

Title (en)

ELECTRODYNAMIC LINEAR OSCILLATING MOTOR

Title (de)

ELEKTRODYNAMISCHER LINEARSCHWINGMOTOR

Title (fr)

MOTEUR À MOUVEMENT ALTERNATIF LINÉAIRE ÉLECTRODYNAMIQUE

Publication

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Application

EP 09796603 A 20091104

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Abstract (en)

[origin: WO2010057460A2] The invention relates to an electrodynamic linear oscillating motor, which is characterized by high power densities in the magnet gap, high efficiency, magnetic restoring of the oscillating system into the center position, and a comparatively low weight of the oscillating system. The linear oscillating motor is composed of a stator system, which is equipped with at least one magnet (4), and an oscillating system, which is mounted movably in the magnetic field of the stator. The oscillating system comprises at least one core (1) made of a soft magnetic material, preferably soft iron, dynamo iron, or soft magnetic construction steel, and at least one driving coil (2; 3). The electrodynamic linear motor according to the invention combines the advantages of the known MC and MM linear motor, thereby allowing electrodynamic conversion levels of up to 99% to be achieved. The linear oscillating motor is suited as a drive for refrigerating and air conditioning systems having low power and also for pumping and injection systems, and, reversing the electrodynamic principle, as a generator, such as for shock absorber systems in vehicle construction.

IPC 8 full level

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