

Title (en)

DEVICE FOR DISTRIBUTING CLIP-TYPE COMPONENTS

Title (de)

VORRICHTUNG ZUM VERTEILEN VON KLAMMERARTIGEN KOMPONENTEN

Title (fr)

DISPOSITIF DE DISTRIBUTION DE COMPOSANTS DE TYPE AGRAFE

Publication

EP 3976308 A1 20220406 (FR)

Application

EP 20737524 A 20200528

Priority

- FR 1905772 A 20190529
- FR 2020050906 W 20200528

Abstract (en)

[origin: WO2020240142A1] The invention relates to a device (100) for distributing clip-type components (A) intended particularly for assembling parts, the device comprising: - a main magazine (110) for bulk storage of the components, - a tray (130) for temporary storage of components (A) extracted from the main magazine (110), which tray is configured to temporarily store the components (A) waiting to be transferred out of the device (100), the tray (130) being mounted for reciprocating translation in at least one longitudinal direction (D) so as to be able to shake the temporarily stored components (A) and facilitate their positioning inside the tray (130) in at least one predetermined stable position (P1, P2) corresponding to their shape, - an optical detection system (140) configured to detect, from among the components (A) temporarily stored inside the temporary storage tray (130), the components having the predetermined stable position (P1, P2), - a transfer system (160) configured to transfer, individually or in groups, the components (A) having the predetermined stable position (P1, P2) to a downstream processing area (170) located outside the device (100), - an electronic control unit (150) electronically connected to the optical detection system (140) and the transfer system (160), the unit (150) being configured to control the transfer system (160), in particular depending on detection signals received from the optical detection system (140), the device being characterised in that the temporary storage tray (130) is equipped with a series of individual recesses (131), each of the recesses (131) being configured to receive a single component (A) in the predetermined stable position (P1, P2).

IPC 8 full level

B23P 19/00 (2006.01); **B65G 47/14** (2006.01)

CPC (source: CN EP US)

B23P 19/001 (2013.01 - CN EP US); **B65G 27/34** (2013.01 - CN EP US); **B65G 47/1492** (2013.01 - CN EP US); **B65G 2203/0225** (2013.01 - US); **B65G 2203/044** (2013.01 - US)

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

DOCDB simple family (publication)

EP 3744471 A1 20201202; **EP 3744471 B1 20230607**; CN 113874161 A 20211231; CN 113874161 B 20240206; EP 3976308 A1 20220406; ES 2953185 T3 20231108; FR 3096598 A1 20201204; FR 3096598 B1 20210716; US 11759896 B2 20230919; US 2022234152 A1 20220728; WO 2020240142 A1 20201203

DOCDB simple family (application)

EP 20174042 A 20200512; CN 202080038209 A 20200528; EP 20737524 A 20200528; ES 20174042 T 20200512; FR 1905772 A 20190529; FR 2020050906 W 20200528; US 202017613703 A 20200528