Development of the Track Circuit with Excellent Noise Immunity Performance

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Many kinds of track circuit have been developed and introduced to be suitable for each electromagnetic condition of various lines. In order to prevent fault of signalling equipment (e.g., track circuit), the allowable value for the currents in a rail generated by vehicle's electric equipments is set a very small level. To solve these problems, we developed a new track circuit which is applicable to any condition of lines especially in immunity to electrical noise. We describe a specification of the track circuit and results of field tests.