

Title (en)

LOADING AND UNLOADING DEVICE FOR A SUBSTRATE HOPPER, SUBSTRATE HOPPER SYSTEM

Title (de)

BE- UND ENTLADEEINRICHTUNG FÜR EIN SUBSTRATMAGAZIN, SUBSTRATMAGAZINSYSTEM

Title (fr)

DISPOSITIF DE CHARGEMENT ET DE DÉCHARGEMENT POUR UNE TRÉMIE DE SUBSTRAT, SYSTÈME DE TRÉMIE DE SUBSTRAT

Publication

EP 4055626 A1 20220914 (DE)

Application

EP 20803149 A 20201105

Priority

- DE 102019217033 A 20191105
- EP 2020081191 W 20201105

Abstract (en)

[origin: WO2021089735A1] The invention relates to a loading and unloading device (7) for a substrate hopper (2), wherein the substrate hopper (2) comprises a plurality of drawers (3) into each of which a plurality of substrates (4) can be inserted for storage or temporary storage, having at least one controllable conveyor belt (8) on which substrates (4) can be deposited and having at least one controllable gripper arm (11) which is designed to insert substrates (4) from the conveyor belt (8) into a drawer (3) of the substrate hopper or to pull substrates out of the drawer (3) onto the conveyor belt (8), wherein the conveyor belt (8) and the gripper arm (11) are arranged on a common and movably mounted carrier (17). According to the invention, the gripper arm (11) is at least substantially arranged below the conveyor belt (8) in order to grip a substrate (4) from below and a movable vacuum gripper (18) is arranged above the conveyor belt (8), which movable vacuum gripper is designed to grip a substrate (4) in the substrate hopper (2) or on the conveyor belt (8) from above and to move said substrate.

IPC 8 full level

H01L 21/677 (2006.01); **B25J 9/00** (2006.01); **B25J 11/00** (2006.01); **B65G 59/04** (2006.01)

CPC (source: CN EP KR)

B25J 9/0084 (2013.01 - CN EP KR); **B25J 9/023** (2013.01 - CN EP KR); **B25J 11/0095** (2013.01 - CN EP KR);
B25J 15/0014 (2013.01 - CN EP KR); **B25J 15/0616** (2013.01 - CN EP KR); **H01L 21/67748** (2013.01 - CN EP KR);
H01L 21/67766 (2013.01 - CN EP KR); **H01L 21/67778** (2013.01 - CN EP KR)

Citation (search report)

See references of WO 2021089735A1

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)

DE 102019217033 A1 20210506; **DE 102019217033 B4 20220630**; CN 114641854 A 20220617; EP 4055626 A1 20220914;
KR 20220098173 A 20220711; WO 2021089735 A1 20210514

DOCDB simple family (application)

DE 102019217033 A 20191105; CN 202080076808 A 20201105; EP 2020081191 W 20201105; EP 20803149 A 20201105;
KR 20227018874 A 20201105