

Controlled Mobile Platform for Service Based Humanoid Robot System

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Abstract : The paper discloses a controlled tracked humanoid robot moving platform. A driving and driven wheel are controlled by a control module to drive a robot body to move according to data signals of a monitoring module, in addition, remote transmission can be achieved, and a certain remote control function can be realized. A power management module circuit board looks after in used for providing electric drive for moving of the robot body and distribution of separate power source to be used in internal of robot system. An external port circuit board is arranged, the tracked robot moving platform can be used immediately for any data acquisition. The moving platform is simple and compact in structure, strong in adaptation performance, stable in operation and suitable for being operated in severe environments. Meanwhile, a layered modular installation structure is adopted, and therefore the moving platform is convenient to assemble and disassemble.

Keywords : moving platform, humanoid robot, embedded controlled drive, mobile robot, museum robots, self-localization, obstacle avoidance, communication

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