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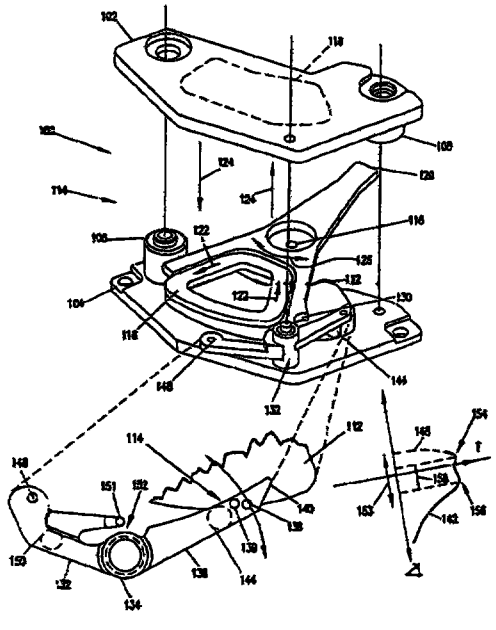
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(54) Title: IMPROVED MAGNETIC LATCHING FOR A DISC DRIVE



(57) Abstract: A latching method and a latch (132, 170, 171, 200, 220) for a voice coil (100) motor in a disc drive (20). The latch (132, 170, 171, 200, 220) has a hub (134, 172, 216) and a latch surface (152, 174). The latch surface (152, 174) has a rotational latching range (153) in which the latch surface (152, 174) latches the voice coil motor (100). A first magnetic detent (138, 178, 202, 222) is coupled to the hub (134, 172, 216) and is active when the latch surface (152, 174) is in a first rotational segment in the latching range (153). A second magnetic detent (139, 180, 204, 224) couples to the hub (134, 172, 216) and is active when the latch surface (153) is in an offset second rotational segment in the latching range (153). The offset shapes detent torque over the latching range (153).

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