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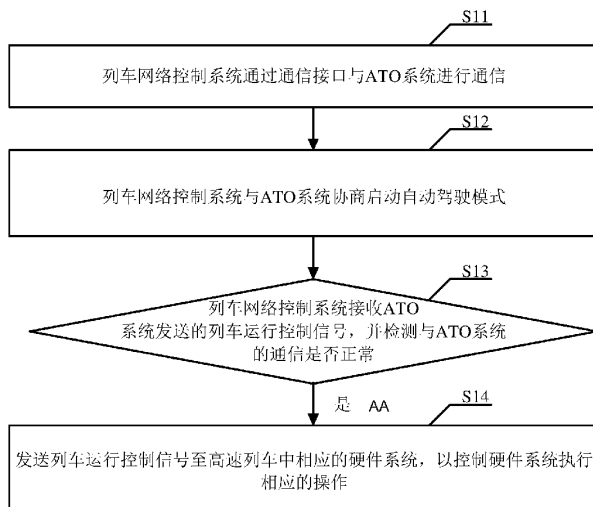
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(81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB,

(54) Title: HIGH-SPEED TRAIN OPERATION CONTROL METHOD AND SYSTEM

(54) 发明名称: 一种高速列车运行控制方法及系统



S11 A TRAIN NETWORK CONTROL SYSTEM COMMUNICATES WITH AN ATO SYSTEM BY MEANS OF A COMMUNICATION INTERFACE
S12 THE TRAIN NETWORK CONTROL SYSTEM NEGOTIATES WITH THE ATO SYSTEM TO ACTIVATE AN AUTOMATIC DRIVING MODE
S13 THE TRAIN NETWORK CONTROL SYSTEM RECEIVES TRAIN OPERATION CONTROL SIGNALS SENT BY THE ATO SYSTEM AND DETECTS WHETHER THE COMMUNICATION WITH THE ATO SYSTEM IS NORMAL
S14 IF YES, SEND A TRAIN OPERATION CONTROL SIGNAL TO A CORRESPONDING HARDWARE SYSTEM IN THE HIGH-SPEED TRAIN TO CONTROL THE HARDWARE SYSTEM TO PERFORM CORRESPONDING OPERATIONS
AA YES

图 1

(57) Abstract: A high-speed train operation control method. On the basis of a train network control system and an ATO system installed on a high-speed train, the method comprises: the train network control system communicates with the ATO system by means of a communication interface (S11); the train network control system negotiates with the ATO system to activate an automatic driving mode (S12); the train network control system receives train operation control signals sent by the ATO system and detects whether the communication with the ATO system is normal (S13); and if yes, send a train operation control signal to a corresponding hardware system in the high-speed train to control the hardware system to perform corresponding operations (S14). Also provided is a high-speed train operation control system. The present method and system can ensure the validity of the train operation control signals and improve the reliability of automatic driving.

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本国际公布:

— 包括国际检索报告 (条约第21条(3))。

(57) 摘要: 一种高速列车运行控制方法, 基于高速列车上安装的列车网络控制系统与ATO系统, 方法包括: 列车网络控制系统通过通信接口与ATO系统进行通信 (S11); 列车网络控制系统与ATO系统协商启动自动驾驶模式 (S12); 列车网络控制系统接收ATO系统发送的列车运行控制信号, 并检测与ATO系统的通信是否正常 (S13); 若是, 发送列车运行控制信号至高速列车中相应的硬件系统, 以控制硬件系统执行相应的操作 (S14)。还提供了一种高速列车运行控制系统。该方法和系统能保证列车运行控制信号的有效性, 提高自动驾驶的可靠性。