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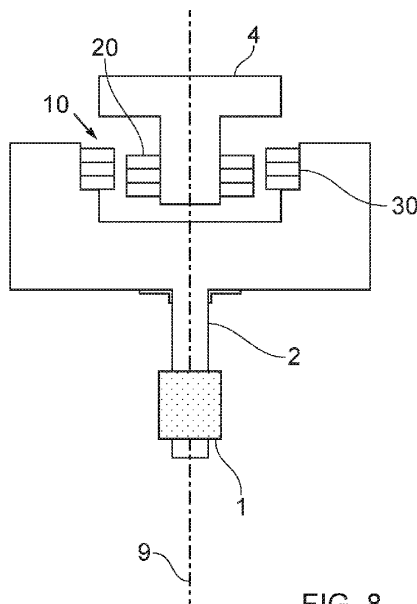


FIG. 8

(57) Abstract: A passive magnetic bearing assembly (10) for a vacuum pump and a vacuum pump having such a bearing are disclosed. The passive magnetic bearing assembly has a plurality of pairs of ring magnets (20, 30) arranged in a stack, a ring magnet of a pair being arranged on a stator side (4) of the bearing and the other magnet of the pair being arranged on a rotor side (2). The ring magnets are radially magnetised, and each rotor ring magnet comprises at least a first harmonic of magnetic inhomogeneity, where magnetic inhomogeneity is measured as the ratio between the 0-peak variation of remanence AB_i and the average remanence B_{RO} , that is less than 3%.

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