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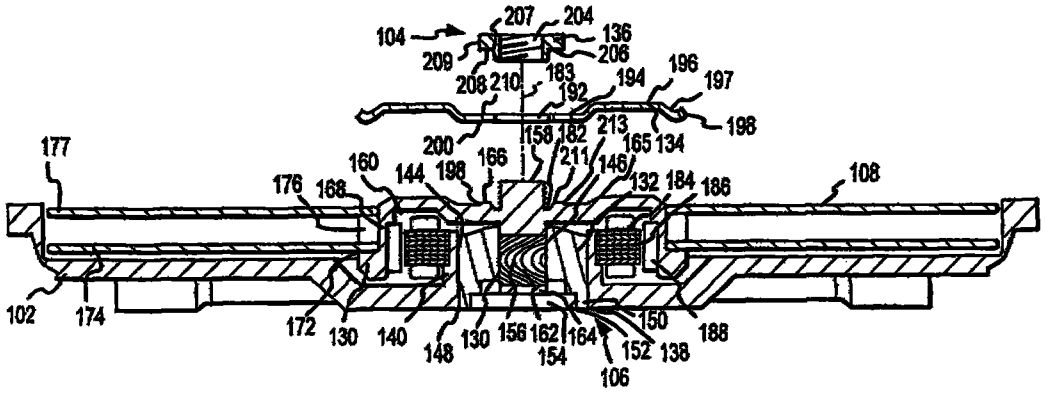
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(54) Title: SINGLE DISC CLAMP NUT FOR DISC CLAMPING IN A DISC DRIVE



(57) Abstract

An apparatus and method for securing an information storage disc within a disc drive incorporates a spindle motor, a rotatable spindle hub, a disc clamp and a disc clamp nut. The disc clamp is positioned on the rotatable spindle hub to clamp the information storage disc to the spindle motor. The disc clamp defines a middle annular raised portion for accepting a predetermined pre-load force to compress the disc clamp down onto the information storage disc. The pre-load force is perpendicular to the disc clamp, and is applied symmetrically around a spindle motor axis of rotation. The disc clamp nut includes a flat engagement surface that secures the pre-loaded disc clamp to the hub. The pre-load force is released once the disc clamp nut is positioned so as to secure the disc clamp to the hub of the disc drive spindle motor. A series of substantially parallel engagement surfaces on the disc clamp nut, disc clamp and hub ensure that the pre-load force is uniformly applied to the information storage disc. The engagement surfaces between the disc clamp, hub and information storage disc can also be co-planar.