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(54) Title: POWERED REAR SWINGARM DRIVE SYSTEM OF PURE ELECTRIC TWO-WHEELED MOTORCYCLE

(54) 发明名称: 纯电动二轮摩托车动力后平叉驱动系统

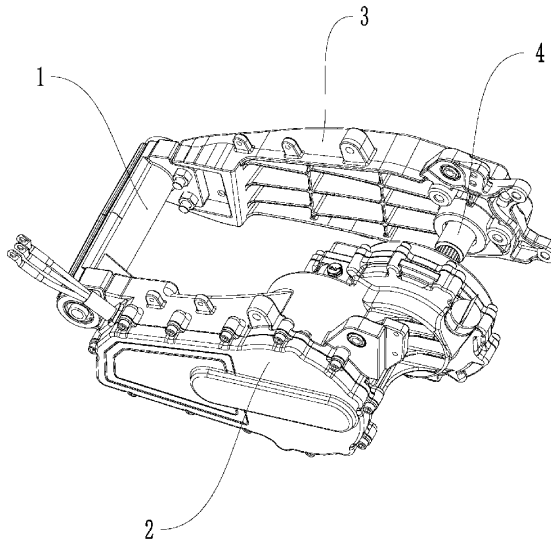


图1

(57) Abstract: Disclosed in the present utility model is a powered rear swingarm drive system of a pure electric two-wheeled motorcycle. The powered rear swingarm drive system comprises a rear fork fixing seat, wherein one side of the rear fork fixing seat is connected to a frame, a powered swingarm housing and a support swingarm are provided at two ends of the other side of the rear fork fixing seat, respectively, an output shaft is rotationally connected between the powered swingarm housing and the support swingarm, an electric motor cavity is provided in the powered swingarm housing, and a gear cavity is provided in the side of the electric motor cavity that

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WO 2025/148311 A1

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is close to the output shaft; a driving electric motor is provided in the electric motor cavity, a driving gear shaft and a driven gear which are meshed with each other are provided in the gear cavity, and the driving gear shaft and the driven gear form a speed reduction transmission; and the driving gear shaft is connected to an electric motor shaft of the driving motor, one end of the output shaft extends into the gear cavity, and the driven gear is connected to the output shaft. A power transmission path is shorter, the efficiency is better, and the sealing performance is good. The size of a battery is not required to be reduced, and a larger battery can be placed to increase the range. The problems of poor performance and poor waterproofness caused by an increased moment of inertia resulting from a hub electric motor are reduced.

(57) 摘要: 本实用新型公开了一种纯电动二轮摩托车动力后平叉驱动系统, 包括后叉固定座, 后叉固定座的一侧连接车架, 另一侧的两端上分别设置有动力平叉壳体 and 支撑平叉, 动力平叉壳体与支撑平叉之间转动连接有输出轴, 动力平叉壳体上设置有电机腔, 电机腔靠近输出轴的一侧设置有齿轮腔, 电机腔内设置有驱动电机, 齿轮腔内设置有相互啮合的主动齿轮轴和被动齿轮, 且主动齿轮轴和被动齿轮为减速传动, 主动齿轮轴与驱动电机上的电机轴连接, 输出轴的一端伸入齿轮腔内, 被动齿轮与输出轴连接, 动力传递路径更短, 效率更好, 且密封性能好; 不用牺牲电池体积, 可以放置更大的电池增加续航里程; 减少因轮毂电机造成的转动惯量增加所引起的性能变差和防水性问题。