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(54) Title: REDUCTION OF PARTICLE CONTAMINATION PRODUCED BY MOVING MECHANISMS IN A PROCESS TOOL

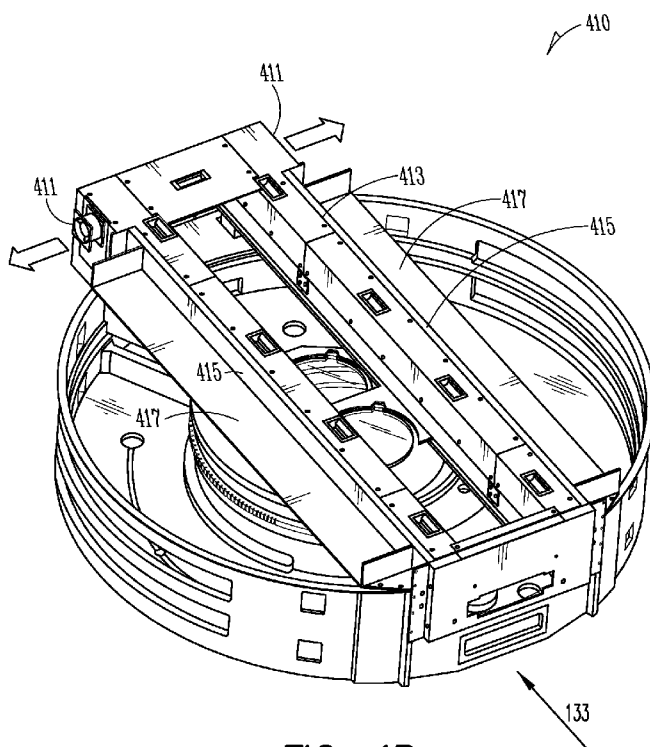


FIG. 4B

(57) Abstract: In various exemplary embodiments described herein, a system and related method to reduce particle contamination on substrates is disclosed. The system includes a substrate traverser mechanism having tracks to transport substrate carriers with one or more traverser ducts arranged to surround, at least partially, the tracks. The one or more ducts have slits along at least a substantial portion of a length of the tracks. A traverser exhaust fan is coupled to one end of each of the one or more traverser ducts. The fan provides sufficient volumetric airflow such that a velocity of the volumetric airflow through the slits is greater than a terminal settling velocity of a predetermined particle size. The fan draws particles less than approximately the predetermined particle size generated by the substrate traverser mechanism into the one or more traverser ducts.

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