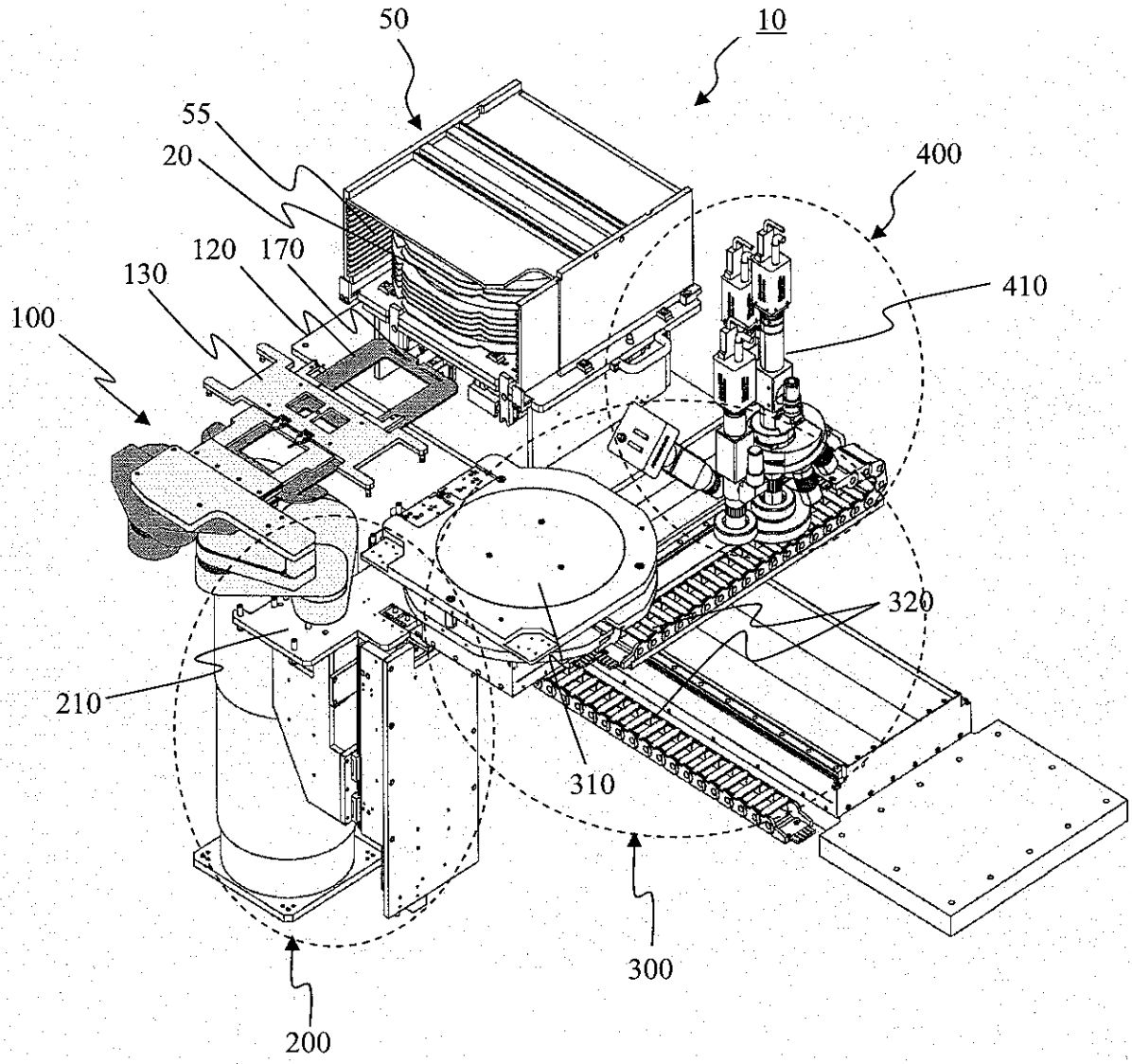


FIG. 1

End Effector 150 of First Handler 120 Aligned With Film Frame Loading Station 50 Prior to Retrieval of Film Frame 20 From Film Frame Loading Station 50

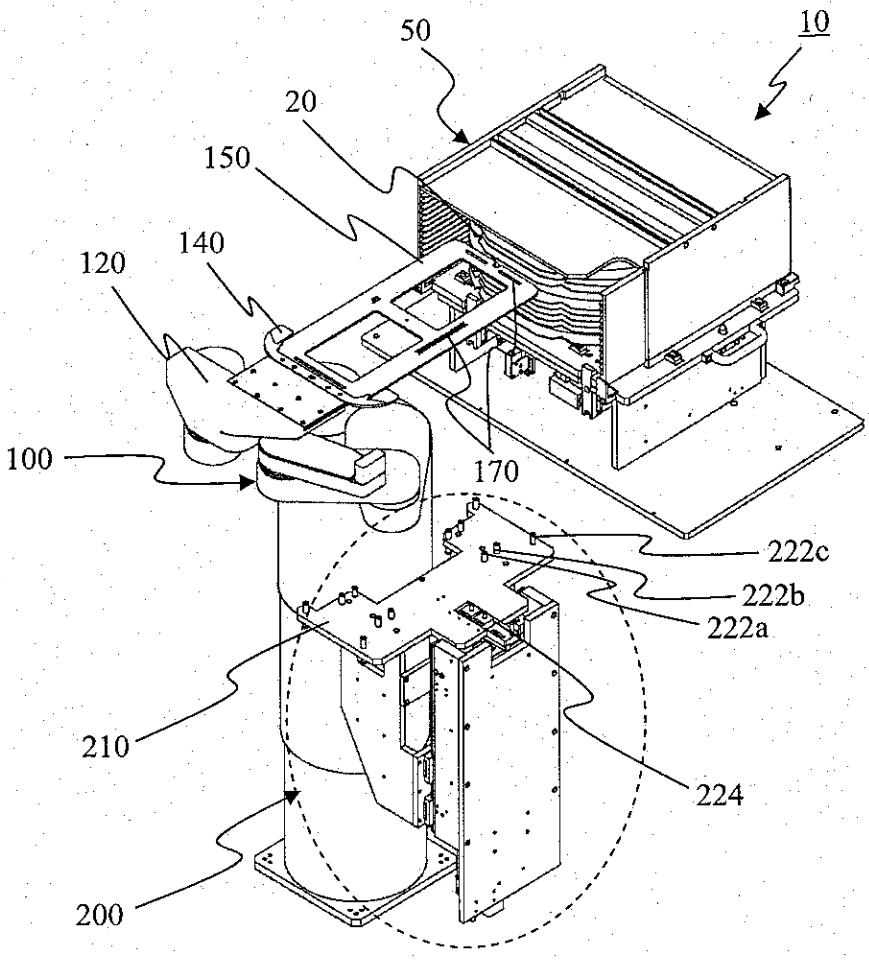


FIG. 2A

End Effector 150 of First Handler 120 Displaced at Extended Position to Retrieve Film Frame 20 from Film Frame Loading Station 50

