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(54) Title: AUTOMATIC ROBOT CALIBRATION FOR MULTI-JOINT ROBOTS

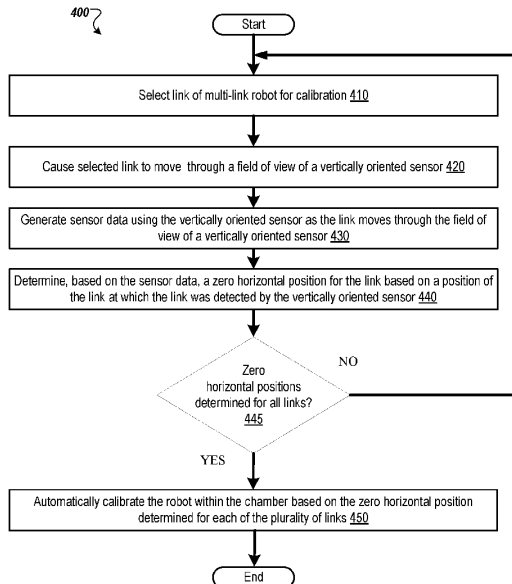


FIG. 4

(57) Abstract: A system includes a chamber, a robot within the chamber, the robot including a plurality of links. The system further includes a vertically oriented sensor within the chamber, the vertically oriented sensor to detect a presence of one or more of the plurality of links. The system further includes a controller, to perform for each link to cause the robot to move the link through a field of view of the vertically oriented sensor. The controller further determines a zero horizontal position for the link based on the position of the link at which the link was detected by the vertically oriented sensor. The controller further automatically calibrates the robot within the chamber based on the zero horizontal position determined for each of the plurality of links.

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