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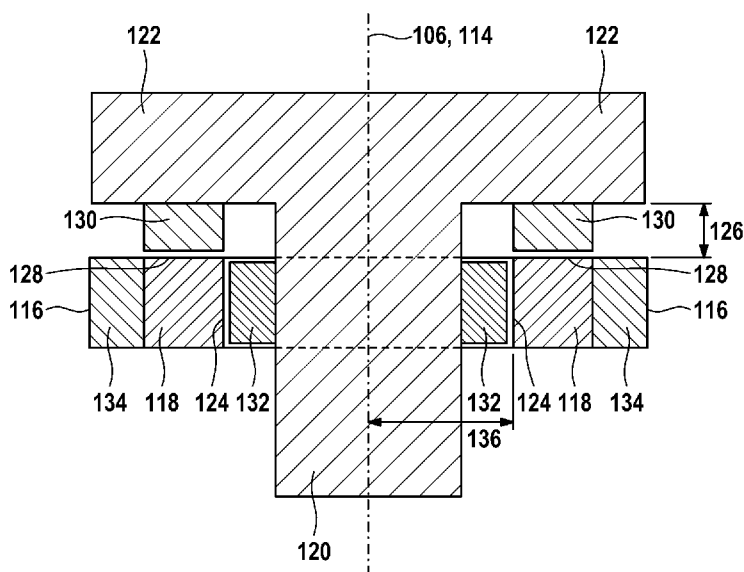
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[Continued on next page]

(54) Title: A MAGNETIC BEARING, A ROTARY STAGE, AND A REFLECTIVE ELECTRON BEAM LITHOGRAPHY APPARATUS

FIG. 2



(57) Abstract: A magnetic bearing (108) with an axis of rotation (106), wherein the magnetic bearing comprises: a cylindrical rotor (116) comprising a ferromagnetic material (118, 338, 440) wherein the cylindrical rotor has an axis of symmetry (114), wherein the cylindrical rotor has an inner radius (124), wherein the cylindrical rotor has a top side (128), a static hub (120), wherein the static hub has an overhang (122) which protrudes from the static hub and is located adjacent to the top side, a lift magnetic actuator apparatus (130) for controlling the distance (126) between the top side and the overhang, a radial magnetic actuator apparatus (132) for controlling the distance (136) between the inner radius and the axis of rotation.





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