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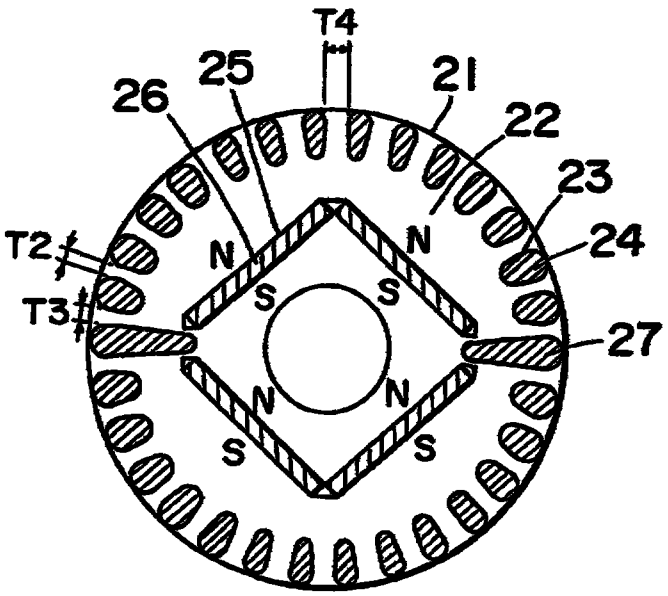
(54) Title: PERMANENT MAGNET SYNCHRONOUS MOTOR



(57) Abstract: A synchronous motor includes a stator, a rotor and permanent magnets. The rotor includes a rotor iron core and rotatable relative to the stator, a plurality of conductor bars accommodated within corresponding slots in the rotor iron core. The conductor bars have their opposite ends shortcircuited by respective shortcircuit rings to form a starter squirrel cage conductor. The rotor also have a plurality of magnet retaining slots defined therein at a location on an inner side of the conductor bars, in which hole permanent magnets are embedded.

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