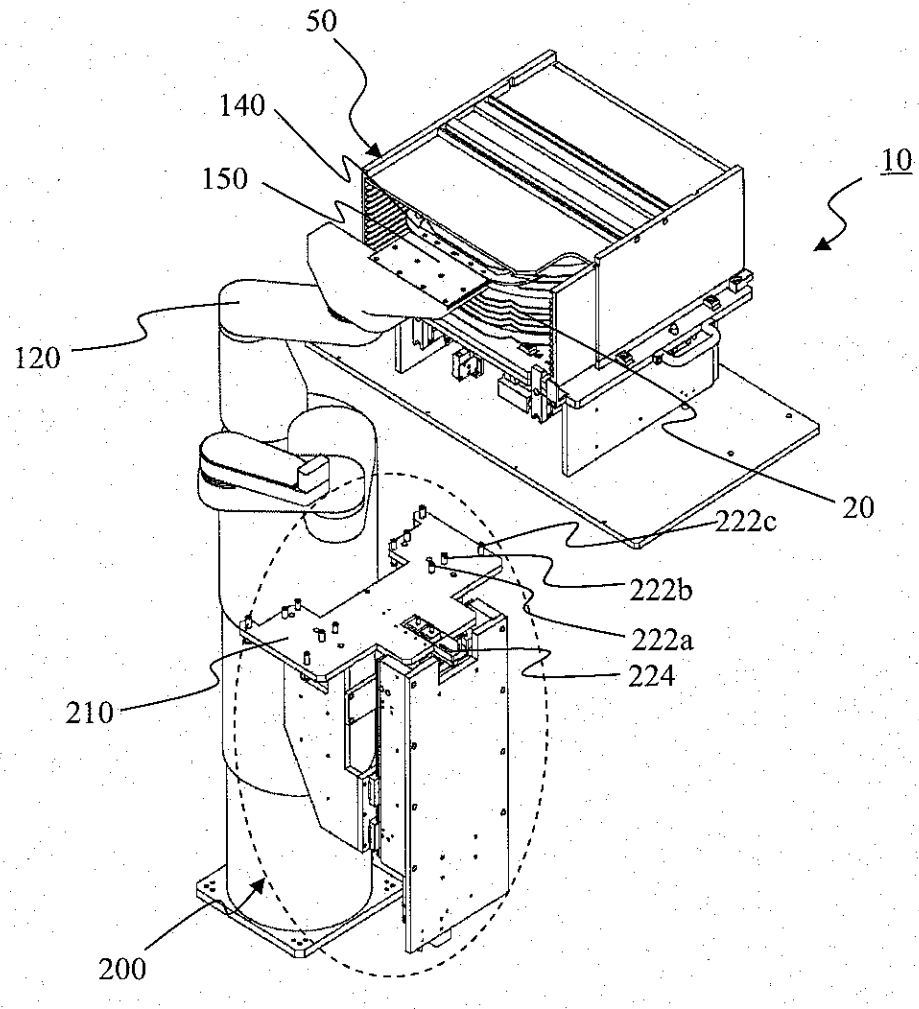


FIG. 2B

Film Frame 20 Retrieved from Film Frame Loading Station 50

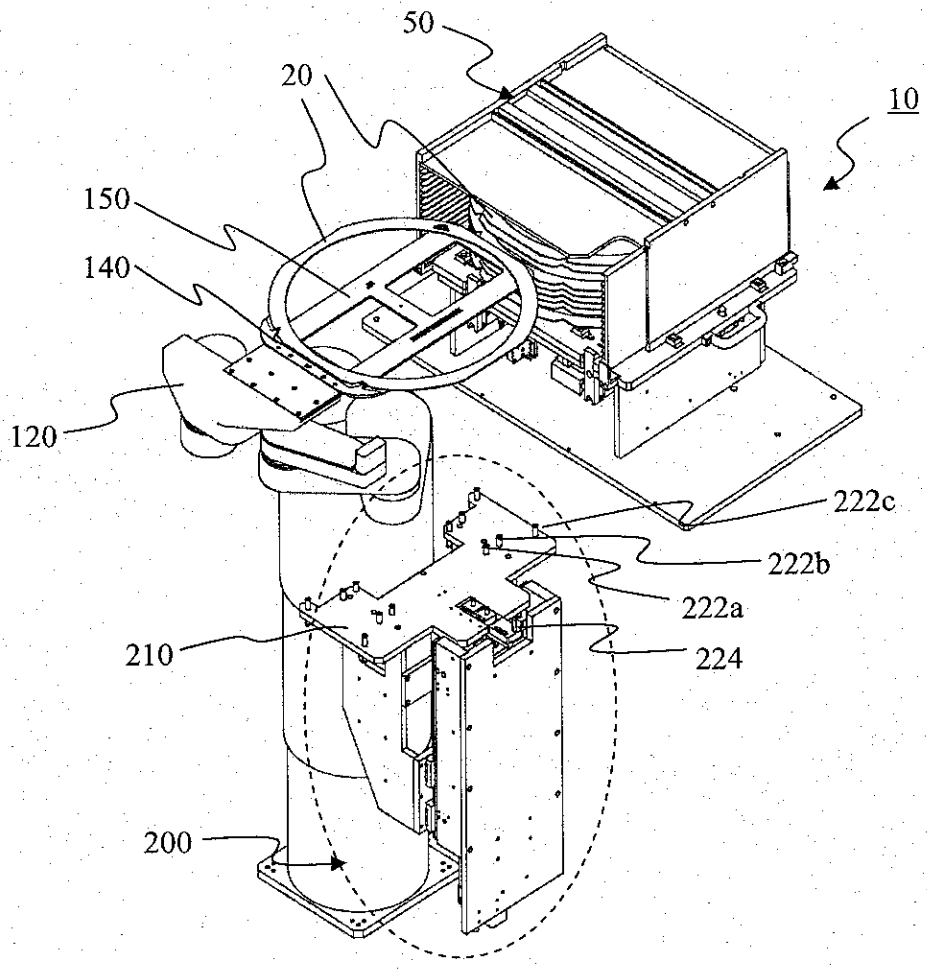


FIG. 2C

End Effector 150 Rotated for Transferring Film Frame 20 to the Film Frame Alignment Station 200

