Patent Search

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Abstract:

ABSTRACT: Title: An Automatic Controlling System for Rail Gate Movement and Method Thereof The present disclosure proposes an automatic controlling system (100) for controlling the movement of railway gates (107) at rail level crossing. The automatic controlling system (100) comprises one or more sensing unit (102), a controller (104), a driving unit (106), railway gates (107), an alerting unit (108) and a power source (110). The automatic controlling system (100) that controllers the movement of the railway gates (107) to replace manual operation by the gatekeeper. The automatic controlling system (100) that reduces the closing time of the railway gate (107) to avoid traffic. The automatic controlling system (100) that provides safety to the road users by reducing the accidents. The automatic controlling system (100) that operates without human intervention. The automatic controlling system (100) that provide with a sensor to detect the arrival of train near to the level crossing.

Complete Specification

Description:DESCRIPTION:
Field of the invention:
[0001] The present disclosure generally relates to the technical field of safety and control systems of rail gate crossing and, in specific, relates to an automatic controlling system for the movement of railway gates at rail level crossing.
Background of the invention:
[0002] A level crossing is an intersection where a railway line crosses a road at the same level. The level crossing present a significant risk of collisions and accidents between trains and road vehicles. Early level crossings had a leg man in a nearby booth. The leg man wave a red flag or lantern on the approach of a train to stop the road vehicles and clear the tracks. Manual or electrical closable gates that barricaded the roadway were later introduced. The gates were intended to be a complete barrier against instruction of any road traffic onto the railway. The railway board barricaded railway gates at the level crossings to prevent the collisions and accidents between the trains and the road vehicles. The railway gates are manually operated by the gate keepers. The railways gates avoids the human and animals intervention at level crossings completely.

[0003] In existing technology, the gate keeper receives signals based on the oral communication through telegraphic conversation with the station agents in the railway stations and co-gatekeepers at the neighbouring level crossing. The human interference in the system causes miscommunication gap in a large scope that causes the collisions and accidents between the trains and the road vehicles. At railway level crossing, the traditional railway system uses the warning lights and human controlled

View Application Status