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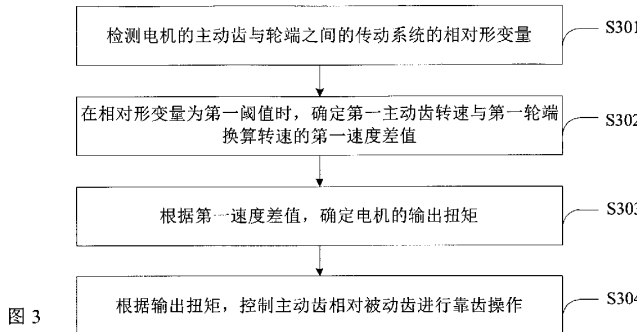
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(54) Title: ELECTRIC VEHICLE AND ELECTRIC-MOTOR CONTROL METHOD AND APPARATUS THEREFOR, AND STORAGE MEDIUM

(54) 发明名称: 电动车及其电机控制方法、装置和存储介质



S301 MEASURE A RELATIVE DEFORMATION QUANTITY OF A TRANSMISSION SYSTEM BETWEEN A DRIVING GEAR AND A WHEEL END OF AN ELECTRIC MOTOR

S302 WHEN THE RELATIVE DEFORMATION QUANTITY IS A FIRST THRESHOLD VALUE, DETERMINE A FIRST SPEED DIFFERENCE VALUE BETWEEN A FIRST DRIVING-GEAR ROTATION SPEED AND A FIRST WHEEL-END CONVERSION ROTATION SPEED

S303 DETERMINE THE OUTPUT TORQUE OF THE ELECTRIC MOTOR ACCORDING TO THE FIRST SPEED DIFFERENCE VALUE

S304 ACCORDING TO THE OUTPUT TORQUE, CONTROL THE DRIVING GEAR TO PERFORM A GEAR APPROACHING OPERATION RELATIVE TO A DRIVEN GEAR

(57) Abstract: The present application belongs to the field of electric vehicles, and particularly relates to an electric vehicle and an electric-motor control method and apparatus therefor, and a storage medium. The electric-motor control method for an electric vehicle in the present application comprises: measuring a relative deformation quantity of a transmission system between a driving gear and a wheel end of an electric motor; when the relative deformation quantity is a first threshold value, determining a first speed difference value between a first driving-gear rotation speed and a first wheel-end conversion rotation speed, wherein the relative deformation quantity being the first threshold value is used for representing that the driving gear starts to be separated from a driven gear of the transmission system, the first driving-gear rotation speed is the rotation speed of the driving gear at the moment when the driving gear

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is separated from the driven gear, and the first wheel-end conversion rotation speed is a rotation speed, which is obtained by converting the wheel-end rotation speed of an electric vehicle on the basis of a speed ratio at the separation moment; determining the output torque of the electric motor according to the first speed difference value; and according to the output torque, controlling the driving gear to perform a gear approaching operation relative to the driven gear. Therefore, the problem of relatively large vibration and noise occurring in an electric motor and a transmission system is ameliorated or even avoided.

(57) 摘要: 本申请属于电动车辆领域, 具体涉及一种电动车及其电机控制方法、装置和存储介质。本申请的电动车的电机控制方法包括: 检测电机的主动齿与轮端之间的传动系统的相对形变量; 在相对形变量为第一阈值时, 确定第一主动齿转速与第一轮端换算转速的第一速度差值, 相对形变量为第一阈值用于表示主动齿和传动系统的被动齿开始脱离, 第一主动齿转速为在主动齿和被动齿的脱离时刻主动齿的转速, 第一轮端换算转速为在脱离时刻, 电动车的轮端转速经速比换算得到的转速; 根据第一速度差值, 确定电机的输出扭矩; 根据输出扭矩, 控制主动齿相对被动齿进行靠齿操作。从而降低甚至避免电机及传动系统出现较大的震动和噪音的问题。