

ABSTRACT

**TRAIN CONFIGURATION RECOGNITION SYSTEM AND TRAIN
CONFIGURATION RECOGNITION APPARATUS**

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A pair of transmission lines 17a, 17b are provided in the train in such a manner that, at each of the two ends of each of the carriage groups, one of the train end detection switches 41 is connected to one of the pair of transmission
10 lines. A resistor 34 is inserted in at least one of the pair of transmission lines, and a voltage detector measures a voltage V1, V2 between the pair of transmission lines at each of both ends of the resistor. A controlling unit controls a first and a second switches 33a, 33b in such a
15 manner that there is only one location within the train where a power supply 31, 32 is inserted between the pair of transmission lines, and the controlling unit recognizes the configuration of the train based on the voltages that have been measured by the voltage detectors.

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Fig. 2