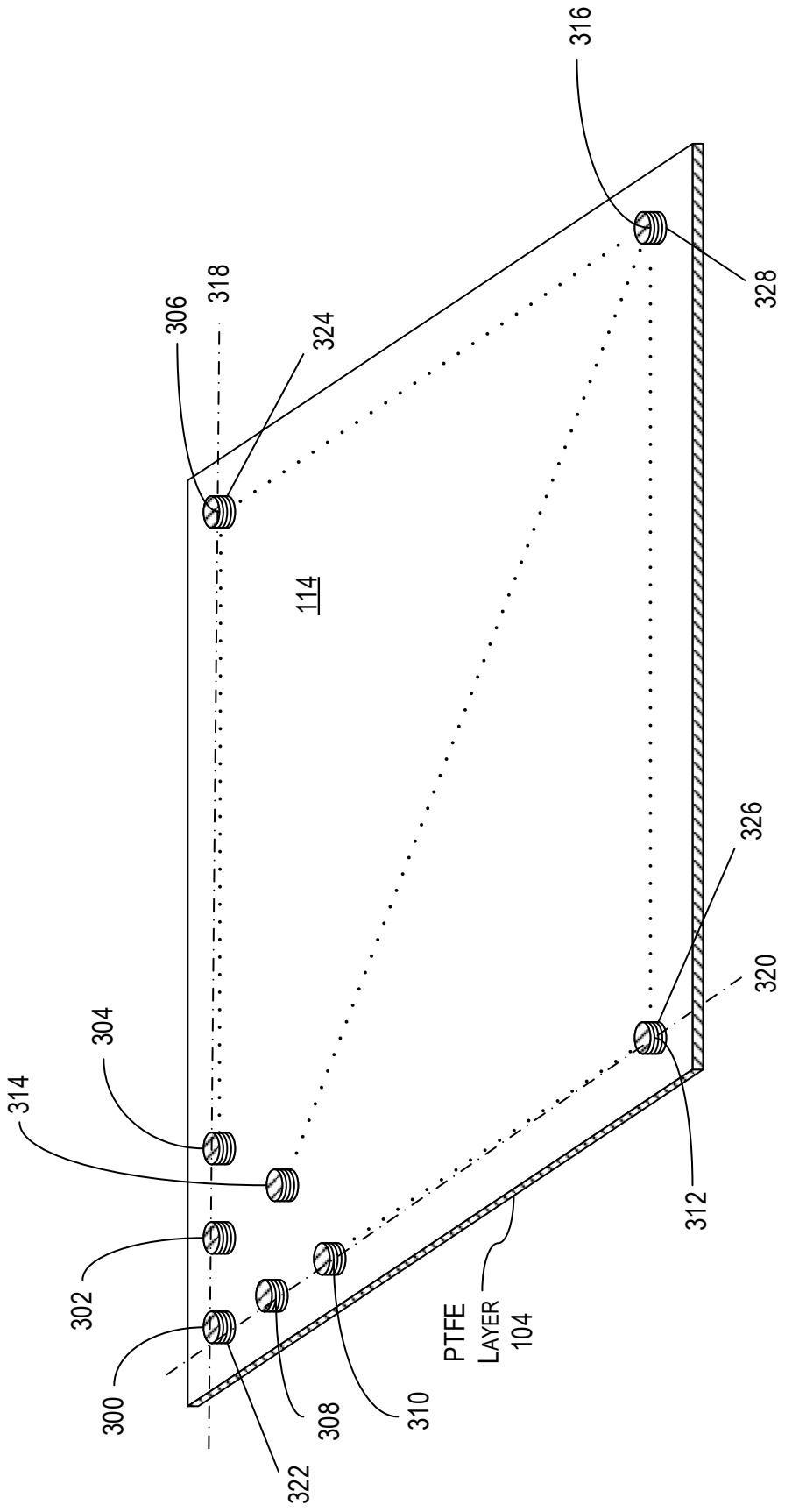
316
328
318
306
324
114
326
320
304
314
312
302
PTFE
LAYER
104
300
308
310
322

