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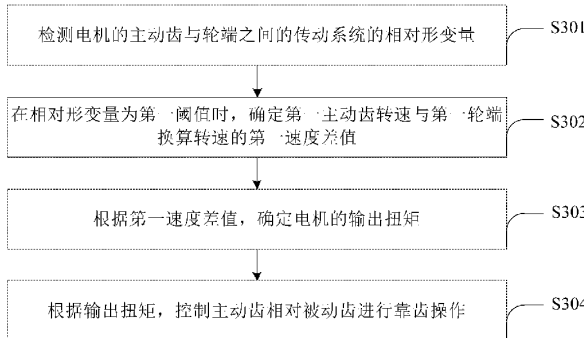
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(54) **Title:** ELECTRIC VEHICLE, MOTOR CONTROL METHOD THEREFOR, APPARATUS AND STORAGE MEDIUM

(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 the relative deformation quantity of a drivetrain between driving teeth of a motor and a wheel end
S302 When the relative deformation quantity is a first threshold value, determine a first speed difference value between a first driving tooth rotating speed and a first converted wheel end rotating speed
S303 According to the first speed difference value, determine the output torque of the motor
S304 According to the output torque, control the driving teeth to perform a tooth engaging operation with respect to driven teeth

图 3

(57) **Abstract:** The present application belongs to the field of electric vehicles, and particularly relates to an electric vehicle, a motor control method therefor, an apparatus and a storage medium. The motor control method for an electric vehicle in the present application comprises: measuring the relative deformation quantity of a drivetrain between driving teeth of a motor and a wheel end; when the relative deformation quantity is a first threshold value, determining a first speed difference value between a first driving tooth rotating speed and a first converted wheel end rotating speed, the relative deformation quantity being the first threshold value being used for indicating that the driving teeth and driven teeth of the drivetrain are about to be disengaged, the first driving tooth rotating speed being the rotating speed of the driving teeth at a disengagement moment of the driving teeth and the driven teeth, and the first converted wheel end rotating speed being a rotating speed obtained by subjecting the wheel end rotating speed of an electric vehicle at the disengagement moment to speed ratio conversion; according to the first speed difference value, determining the output torque of the motor; and, according to the output torque, controlling the driving teeth to perform a tooth engaging operation with respect to the driven teeth. Therefore, the problem of the high vibration and loud noise of motors and drivetrains is alleviated or even avoided.

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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: 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。