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(54) Title: BICYCLE FOLDING STRUCTURE AND BICYCLE FOLDING METHOD

(54) 发明名称: 自行车收折结构及自行车收折方法

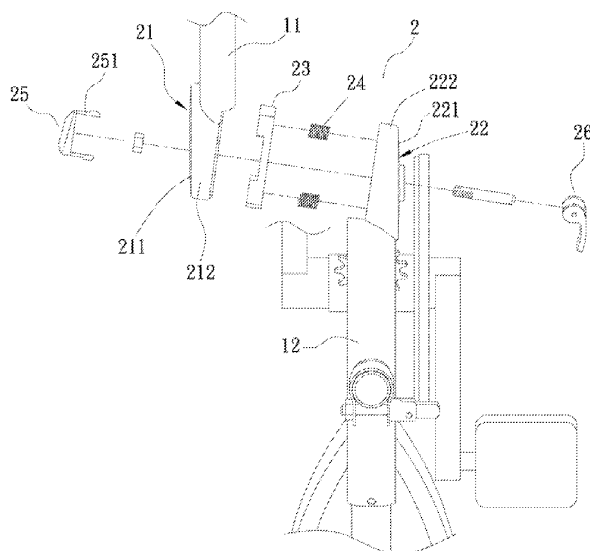


图3

(57) Abstract: A bicycle folding structure and a bicycle folding method thereof. The folding structure comprises a main skeleton (1), a first folding joint (2), and a front wheel frame (3), wherein the main skeleton (1) comprises a first connection rod (11) and a second connection rod (12); the first folding joint (2) is provided between the first and second connection rods (11, 12); a front end of the first connection rod (11) is connected to the front wheel frame (3); the first folding joint (2) comprises first and second housings (21, 22), an engagement member (23), an elastomer (24), a pressing button (25), and a cam locking member (26); the first and second housings (21, 22) respectively are connected to rear and front ends of the first and second connection rods (11, 12); and the heights of an annular

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- 包括国际检索报告(条约第21条(3))。

wall (212) of the first housing (21) and an annular wall (222) of the second housing (22) are linearly changed and respectively have a high point and a low point, so that the annular walls (212, 222) form wall surfaces having unequal heights. According to the bicycle folding structure, a front wheel (4) and a rear wheel (5) that are originally in the same straight line are synchronously staggered in a folding process, so that the front wheel (4) and the rear wheel (5) are in a parallel state; a user is facilitated to pull a bicycle; when a handle rod (7) is further folded, the volume of the bicycle is reduced, the occupation of space is reduced, and the bicycle is facilitated to carry or store when the bicycle is not ridden.

(57) 摘要: 一种自行车收折结构及其收折方法, 该收折结构包括主骨架(1)、第一折合关节(2)和前轮架(3), 主骨架(1)包括第一连杆(11)和第二连杆(12), 第一、二连杆(11, 12)之间设置第一折合关节(2), 第一连杆(11)的前端衔接前轮架(3); 第一折合关节(2)包括第一、二外壳(21, 22)、齿合件(23)、弹性体(24)、按压钮(25)和凸轮锁定件(26); 第一、二外壳(21, 22)分别衔接第一、二连杆(11, 12)的后、前两端, 第一外壳(21)的环壁(212)与第二外壳(22)的环壁(222)的高度呈线性变化且各具有一高点与一低点, 使环壁(212, 222)形成非等高的墙面。该自行车收折结构在收折的过程中同步将原本在同一直线的前轮(4)与后轮(5)错开, 使前轮(4)与后轮(5)呈并列状态, 可供使用者方便牵移自行车, 当进一步收折把手杆(7), 能在不骑乘自行车时, 缩小自行车体积, 减少空间的占用, 便于携带或储藏。