

Title (en)
PERMANENT MAGNET MACHINE

Title (de)
PERMANENTMAGNETMASCHINE

Title (fr)
MACHINE A AIMANTS PERMANENTS

Publication
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Application
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Abstract (en)
[origin: WO2004021551A2] A machine includes a rotor defining at least two adjacent magnet retention slots and a plurality of interior permanent magnets. The rotor's radial thickness above a magnet retention slot transitions from a first thickness to a bridge region having a lesser, second thickness. The transition occurs within a defined angular expanse. Low permeability areas are positioned below the bridge region between the magnets. There are no direct linear paths between the ends of the magnets and no direct linear paths that extend radially from the outer rotor portion to the interior of the rotor, between the magnets, that do not pass through a low permeability area. A machine includes a stator defining stator poles, a rotor with interior permanent magnets. In one embodiment, at least two impedance reduction slits are positioned radially outward of the magnets, and at least a portion of each slit is within a defined region.

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