FIG. 3

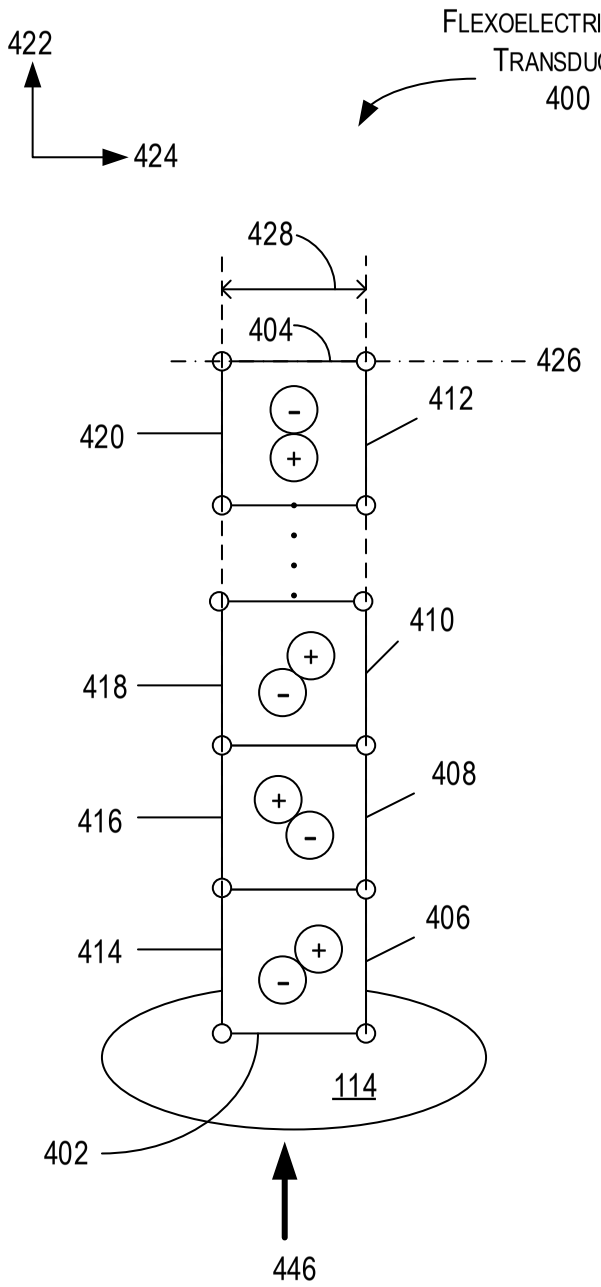


FIG. 4A

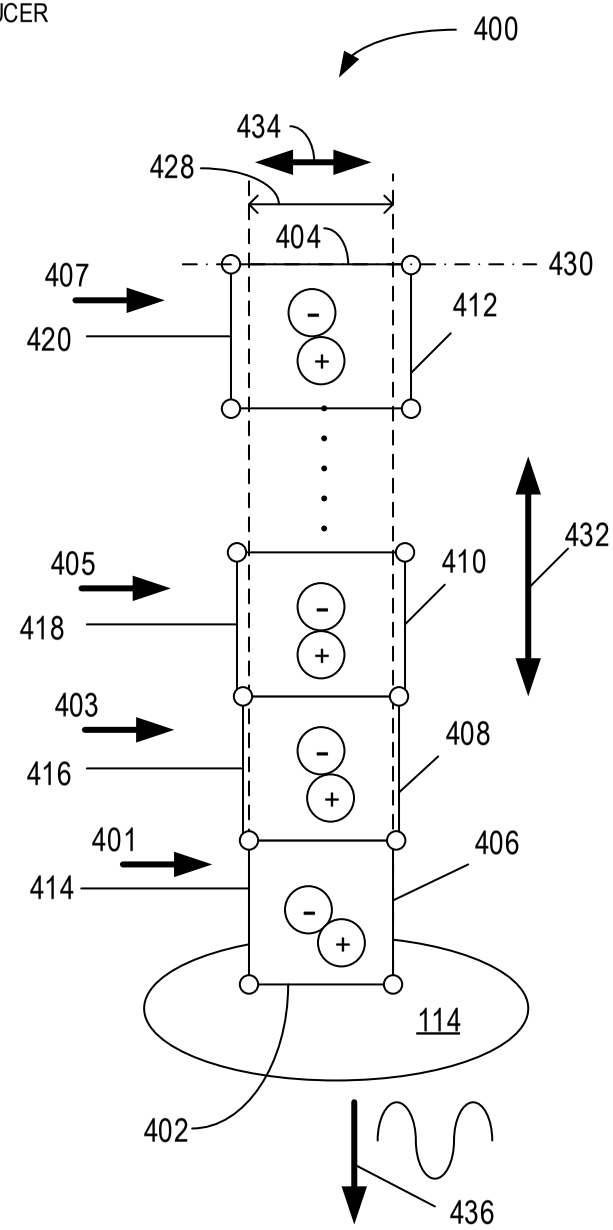


