

Title (en)

METHOD OF VERIFYING AND IMPROVING THE POSITIONING OF ROD-LIKE ARTICLES IN TRAYS OR INTERMEDIATE STORES AND A DEVICE ENABLING THE VERIFICATION OF CORRECT POSITIONING OF ROD-LIKE ARTICLES AND ALIGNING OF THEIR FRONT FACE IN TRAYS OR INTERMEDIATE STORES

Title (de)

VERFAHREN ZUR ÜBERPRÜFUNG UND VERBESSERUNG DER POSITIONIERUNG VON STANGENARTIGEN ARTIKELN AUF ABLAGEN ODER ZWISCHENLAGERN UND VORRICHTUNG ZUR ÜBERPRÜFUNG DER KORREKTEN POSITIONIERUNG VON STANGENARTIGEN ARTIKELN SOWIE AUSRICHTUNG IHRER VORDERSEITE AUF ABLAGEN ODER ZWISCHENLAGERN

Title (fr)

PROCÉDÉ DESTINÉ À VÉRIFIER ET À AMÉLIORER LE POSITIONNEMENT D'ARTICLES SIMILAIRES À DES TIGES SUR DES PLATEAUX OU DES MAGASINS INTERMÉDIAIRES ET DISPOSITIF PERMETTANT DE VÉRIFIER LE POSITIONNEMENT CORRECT D'ARTICLES SIMILAIRES À DES TIGES ET L'ALIGNEMENT DE LEUR FACE AVANT SUR DES PLATEAUX OU DES MAGASINS INTERMÉDIAIRES

Publication

**EP 2587948 A1 20130508 (EN)**

Application

**EP 11743660 A 20110630**

Priority

- PL 39169210 A 20100630
- PL 2011000066 W 20110630

Abstract (en)

[origin: WO2012002831A1] A method, where a verification of positioning of articles (3) is effected by means of sensors (14), and an improvement of positioning is effected by aligning a plane of end faces of the articles (3), consists in that the verification and improvement of positioning of rod-like articles (3) is effected simultaneously by means of an aligning device (1) provided with sensors (14), where the sensors (14) detect correct filling and/or arrangement of the articles (3), and the aligning device (1) aligns the plane of end faces of the articles (3) correctly filling the inside of a tray (6, 6') or an intermediate store (7,7'), and in the event of detection of incorrect filling and/or arrangement the aligning device (1) is switched off and the operation of the entire unit is interrupted. An apparatus for using the method has an aligning device (1) in the form of a plate (2) coming in contact with end faces of the articles (3), provided with at least one sensor (14) for the control of filling of the tray (6, 6') or the intermediate store (7, 7'). The plate (2) consists of multiple pushers (4) whose number corresponds to the number of segments (5) of a multi-segment tray (6) or intermediate store (7), and a gap (8) between the pushers (4) corresponds to the thickness of a partition (9) between the segments (5), where on each pusher (4) one sensor (14) is situated. The sensors (14) may constitute an optical element operating in the range of visible or invisible radiation, or an ultrasonic element, respectively. Between the pushers (4), movable gates (11) eliminating the gap (8) in the event of using conventional trays (6') or intermediate stores (7') with one compartment are situated.

IPC 8 full level

**A24C 5/354** (2006.01); **A24C 5/356** (2006.01)

CPC (source: EP US)

**A24C 5/35** (2013.01 - US); **A24C 5/354** (2013.01 - EP US); **A24C 5/356** (2013.01 - EP US)

Citation (search report)

See references of WO 2012002831A1

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

DOCDB simple family (publication)

**WO 2012002831 A1 20120105**; BR 112012030637 A2 20150915; BR 112012030637 B1 20190625; CN 103096740 A 20130508; CN 103096740 B 20160106; EP 2587948 A1 20130508; EP 2587948 B1 20161109; HU E033068 T2 20171128; JP 2013530710 A 20130801; JP 5568182 B2 20140806; PL 216616 B1 20140430; PL 391692 A1 20120102; RU 2514484 C1 20140427; US 2013101379 A1 20130425

DOCDB simple family (application)

**PL 2011000066 W 20110630**; BR 112012030637 A 20110630; CN 201180032712 A 20110630; EP 11743660 A 20110630; HU E11743660 A 20110630; JP 2013518305 A 20110630; PL 39169210 A 20100630; RU 2013103773 A 20110630; US 201113807496 A 20110630