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(54) **Title**: MULTIFUNCTION WAFER AND FILM FRAME HANDLING SYSTEM

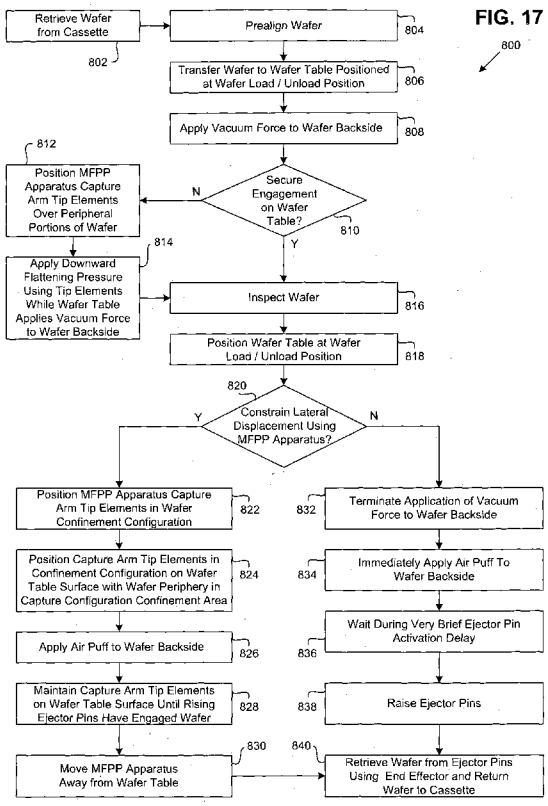


FIG. 17

(57) **Abstract**: A multifunction wafer and film frame handling system includes a wafer table assembly having a wafer table providing an ultra-planar wafer table surface configured for carrying a wafer or a film frame, and at least one of: a flattening apparatus configured for automatically applying a downward force to portions of a warped or non-planar wafer in a direction normal to the wafer table surface; a displacement limitation apparatus configured for automatically constraining or preventing uncontrolled lateral motion of a wafer relative to the wafer table surface after cessation of an applied negative pressure and application of a positive pressure to the underside of the wafer via the wafer table; and a rotational misalignment compensation apparatus configured for automatically compensating for a rotational misalignment of a wafer mounted on a film frame.

WO 2014/035348 A1

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