FIG. 4B

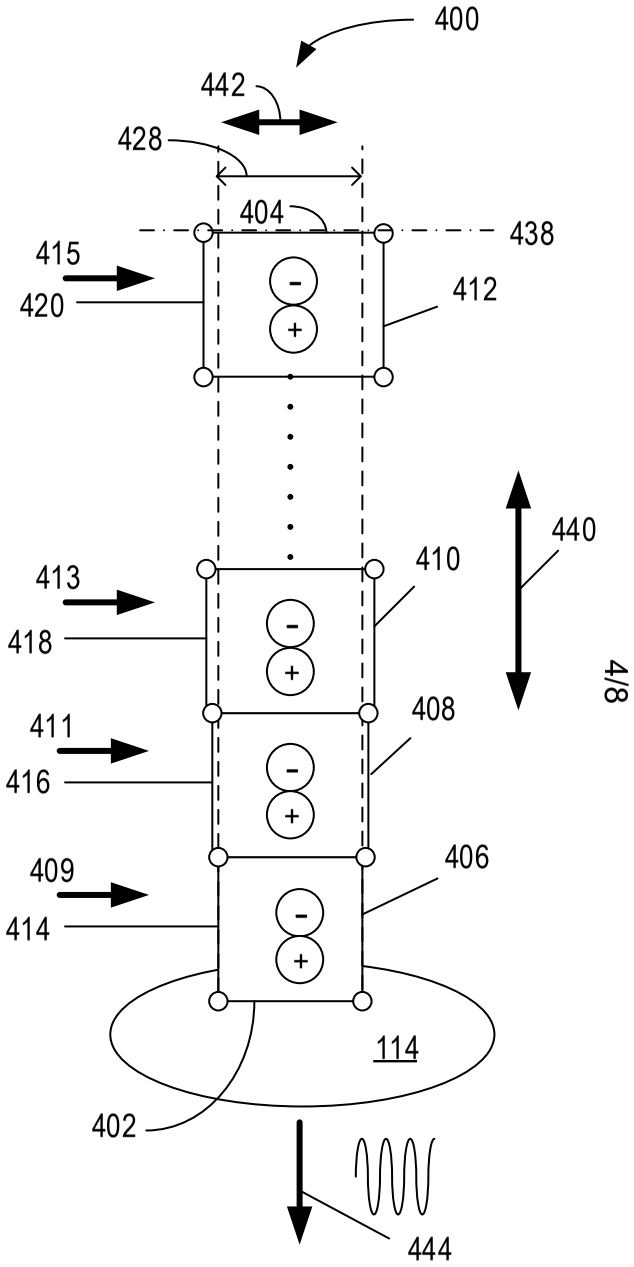


FIG. 4C

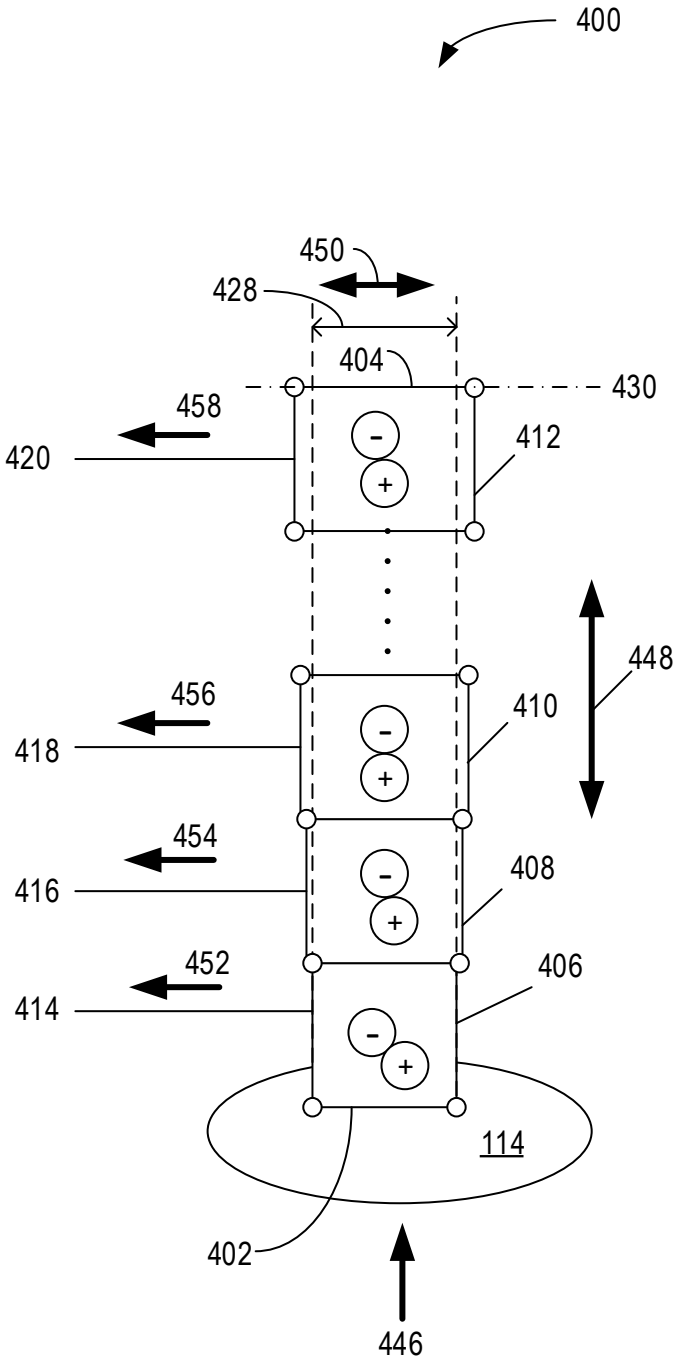
400
450
428
404
430
458
420
412
448
456
418
410
454
416
408
452
414
406
114
402
446

