

Title (en)
HANDLING DEVICE AND METHOD FOR HANDLING PRODUCTS, IN PARTICULAR FOOD, BEING CONVEYED BY MEANS OF A TRANSPORT DEVICE

Title (de)
HANDHABUNGSVORRICHTUNG SOWIE VERFAHREN ZU EINEM HANDHABEN VON MITTELS EINER TRANSPORTVORRICHTUNG GEFÖRDERTEN PRODUKTEN, INSBESONDERE LEBENSMITTELN

Title (fr)
DISPOSITIF DE MANIPULATION ET PROCÉDÉ DE MANIPULATION DE PRODUITS, EN PARTICULIER D'ALIMENTS, TRANSPORTÉS AU MOYEN D'UN DISPOSITIF DE TRANSPORT

Publication
EP 4157766 A1 20230405 (DE)

Application
EP 21731403 A 20210526

Priority
• DE 102020114084 A 20200526
• EP 2021063966 W 20210526

Abstract (en)
[origin: WO2021239768A1] The invention relates to a handling device for handling products (14) being conveyed by means of a transport device (12), comprising at least one handling unit (16) which has a plurality of movably mounted moving slides (18) and a plurality of handling elements (20), wherein at least one handling element (20) is arranged on each moving slide (18), and comprising at least one support structure (22) that has at least one support element (24), on which the moving slides (18) are mounted in a drivable manner at least along one direction (28) independently of each other with respect to speed and/or position, said direction running parallel to a longitudinal axis (26) of the support element (24), wherein the handling elements (20) are movably mounted on the moving slides (18), each of the handling elements (20) has a movement axis (30, 32) running transversely to the longitudinal axis (26) of the support element (24), and the support structure (22) comprises at least one support unit (34), by means of which the support element (24) is supported in a vertically movable manner. Each of the movement axes (30) of the handling elements (20) runs parallel to a product support surface (60) of the transport device (12) for a movement of the handling elements (20) relative to the moving slides (18), and the handling device comprises an electromagnetic drive unit (68) for individually moving the moving slides (18) relative to the support element (24), said drive unit being designed as a linear motor system. The handling unit (16) has fluidic drives (42), in particular hydraulic or pneumatic cylinders, or electromagnetic drives in order to produce a translational movement of the handling elements (20) along the respective movement axis (30) of the handling elements (20).

IPC 8 full level
B65G 47/91 (2006.01); **B25J 15/00** (2006.01); **B65B 5/10** (2006.01); **B65B 5/12** (2006.01); **B65B 35/38** (2006.01); **B65G 54/02** (2006.01)

CPC (source: EP US)
B25J 11/0045 (2013.01 - EP US); **B25J 15/0061** (2013.01 - EP); **B25J 15/0616** (2013.01 - EP US); **B65B 25/005** (2013.01 - US); **B65B 35/38** (2013.01 - US); **B65G 47/917** (2013.01 - US); **B65G 47/918** (2013.01 - EP US); **B65G 54/02** (2013.01 - US); **B65B 25/005** (2013.01 - EP); **B65B 35/18** (2013.01 - EP); **B65B 35/38** (2013.01 - EP); **B65G 54/02** (2013.01 - EP)

Citation (search report)
See references of WO 2021239768A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
DE 102020114084 A1 20211202; BR 112022019784 A2 20221206; EP 4157766 A1 20230405; US 2023158681 A1 20230525; WO 2021239768 A1 20211202

DOCDB simple family (application)
DE 102020114084 A 20200526; BR 112022019784 A 20210526; EP 2021063966 W 20210526; EP 21731403 A 20210526; US 202117916141 A 20210526