Rotor for an electric motor, rotor discs for construction of the rotor, and an electric motor having such a rotor

ABSTRACT

Annular rotor disc (22) for, in an axially stacked disc assembly of a plurality of similar rotor discs (22), forming a rotor (16) for an electric motor, in which the discs (22) secure a plurality of axially running permanent bar magnets (28), of substantially rectangular cross-sectional shape, distributed around the circumference of the rotor. The rotor disc (22) has pockets (24, 26) for accommodating and securing the permanent bar magnets (28) in such a way that adjoining bars form an angle to one another. The pockets (24, 26) for adjacent, mutually diverging permanent bar magnets (28), viewed in the radial direction from the centre of the rotor, delimit between them a substantially triangular disc part (32), which is flexibly connected to a radially inner part (36) of the annular rotor disc (22) only by a radially inner web portion (34).

(Fig. 2)