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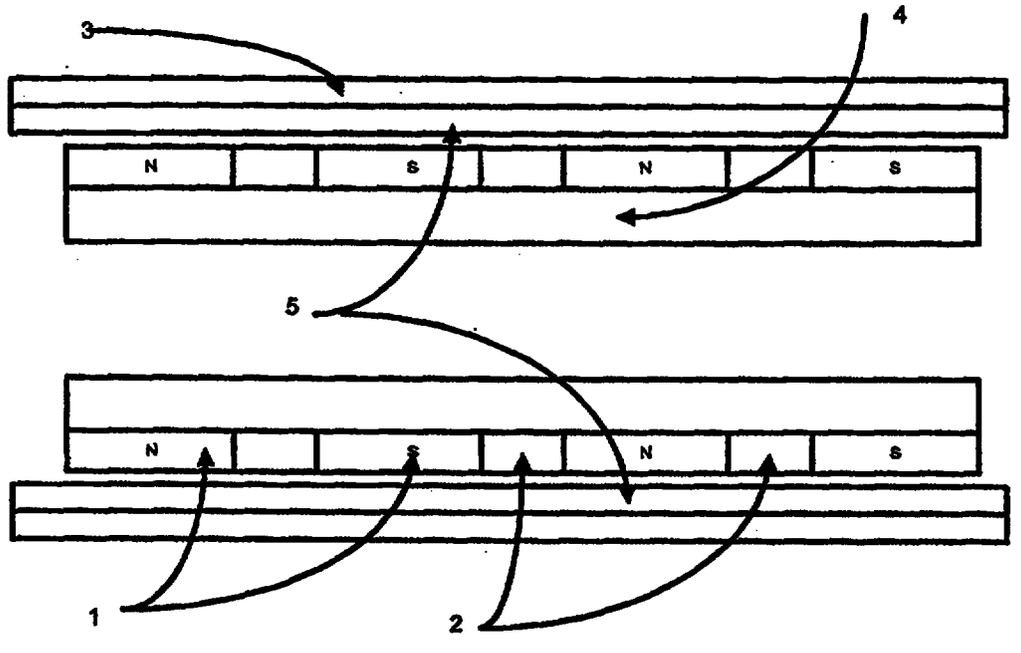
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(54) Title: A LINEAR ELECTROMAGNETIC MACHINE



(57) Abstract

A linear electromagnetic machine for generating a force acting between two members relatively movable along an axis, one of which is capable of producing a magnetic field the direction of at least part of which extends substantially radially of the said axis and the other of which comprises or includes a conductor, conveniently in the form of a coil, in which an electric current can flow substantially perpendicularly of the magnetic field so as to generate a force between the two members substantially parallel to the axis. The radial magnetic field is generated by permanent magnets orientated with their direction of magnetisation axially, the pole pieces acting to concentrate the magnetic flux to follow a radial path through the coils.