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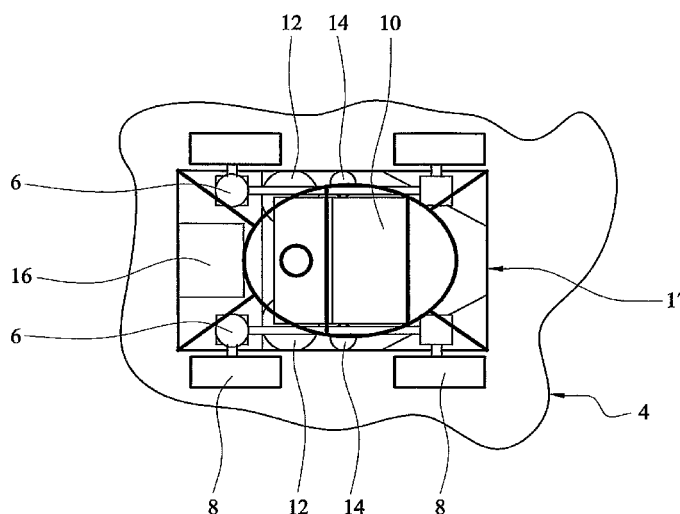
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(54) Title: APPARATUS FOR DETERMINING THE POSITION OF A MOVEABLE APPARATUS ON A SURFACE



(57) Abstract: A robotic navigation system using a combination of magnetic landmark recognition system (12) for the identification of surface and subsurface features of steel structures, and an optical dead reckoning system (14), which creates a two-dimensional map of the structure's surface being traversed by a robot is disclosed. The system can be employed as a navigational system for use onboard robotic inspection and maintenance vehicle (2) for the inspection, cleaning and general repair of large steel fabricated structures such as the hull of a ship (4).

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