Title (en)

System and relative method for sorting a plurality of pillow bags containing salty products

Title (de

System und zugehöriges Verfahren zur Sortierung mehrerer Schlauchbeutel mit salzigen Produkten

Title (fr)

Système et procédé associé pour trier une pluralité de sacs souples contenant des produits salés

Publication

EP 2960169 B1 20161026 (EN)

Application

EP 14425081 A 20140626

Priority

EP 14425081 A 20140626

Abstract (en)

[origin: EP2960169A1] The present invention relates to a system and a method for sorting a plurality of pillow bags (100, 101, ..., 100x) containing salty products, comprising a loading station (2) having a conveyor belt (4) extending by a predetermined length (L) along a first horizontal lying plane (X), first motor means (2A) to move said conveyor belt (4) with a first advancement speed (v1) so as to transport a row of pillow bags (100, 101, ..., 100x) from a loading position to an unloading position; an ordering station (3) having a support plane (5) extending along a second horizontal lying plane (X') and intended to receive and support a plurality of pillow bags (100, 101, ..., 100x), second motor means (3A) to move said support plane (5) with a second advancement speed (v2) from a loading position to an unloading position; a plurality of panels (6,7) active on said support plane (5) to define a plurality of containing spaces (8), each of which being intended to contain a predetermined plurality of pillow bags (100, 101, ..., 100x); gripping means (9) configured to grasp a pillow bag at a time from said row of pillow bags (100, 101, ..., 100x) present on said conveyor belt (4) and to put it into a containing space (8) defined on said support plane (5); detecting means (10) of the spatial position of each bag of said row of pillow bags (100, 101, ..., 100x), said detecting means (10) being associated to said conveyor belt (4) in the proximity of said loading position and configured to generate a passage signal (S1) upon the passage of each pillow bag (100, 101, ..., 100x) present on said conveyor belt (4), said passage signal (s1) being representative of the time instant at which said pillow bag (100, 101, ..., 100x) has passed; processing and driving means (11) in signal communication with said detecting means (10) and electrically connected with said gripping means (9) and with said second motor means (3A), said processing and driving means (11) comprising a firmware configured for: - processing said passage signal (S1) as a function of said first advancement speed (v1) and said length (L) of said conveyor belt (4) so as to generate a position signal (S2) identifying the position taken by each of said pillow bag (100, 101, ..., 1 00x) with respect to said conveyor belt (4) and - generating a driving signal (S3) to drive said second motor means (3A) to change said second advancement speed (v2) as a function of said position signal (S2).

IPC 8 full level

B65B 61/20 (2006.01); B65B 5/06 (2006.01); B65B 5/10 (2006.01); B65G 47/52 (2006.01)

CPC (source: EP)

B65B 5/064 (2013.01); B65B 5/10 (2013.01); B65B 61/20 (2013.01)

Designated contracting state (EPC)

ÂL 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)

 $\mathsf{BA}\;\mathsf{ME}$

DOCDB simple family (publication)

EP 2960169 A1 20151230; EP 2960169 B1 20161026; ES 2612433 T3 20170516

DOCDB simple family (application)

EP 14425081 A 20140626; ÉS 14425081 T 20140626