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(LUO, Qiang); 中国上海市闵行区昆阳路 1508 号 2 幢 2 层 201111 (CN)。

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(74) 代理人: 无锡松禾知识产权代理事务所 (普通合伙) (WUXI SONGHE INTELLECTUAL PROPERTY FIRM (GENERAL PARTNERSHIP)); 中国江苏省无锡市新吴区金城东路 9 号 601 214000 (CN)。

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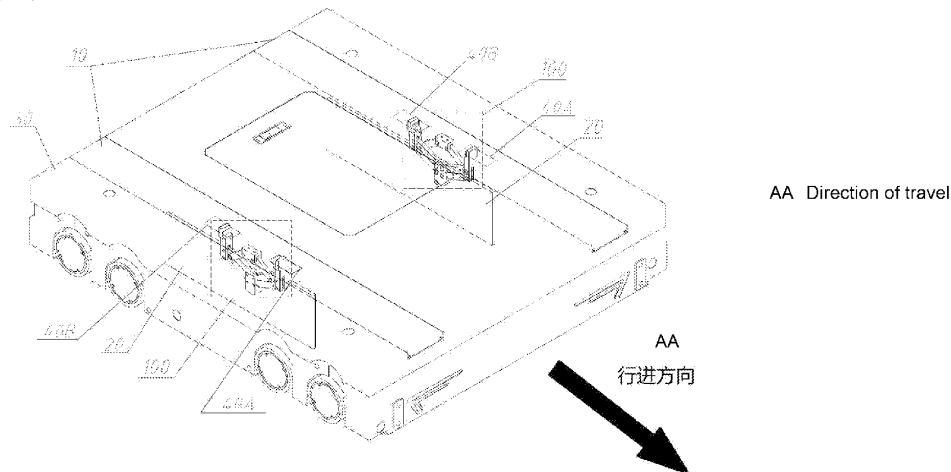
(71) 申请人: 上海智世机器人有限公司(SHANGHAI ZS ROBOTICS CO., LTD.) [CN/CN]; 中国上海市闵行区昆阳路 1508 号 2 幢 2 层 201111 (CN)。

(72) 发明人: 崔磊 (CUI, Lei); 中国上海市闵行区昆阳路 1508 号 2 幢 2 层 201111 (CN)。 罗强

(54) Title: PALLET LIFTING DEVICE FOR SHUTTLE, AND WORKING METHOD

(54) 发明名称: 一种用于穿梭车的托盘举升装置及工作方法

[图1]



(57) Abstract: A pallet lifting device for a shuttle, comprising a shuttle (30) and a pallet (40). Lifting plates (10) are provided on the upper portion of the shuttle (30), and a driving device on the shuttle (30) drives the lifting plates (10) to perform lifting motion; a plurality of support legs (410) are provided at the bottom of the pallet (40), and one support leg (410) close to the center of the pallet (40) among the plurality of support legs (410) is denoted as an anti-deviation leg (420); front gripper members (110A) and rear gripper members (110B) are provided one behind the other on the shuttle (30) in the direction of travel, the front gripper members (110A) and the rear gripper members (110B) are in linkage connection with the lifting plates (10) by means of linkage structures (100), the pallet

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(40) is horizontally placed on the lifting plates (10), and under transmission of the linkage structures (100), the front gripper members (110A) and the rear gripper members (110B) are enabled to perform ascending motion and get close to each other and to be located on the front and rear sides of the anti-deviation leg (420) in the direction of travel; the front gripper members (110A) and the rear gripper members (110B) limit sliding between the anti-deviation leg (420) of the pallet and the lifting plates (10) of the shuttle and deviation of the pallet (40) after goods scrape against rack upright columns, and front guide notches (200A) and rear guide notches (200B) are formed in the front gripper members (110A) and the rear gripper members (110B), so that the placing error of the pallet (40) and the stopping error of the shuttle (30) are eliminated.

(57) 摘要: 一种用于穿梭车的托盘举升装置, 包括穿梭车 (30) 和托盘 (40), 穿梭车 (30) 上部设置有举升板 (10), 穿梭车 (30) 上的驱动装置驱动举升板 (10) 做举升运动; 托盘 (40) 底部有若干支撑脚 (410), 若干支撑脚 (410) 中靠近托盘 (40) 中央的一个记为防偏脚 (420); 穿梭车 (30) 上沿行进方向前后设置有前夹爪 (110A) 和后夹爪 (110B), 前夹爪 (110A) 和后夹爪 (110B) 通过联动结构 (100) 与举升板 (10) 联动连接, 托盘 (40) 水平放置于举升板 (10) 上, 使前夹爪 (110A) 与后夹爪 (110B) 在联动结构 (100) 的传动下做上升运动的同时相互靠近, 并位于防偏脚 (420) 行进方向上的前后两侧; 前夹爪 (110A) 和后夹爪 (110B) 限制托盘防偏脚 (420) 与穿梭车举升板 (10) 之间的滑动, 以及货物刮蹭货架立柱后托盘 (40) 的偏移, 通过在前夹爪 (110A) 和后夹爪 (110B) 上设置前导向缺口 (200A) 和后导向缺口 (200B), 消除托盘 (40) 的摆放误差及穿梭车 (30) 的停止误差。