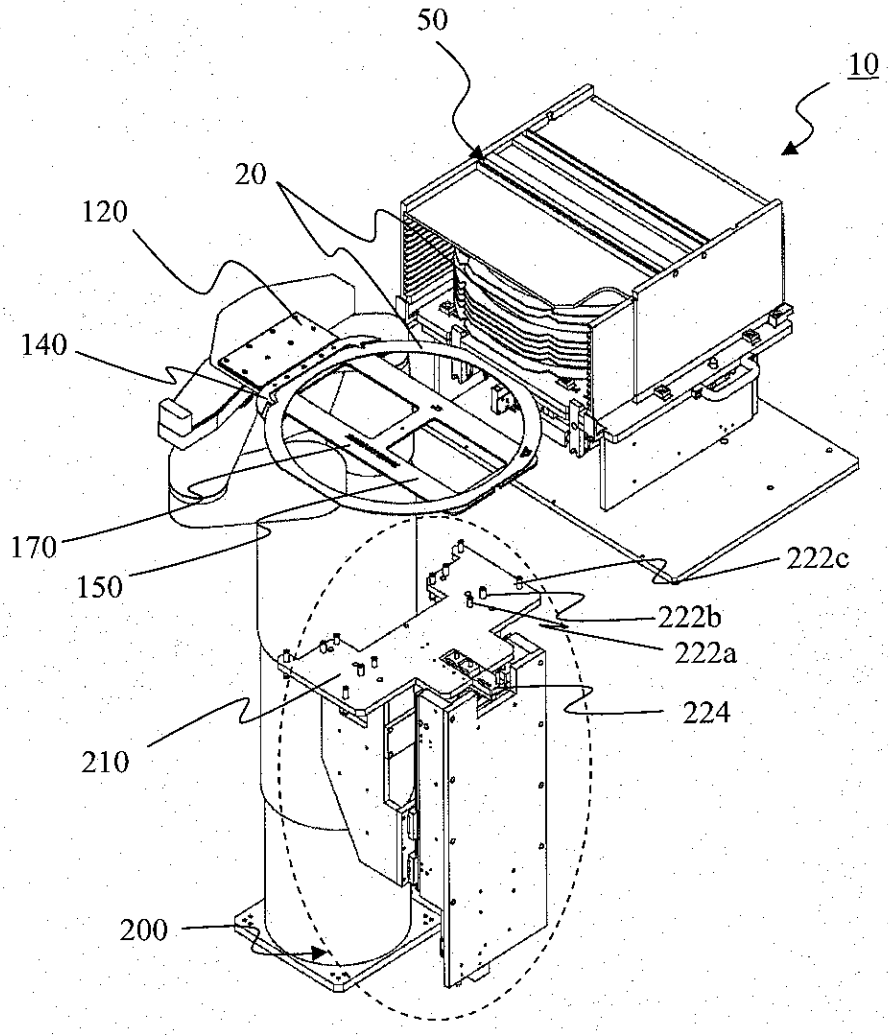


FIG. 2D

End Effector 150 Places Film Frame 20 onto Displaceable Platform 210 of the Film Frame Alignment Station 200

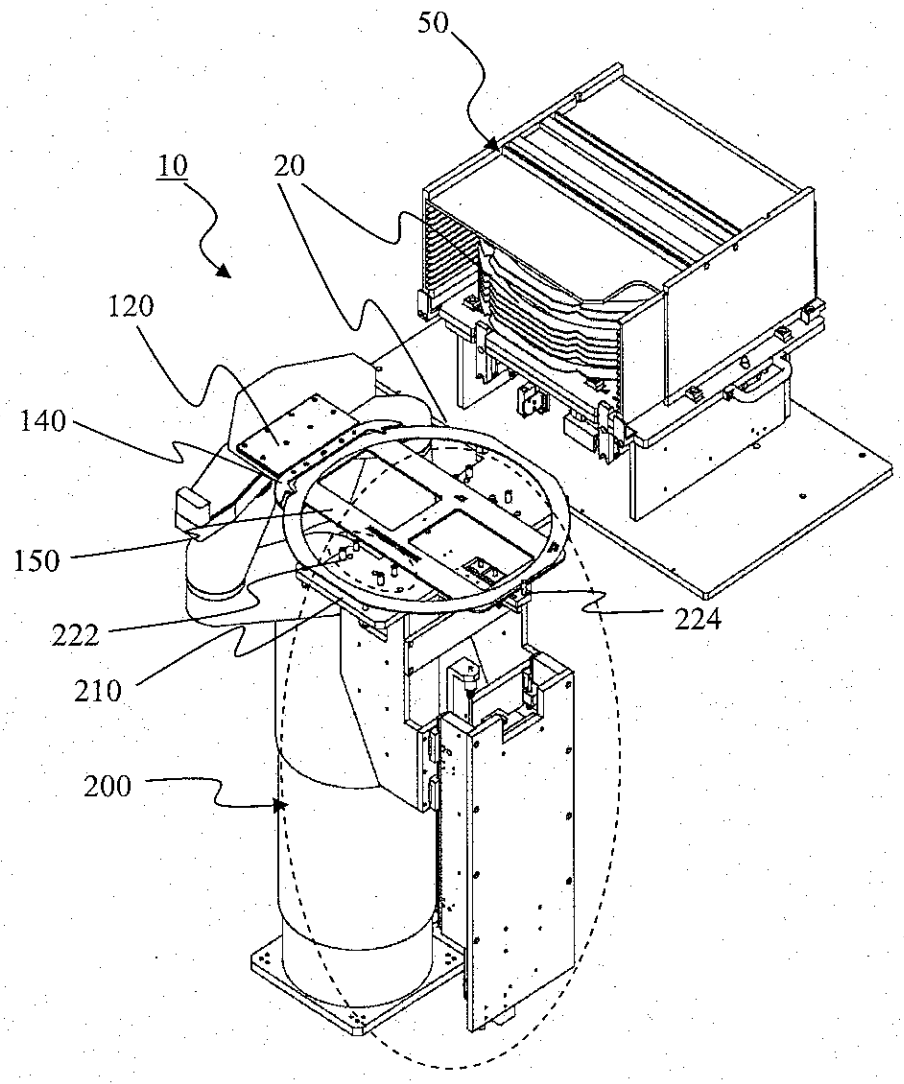


FIG. 2E

Film Frame 20 Placed Onto, or Carried By, the Displaceable Platform 210 of the Film Frame Alignment Station 200

