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(54) **SELF-CLIMBING ROBOT FOR INSTALLING ELEVATOR GUIDE RAIL**

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CPC ***B66B 19/002*** (2013.01); ***E04G 3/28*** (2013.01); *B66B 7/023* (2013.01); *E04G 2003/286* (2013.01)

(58) **Field of Classification Search**
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See application file for complete search history.

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(57) **ABSTRACT**

The present invention discloses a self-climbing robot for installing an elevator guide rail, which comprises a climbing mobile platform, a working mobile platform, a rectangular parallelepiped frame and a PLC control unit. The frame is fixedly provided with a first platform, a second platform, a third platform and a fourth platform from bottom to top, the top end of a screw provided vertically is fixedly connected with the fourth platform, and the bottom end of the screw is fixedly connected with the first platform; the climbing mobile platform and the working mobile platform are provided with a nut engaged with the screw and a driving mechanism capable of driving the rotation of the nut, respectively, the driving mechanism comprises a driving motor and a pulley box, the working mobile platform is located above the climbing mobile platform, both the climbing mobile platform and the working mobile platform are slidingly connected with the frame, and the climbing mobile platform and the working mobile platform are only capable of sliding in the vertical direction. The self-climbing robot for installing the elevator guide rail according to the present invention can automatically complete the task of measuring a well and installing a guide rail, and can self-climb in the elevator well.

9 Claims, 9 Drawing Sheets