

ABSTRACT

LINEAR MOTOR COOLING APPARATUS WITH AIR AMPLIFICATION

5

A cooling apparatus is provided for a linear motor that comprises a coil assembly and a magnet assembly, wherein the coil assembly generates heat during operation. The cooling apparatus comprises a compressed air inlet positioned to discharge compressed air in a direction directly towards a gap between the coil assembly and magnet assembly, and an inclined surface extending from the compressed air inlet and sloping at an obtuse angle away from the discharge direction of the compressed air. The compressed air inlet is configured to discharge the compressed air at a sufficient velocity so as to entrain atmospheric air along the inclined surface to amplify the compressed air that is discharged.

10

15

(FIG. 4)