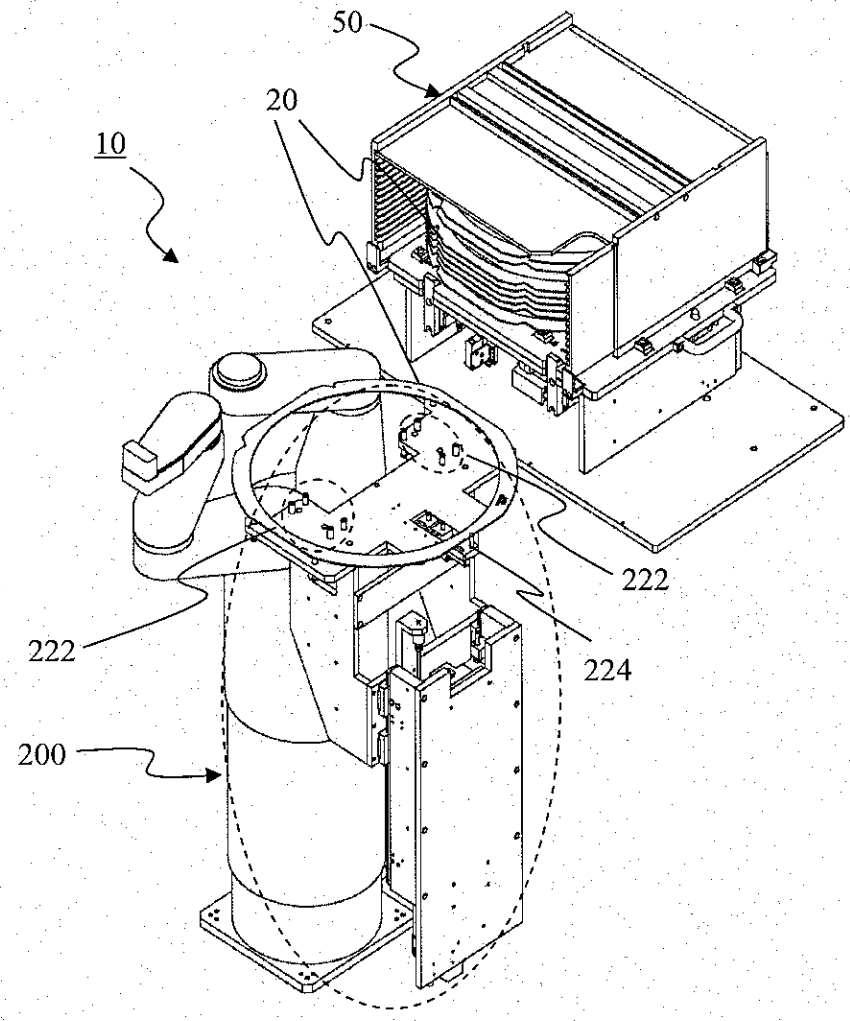


FIG. 2F

Second Handler 130 Positioned to Retrieve Film Frame 20 From the Displaceable Platform 210

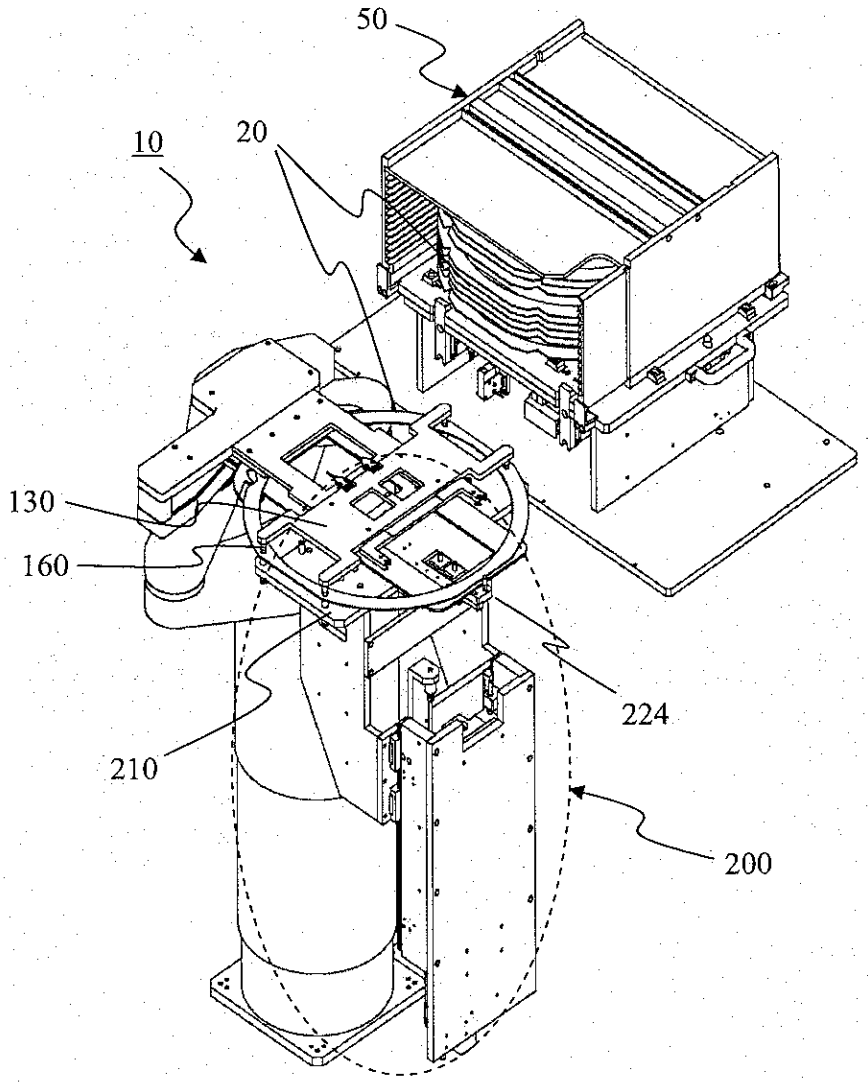


FIG. 2G

Second Handler 130 Retrieves or Removes Film Frame 20 From the Displaceable Platform 210

