

DETECTION METHOD AND SYSTEM

Abstract

A current collector device (CCD) is a component used to lead electrical power from the third rail of a train track to the train for powering the train and equipment carried thereon. The CCD is a critical component for the train's operation and constant inspection of the CCD is required in order to enable continuous service of the train. An existing approach uses noise as a detection parameter. The problem with this method is with the difficulty in separating the noise, which is generated by the defected CCD, from the sound generated by the CCD during travel along the third rail. Described herein is a detection system that utilizes a scanner for detecting presence of device anomaly. At least one camera functions in tandem to capture images of the CCD to be identified and sent as part of an alert when device anomaly has been detected.

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Figure 1