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(54) **PLANAR DRIVE SYSTEM**

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(57) **ABSTRACT**

A planar drive system has at least one stator assembly with a plurality of coil groups for generating a stator magnetic field, a stator surface above the stator assembly, and first and second rotors. The rotors each have a plurality of magnet units for generating a rotor magnetic field. The rotors can be moved above the stator surface in first and second directions, with the aid of an interaction of the stator magnetic field with the rotor magnetic field. A connection can be formed between the rotors with the aid of a coupling device. A controller is arranged to output control signals to the stator assembly. The stator assembly is configured to energize the coil groups on the basis of the control signals so that movements of the rotors, coordinated with one another with respect to the coupling device, are carried out with the aid of the stator magnetic field.

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