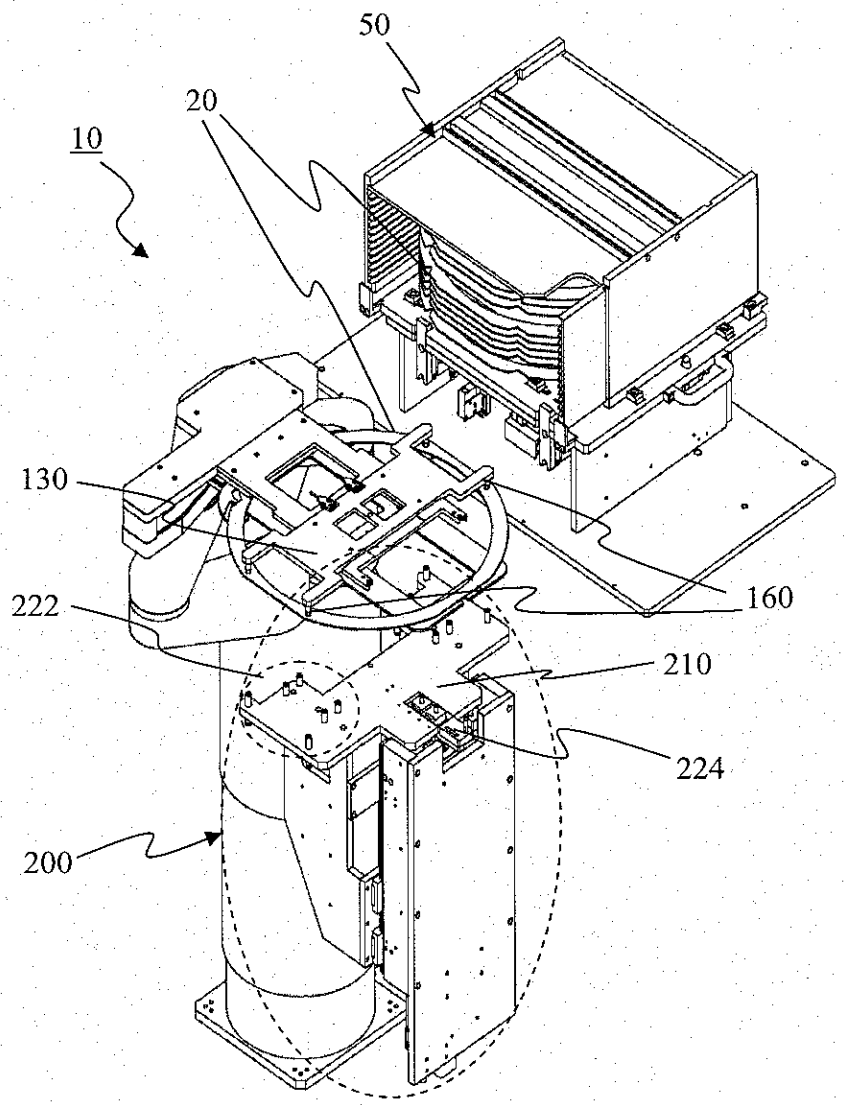


FIG. 2H

Second Handler 130 Transfers Film Frame 20 to Vacuum Table 310 of Vacuum Table Assembly 300

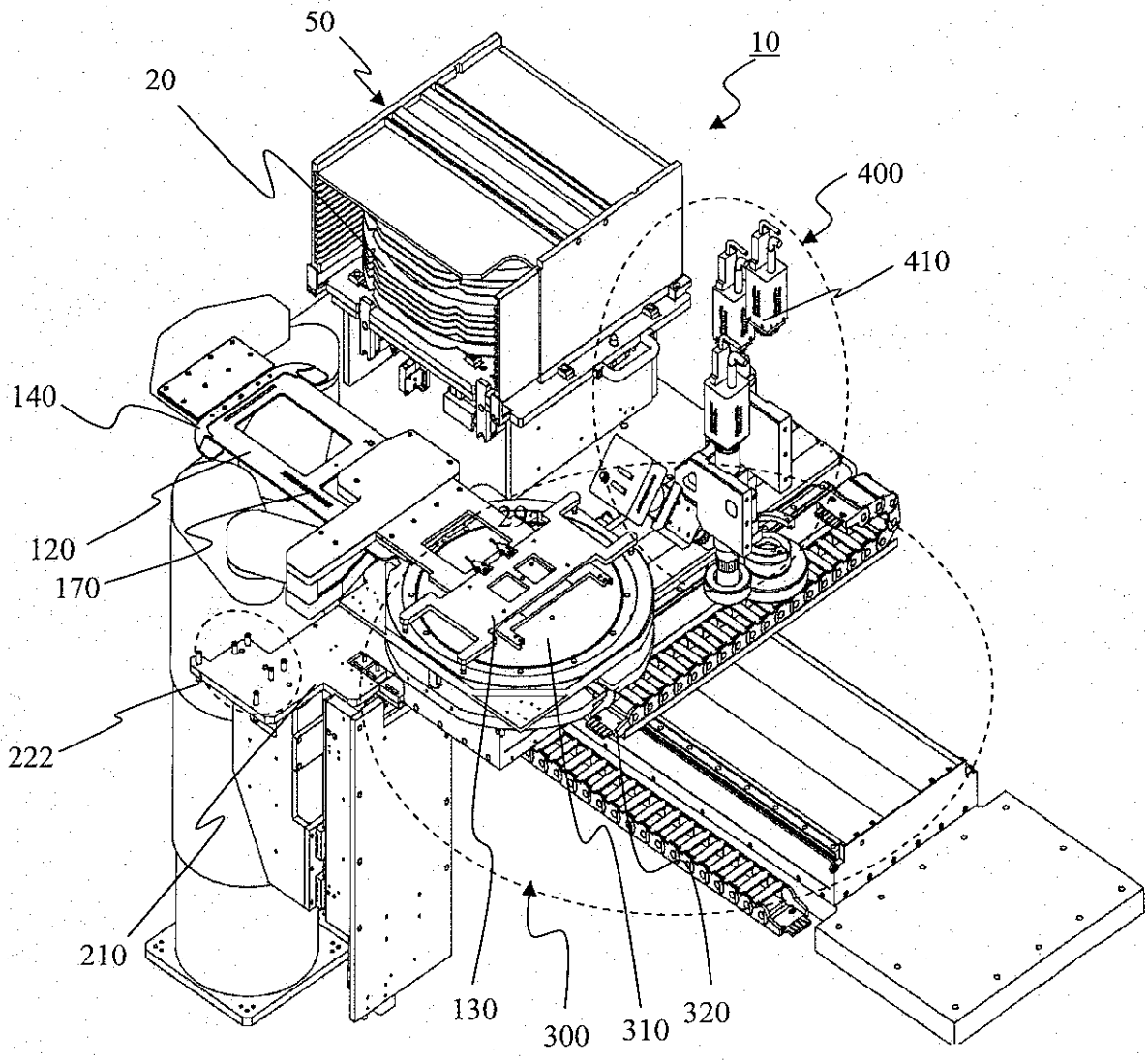


FIG. 2I

Film Frame 20 Placed Carried by Vacuum Table 310 Displaced to Inspection Station 400

