

Title (en)

ROW-FORMING DEVICE, ROW-FORMING METHODS AND BOTTLE HANDLING INSTALLATION

Title (de)

REIHENBILDUNGSVORRICHTUNG, REIHENBILDUNGSVERFAHREN UND FLASCHENBEHANDLUNGSANLAGE

Title (fr)

DISPOSITIF DE FORMATION DE RANGÉES, PROCÉDÉ DE FORMATION DE RANGÉES ET INSTALLATION DE TRAITEMENT DE BOUTEILLES

Publication

EP 4126720 A1 20230208 (DE)

Application

EP 21717329 A 20210324

Priority

- DE 202020101678 U 20200327
- DE 202020103718 U 20200629
- EP 2021057594 W 20210324

Abstract (en)

[origin: US2021300608A1] A storage station, a process for storing, and a bottle tray (5) configured for receiving a bottle layer (7) are provided. The bottle tray has an upright side wall (12), with an upper tray opening (13) and a tray bottom (15) connected to the side wall (12). The bottle tray (5) has a movable lifting bottom (18) that lies in the loaded state (5) on the tray bottom (15) and which has a plurality of passage openings (16) for a lifting device (34) for a relative lift between the side wall (12) and the lifting bottom (18). The tray bottom (15) has a perforated plate or a plurality of struts (17) located spaced apart and enclosing the passage openings (16). The struts are fastened to the side wall (12). The bottle tray (5) has a bottom centering (19) acting between the tray bottom (15) and the lifting bottom (18).

IPC 8 full level

B65G 47/51 (2006.01); **B65G 47/68** (2006.01)

CPC (source: EP US)

B65B 21/14 (2013.01 - US); **B65D 71/0088** (2013.01 - US); **B65G 1/06** (2013.01 - US); **B65G 47/082** (2013.01 - EP US); **B65G 47/088** (2013.01 - EP); **B65G 47/256** (2013.01 - US); **B65G 47/5104** (2013.01 - EP); **B65G 47/53** (2013.01 - US); **B65G 47/682** (2013.01 - EP US); **B65G 47/715** (2013.01 - EP); **B65G 47/82** (2013.01 - US); **B65G 47/91** (2013.01 - US); **B65G 47/92** (2013.01 - US); **B65B 21/18** (2013.01 - EP); **B65B 43/46** (2013.01 - EP); **B65G 15/00** (2013.01 - US); **B65G 57/302** (2013.01 - EP); **B65G 2201/0244** (2013.01 - EP US); **B65G 2201/0258** (2013.01 - EP)

Citation (search report)

See references of WO 2021191291A1

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 202020101678 U1 20210705; CN 115427332 A 20221202; EP 4126720 A1 20230208; US 11597549 B2 20230307; US 2021300608 A1 20210930; US 2023123396 A1 20230420; WO 2021191291 A1 20210930

DOCDB simple family (application)

DE 202020101678 U 20200327; CN 202180025628 A 20210324; EP 2021057594 W 20210324; EP 21717329 A 20210324; US 202016984579 A 20200804; US 202117914431 A 20210324