FIG. 4D

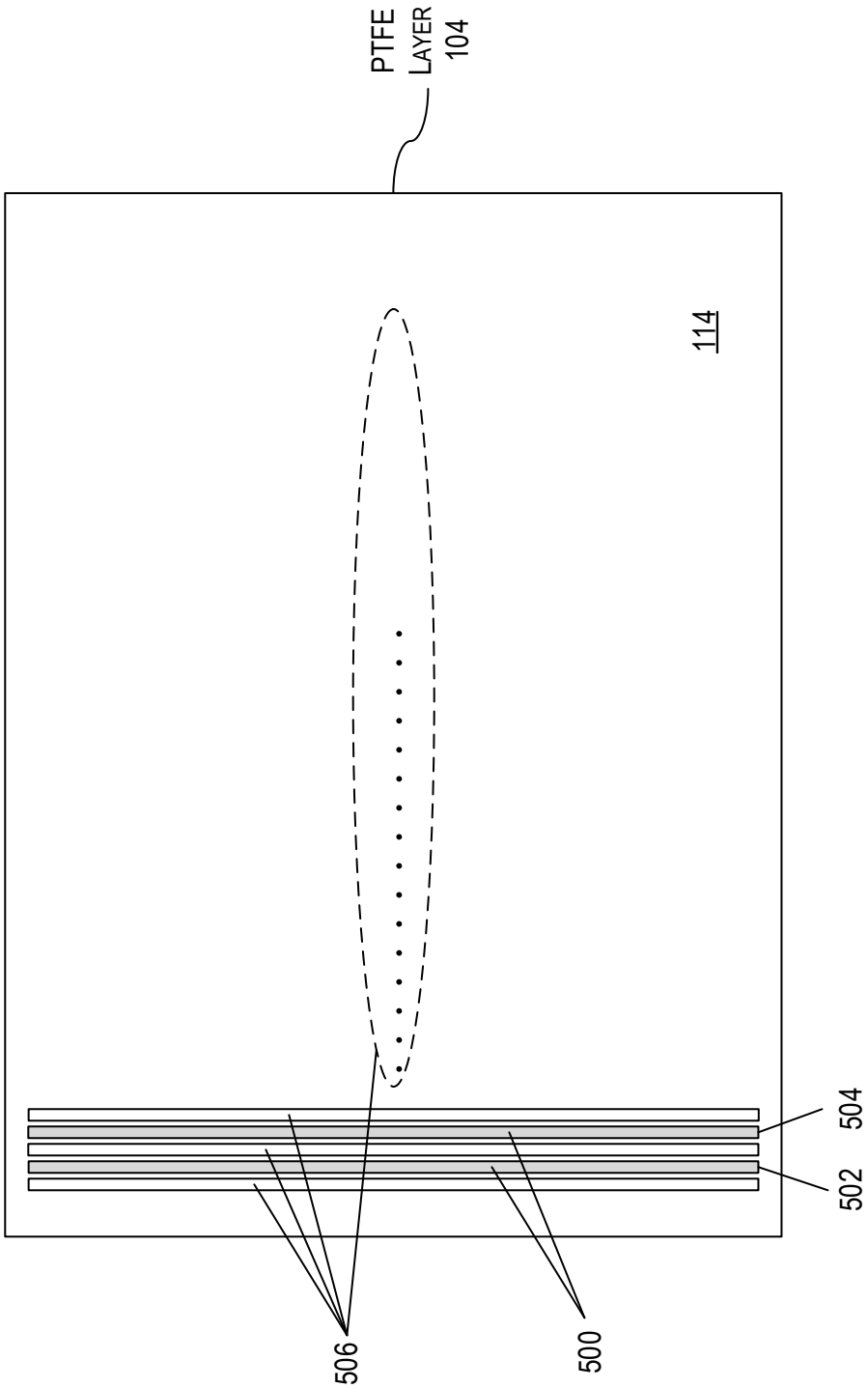


FIG. 5

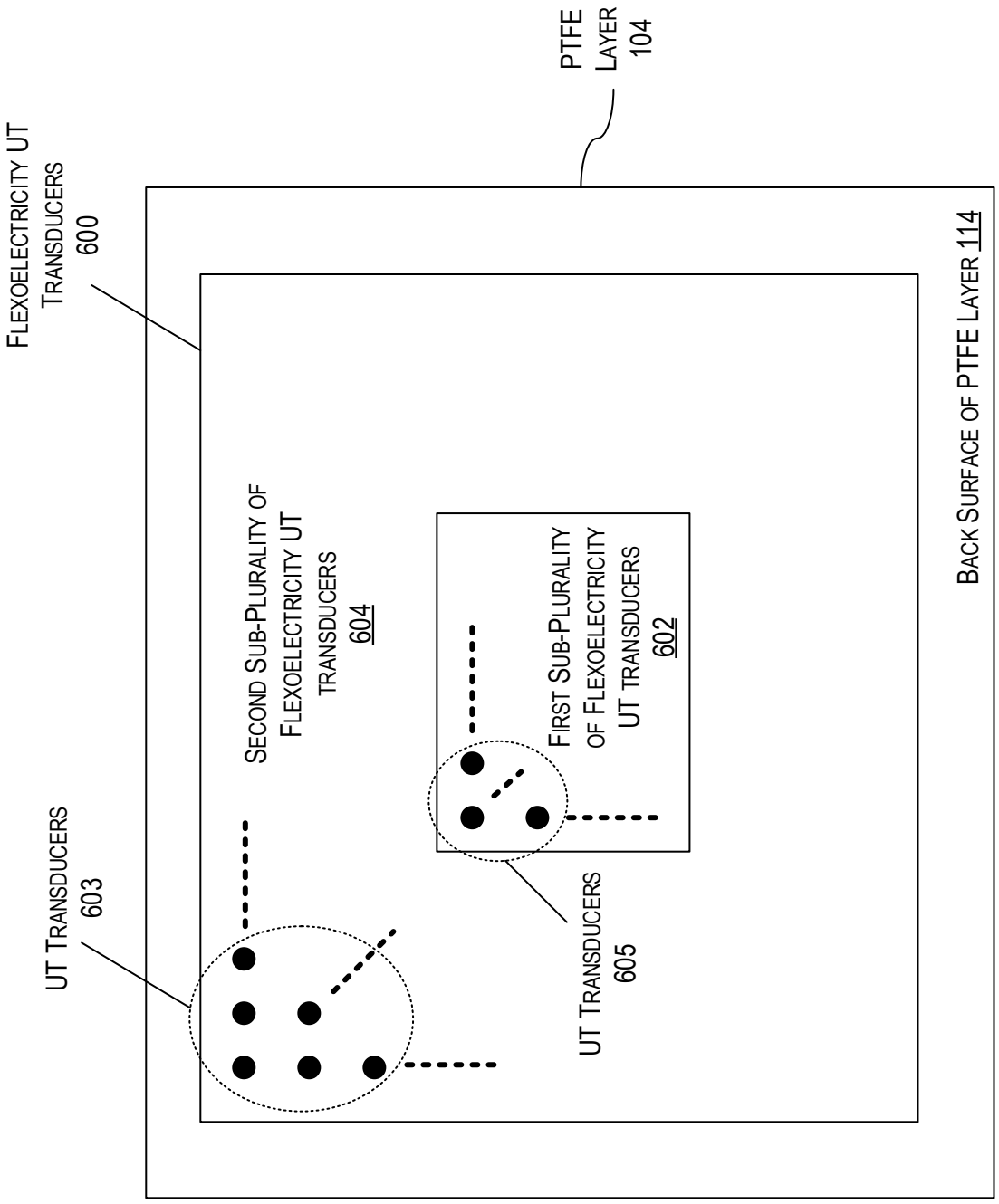
FLEXOELECTRICITY UT TRANSDUCERS 600
PTFE LAYER 104
BACK SURFACE OF PTFE LAYER 114
SECOND SUB-PLURALITY OF FLEXOELECTRICITY UT TRANSDUCERS 604
FIRST SUB-PLURALITY OF FLEXOELECTRICITY UT TRANSDUCERS 602
UT TRANSDUCERS 603
UT TRANSDUCERS 605