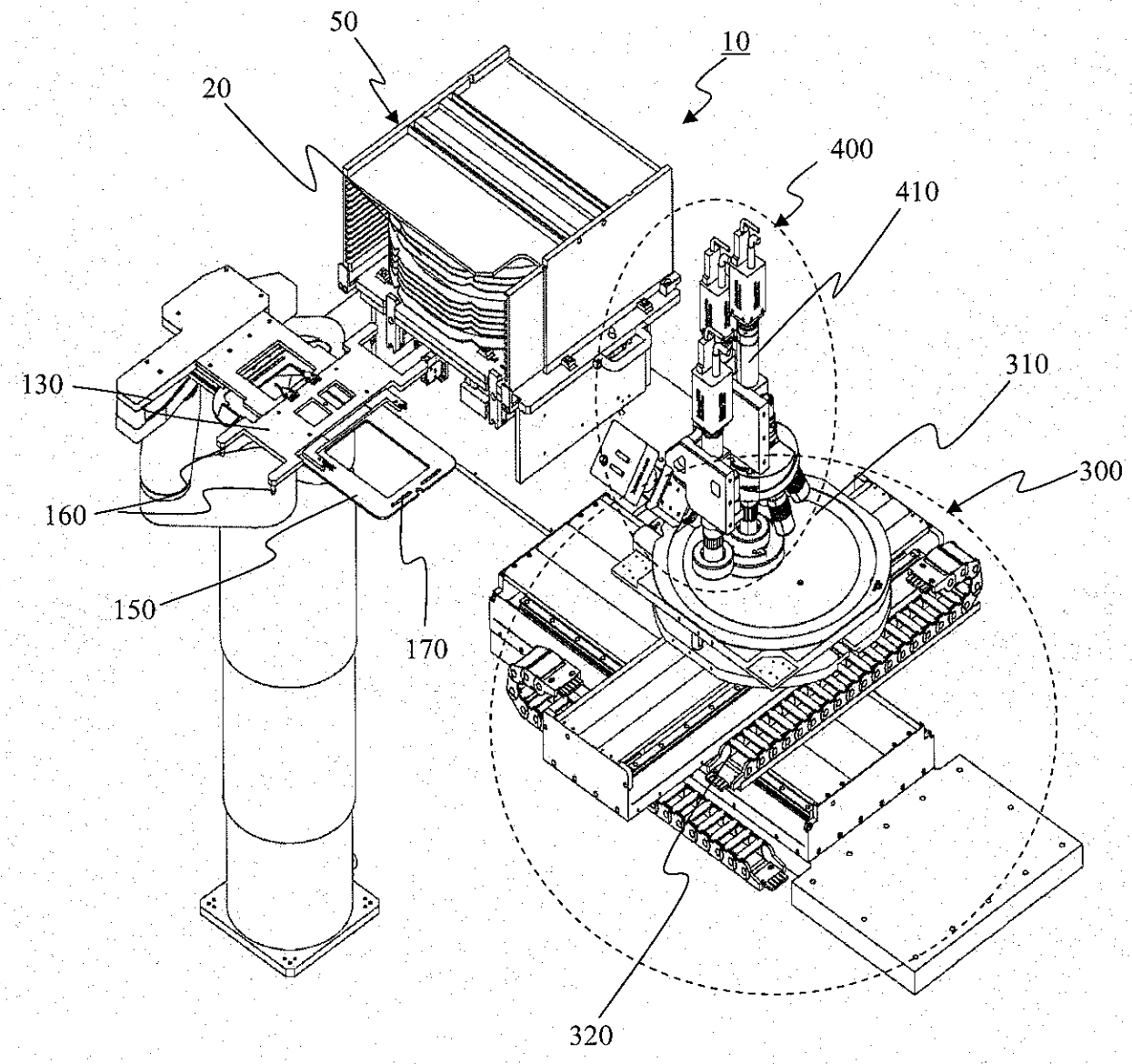


FIG. 2J

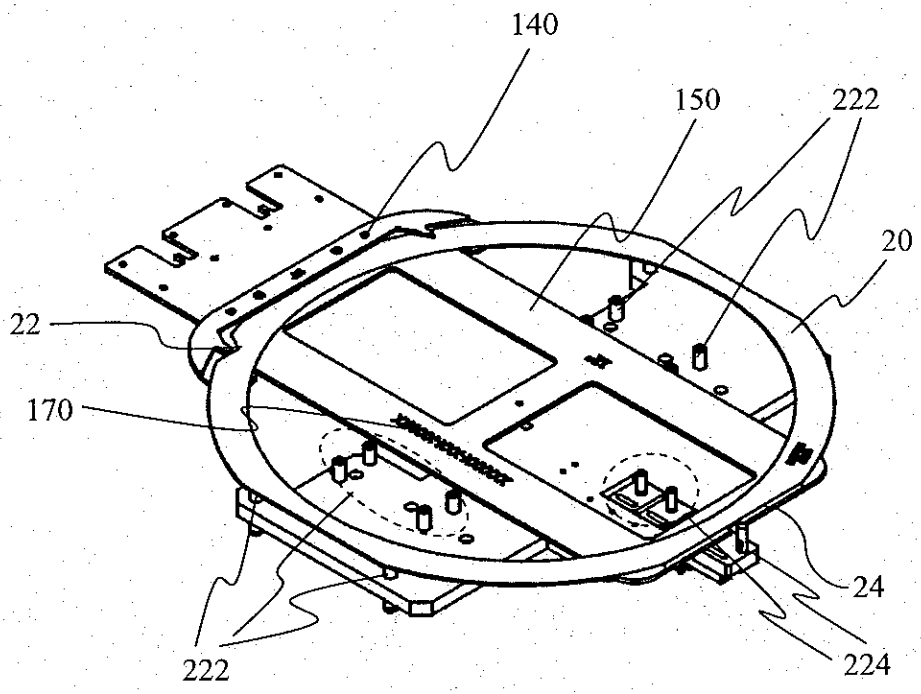


FIG. 3

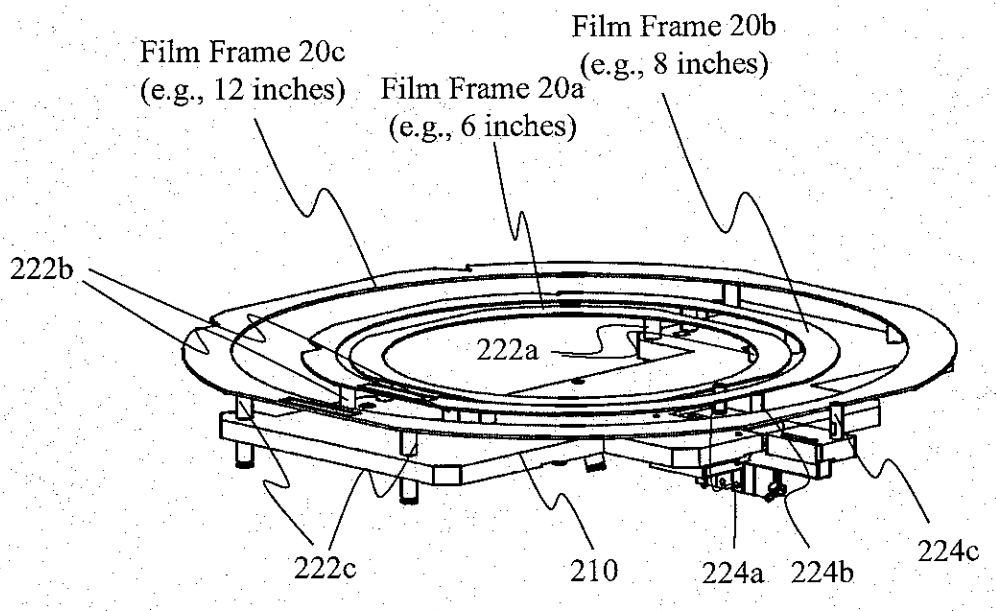

Film Frame 20c
(e.g., 12 inches)
Film Frame 20a
(e.g., 6 inches)
Film Frame 20b
(e.g., 8 inches)
222b
222a
222c
210
224a
224b
224c

FIG. 4

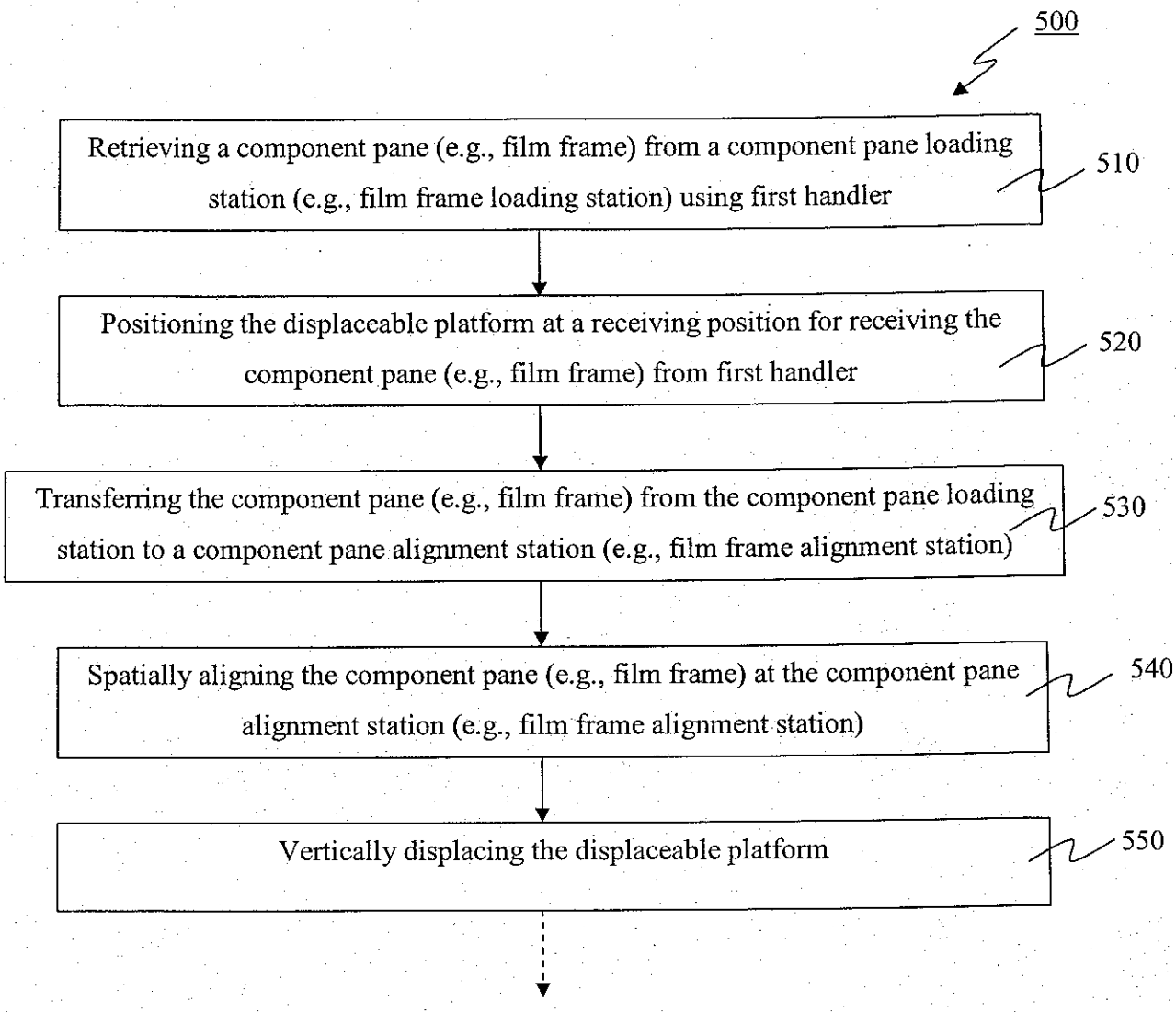

500
Retrieving a component pane (e.g., film frame) from a component pane loading station (e.g., film frame loading station) using first handler
510
Positioning the displaceable platform at a receiving position for receiving the component pane (e.g., film frame) from first handler
520
Transferring the component pane (e.g., film frame) from the component pane loading station to a component pane alignment station (e.g., film frame alignment station)
530
Spatially aligning the component pane (e.g., film frame) at the component pane alignment station (e.g., film frame alignment station)
540
Vertically displacing the displaceable platform
550

