

LATCHING DEVICES

ABSTRACT

Described herein are latching devices where relative speed of movement between members is in part controlled or reduced via eddy current formation and in part controlled or relative motion stopped via a latch arrangement. Various embodiments are described, one being use of a conductive member; at least one magnetic field and a latch member that, prior to latching, moves independently to the at least one conductive member. A kinematic relationship exists between the conductive member and at least one magnetic field that enables the conductive member to move at a different speed relative to the magnetic field on application of an energising force, thereby inducing an eddy current drag force by relative movement of the conductive member in the magnetic field. The eddy current drag force resulting causes movement of the conductive member causing the conductive member to engage the latch member thereby halting movement between the at least one conductive member and the at least one latch member.

FIGURE 1