FIG. 6

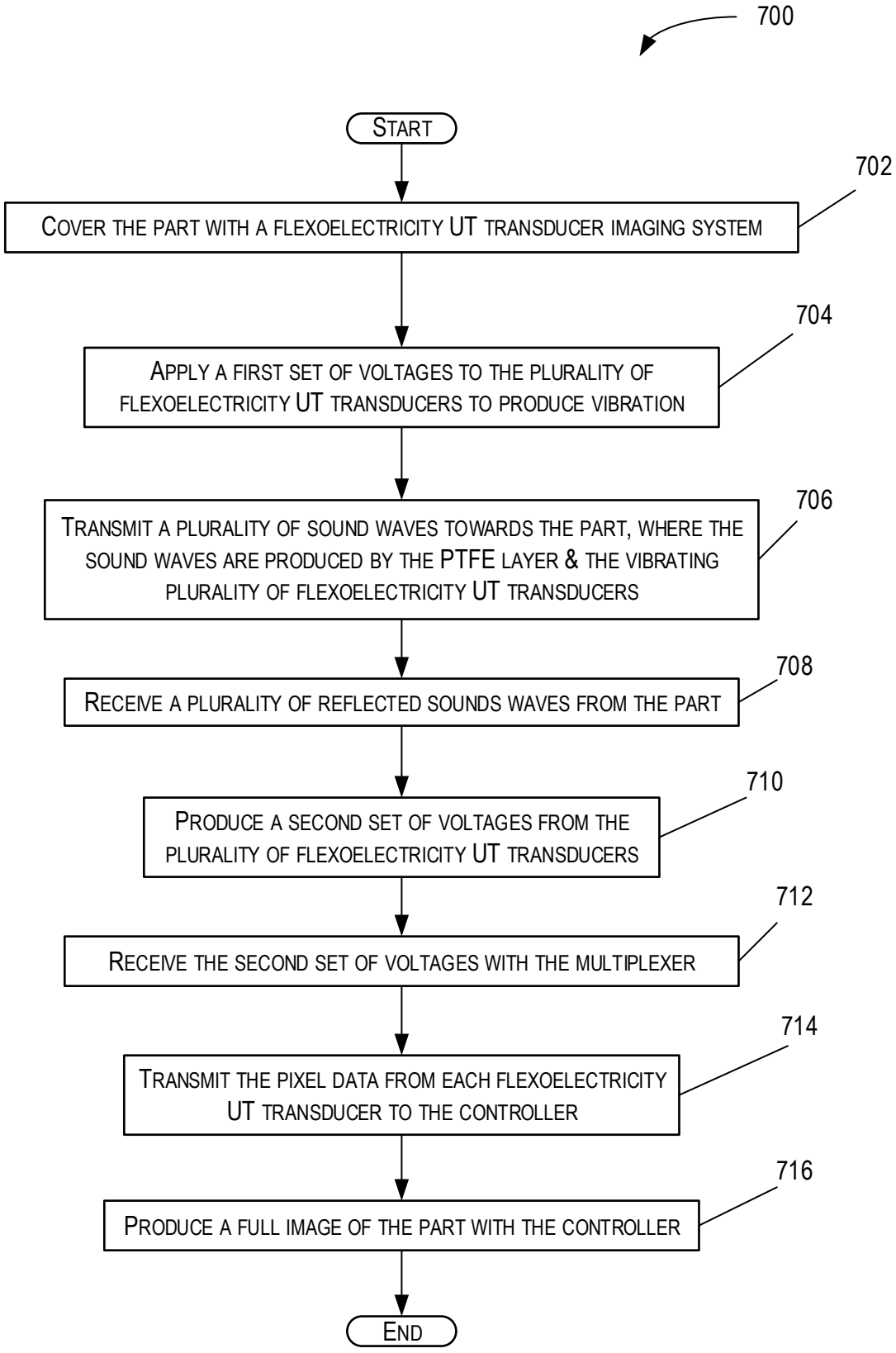
700
START
702
COVER THE PART WITH A FLEXOELECTRICITY UT TRANSDUCER IMAGING SYSTEM
704
APPLY A FIRST SET OF VOLTAGES TO THE PLURALITY OF FLEXOELECTRICITY UT TRANSDUCERS TO PRODUCE VIBRATION
706
TRANSMIT A PLURALITY OF SOUND WAVES TOWARDS THE PART, WHERE THE SOUND WAVES ARE PRODUCED BY THE PTFE LAYER & THE VIBRATING PLURALITY OF FLEXOELECTRICITY UT TRANSDUCERS
708
RECEIVE A PLURALITY OF REFLECTED SOUNDS WAVES FROM THE PART
710
PRODUCE A SECOND SET OF VOLTAGES FROM THE PLURALITY OF FLEXOELECTRICITY UT TRANSDUCERS
712
RECEIVE THE SECOND SET OF VOLTAGES WITH THE MULTIPLEXER
714
TRANSMIT THE PIXEL DATA FROM EACH FLEXOELECTRICITY UT TRANSDUCER TO THE CONTROLLER
716
PRODUCE A FULL IMAGE OF THE PART WITH THE CONTROLLER
END

*FIG. 7*