FIG. 5

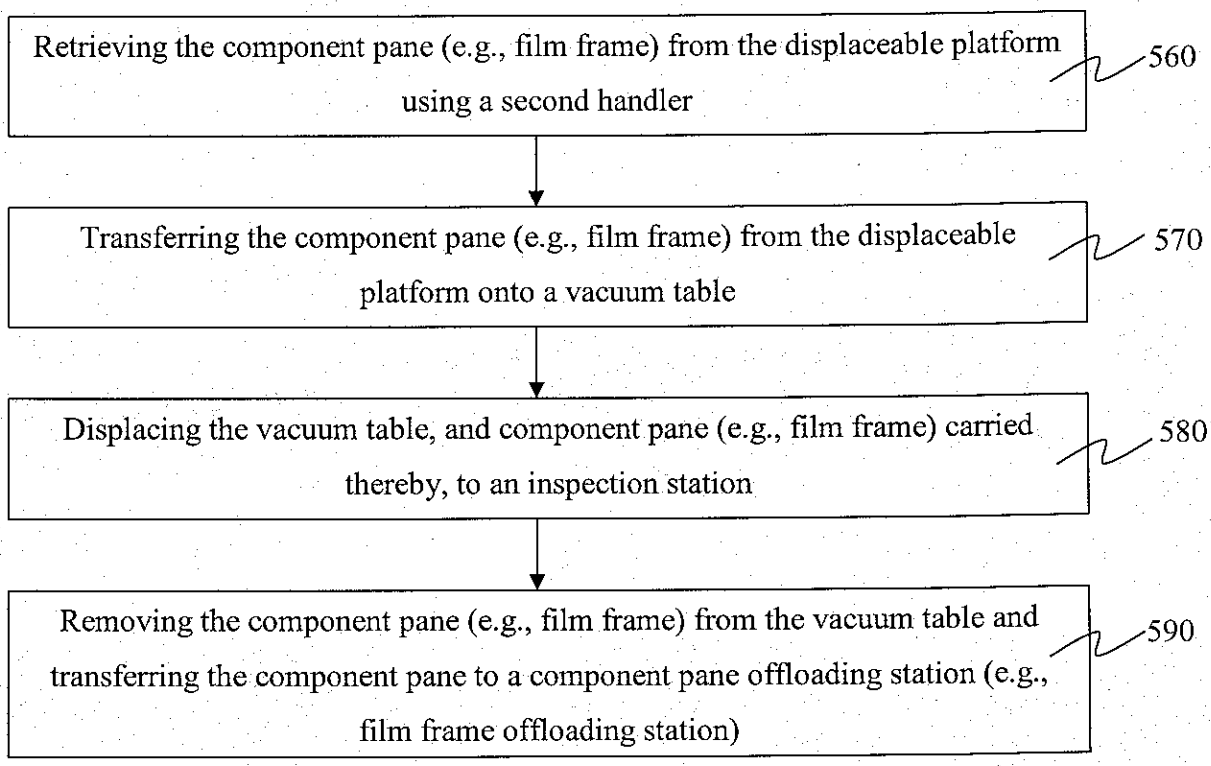


FIG. 5 (Continued)

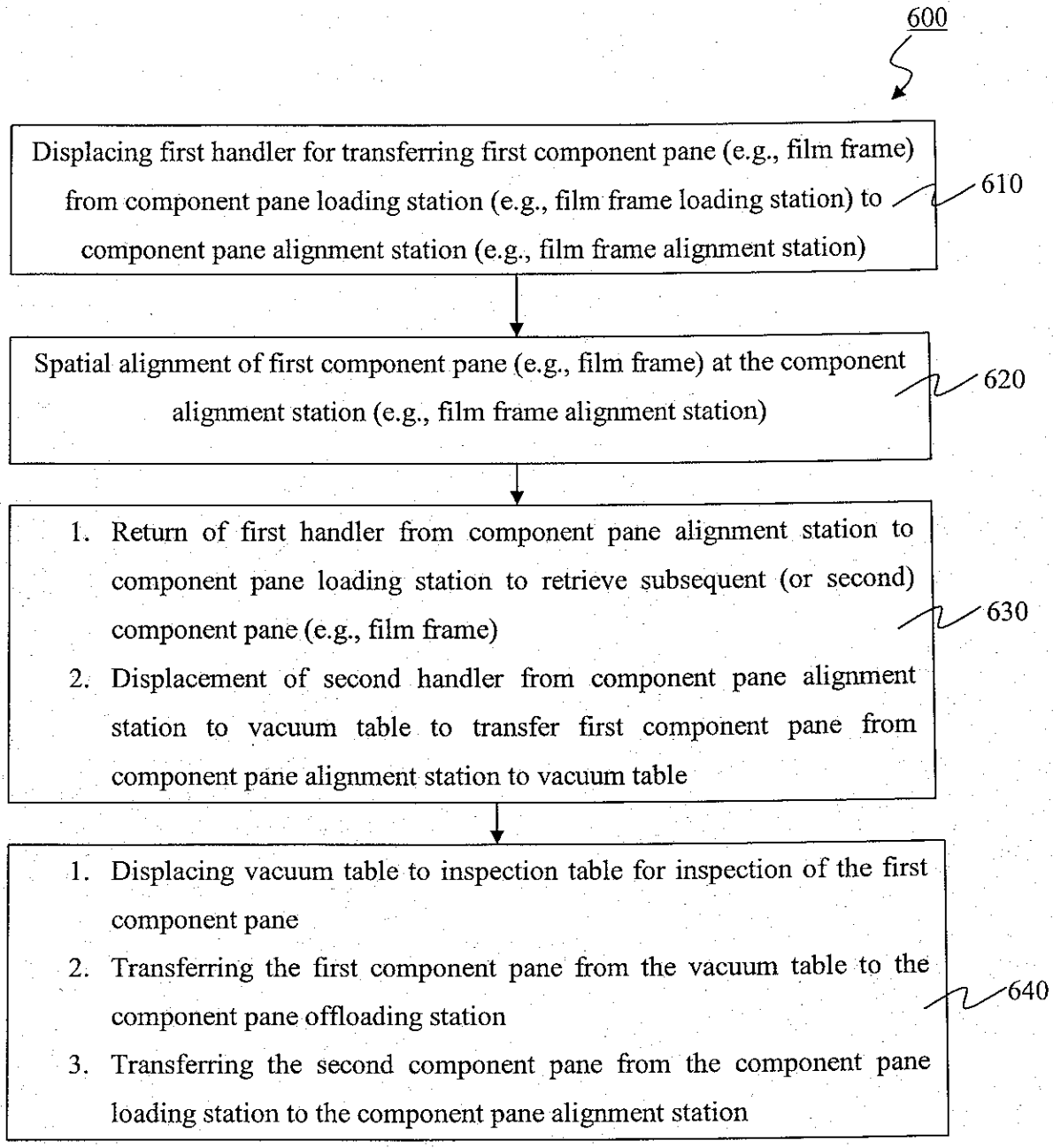

600
Displacing first handler for transferring first component pane (e.g., film frame) from component pane loading station (e.g., film frame loading station) to component pane alignment station (e.g., film frame alignment station)
610
Spatial alignment of first component pane (e.g., film frame) at the component alignment station (e.g., film frame alignment station)
620
1. Return of first handler from component pane alignment station to component pane loading station to retrieve subsequent (or second) component pane (e.g., film frame)
2. Displacement of second handler from component pane alignment station to vacuum table to transfer first component pane from component pane alignment station to vacuum table
630
1. Displacing vacuum table to inspection table for inspection of the first component pane
2. Transferring the first component pane from the vacuum table to the component pane offloading station
3. Transferring the second component pane from the component pane loading station to the component pane alignment station
640

FIG. 6