ABSTRACT

An actuator is configured to produce a displacement force between a first and a second part to displace the first and second parts relative to each other. The Actuator includes a first magnet subassembly, attached to one of a first and a second part, and an electrically conductive element, attached to the other one of the first and second part and placed near the first magnet subassembly. The first magnet subassembly includes at least one set of at least two adjacently placed magnets oriented such that their magnetic polarizations are substantially mutually opposite, and a back mass made out of a magnetic flux guiding material and connecting the magnets to guide a magnetic flux there between. The first magnet subassembly includes a carrier made of a non-magnetic-flux-guiding material, the carrier including at least one recess in which the at least one set of back mass and magnets is embedded.

Figure 5