## ABSTRACT

The present application discloses an axle assembly for connecting at least one wheel to a mobile robot movable on a ferromagnetic surface, wherein the axle assembly comprises: an axle for revolving the at least one wheel; and at least one magnet for exerting a pull force between the axle assembly and a portion of the ferromagnetic surface. The axle assembly is adapted to pivot the at least one magnet about a rotation axis parallel to the axle, the at least one magnet being pivotable in reaction to a shape change of the portion of the ferromagnetic surface while the mobile robot moves on the ferromagnetic surface. Also disclosed is a mobile robot comprising the at least one axle assembly, a method of performing an operation on a ferromagnetic surface and a method of adapting a mobile robot so that the mobile robot becomes attachable to a ferromagnetic surface.

[Fig. 2A]