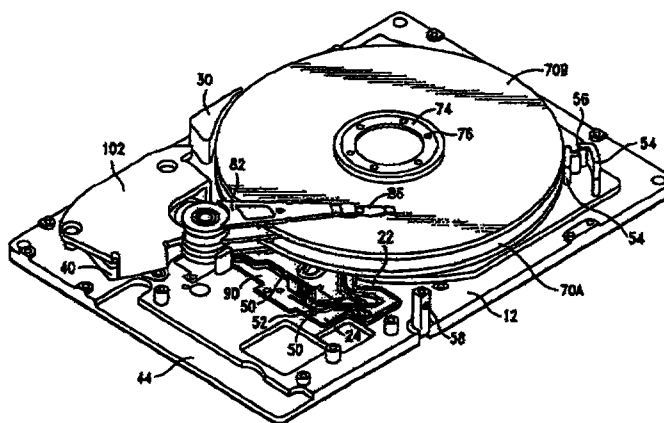


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(54) Title: LOW PROFILE DISK DRIVE ARCHITECTURE WITH IN-LINE CIRCUIT BOARD AND FLEX CIRCUIT PRESSURE PIN CONNECTOR

**(57) Abstract**

A hard disk drive (10) includes a spindle motor flex circuit (22) having a connection end (24) secured to a drive base (12) at a location established by a reference feature (52) and an actuator flex circuit (90) having a connection end (92) also secured to the base (12) at the location established by the feature (52); a cover (114) and cover gasket (112) mounted to the base plate (12) to enclose and seal a rotating data storage disk (70), a disk spindle motor, a magnet structure, a rotary actuator assembly (82) and the flex circuits (24, 92) except for the spindle motor connection end (24) and the actuator connection end (92); and, a printed circuit board (122) carrying drive electronics has a connector array (126) of pressure pins (128) aligned to contact facing connecting pads (130) of the flex circuits (24, 92), the connector array (126) having an alignment pin (132) for registering with the reference feature (52) of the base plate (12) as the printed circuit board (122) is mounted to the base plate (12) externally of the cover (114), thereby establishing electrical connections between the printed circuit board (122) and the flex circuit connection pads (130). This arrangement results in an in-line circuit board and a low-profile disk drive, lending itself to simplified assembly by manufacturing robots.