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(54) Title: FLEXIBLE ROLLING BELT-BASED CONVEYING APPARATUS

(54) 发明名称: 一种基于柔性滚动带输送装置

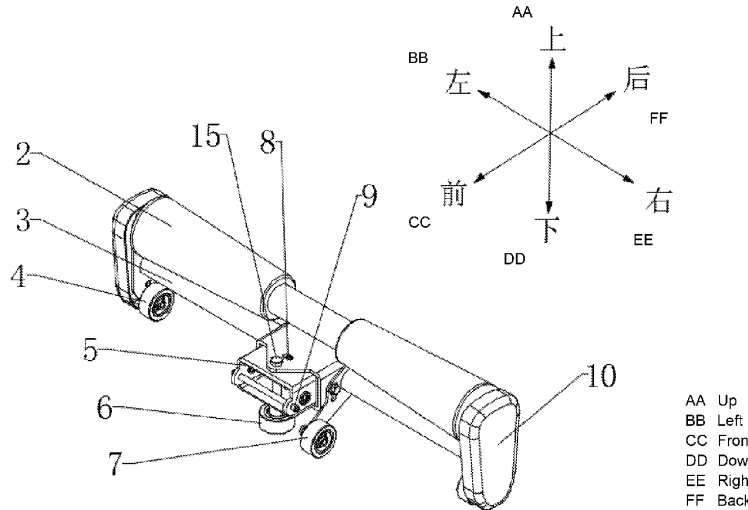


图 2

(57) Abstract: A flexible rolling belt-based conveying apparatus, comprising a plurality of rolling body units (1). Each rolling body unit (1) comprises a support (3); a power roller (2) is provided above the support (3); locomotion wheels (4) are provided on two sides of the support (3); a chain link unit (5) is provided in the middle of the support (3); a guide wheel (6) is mounted below the chain link unit (5); the chain link unit (5) comprises a main chain link (11) and an auxiliary chain link (12); the main chain link (11) and the auxiliary chain link (12) are hingedly connected respectively by means of a longitudinal hinge shaft (15) and transverse hinge shafts

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MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW。

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— 包括国际检索报告(条约第21条(3))。

(14); the longitudinal and transverse hinge shafts form a crisscross structure, and the longitudinal hinge shaft is not in contact with the transverse hinge shafts at the center of the crisscross structure; the plurality of rolling body units (1) are sequentially connected front and back by means of chain link units (5); and the rolling body units (1) can rotate in the horizontal direction and the vertical direction to form a continuous flexible conveying rolling belt. The conveying apparatus can simultaneously rotate in two directions and has short chain link units and a small turning radius, so that the apparatus can be adapted to small-scale storage, a narrow transfer space, and other complex storage and transportation working conditions, malfunctions such as items being stuck are not prone to occur, and transportation is more stable and reliable.

(57) 摘要: 一种基于柔性滚动带输送装置, 包括若干个滚动体单元(1); 滚动体单元(1)包括支撑架(3), 支撑架(3)上方设置有动力辊筒(2), 两侧设置有行走轮(4), 中间设置有链节单元(5); 链节单元(5)下方安装有导向轮(6); 链节单元(5)包括主链节(11)和辅链节(12), 主链节(11)和辅链节(12)分别通过纵向铰接轴(15)和横向铰接轴(14)铰接, 纵、横向铰接轴形成十字交叉结构且十字交叉中心不接触; 若干个滚动体单元(1)通过链节单元(5)前后依次连接, 滚动体单元(1)之间可以沿水平方向和竖直方向旋转, 形成连续的柔性输送滚动带。该输送装置不仅能同时实现两个方向的旋转, 而且链节单元短、转弯半径小, 能适应小仓储、狭小转运空间等复杂仓储运输工况, 不易发生卡住物品等故障, 运输更平稳、可靠。