

Title (en)

METHOD AND DEVICE FOR INDIVIDUALIZING PLATES

Title (de)

VERFAHREN UND VORRICHTUNG ZUM VEREINZELN VON PLATINEN

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT D'INDIVIDUALISER DES PLAQUES

Publication

**EP 4097037 A1 20221207 (DE)**

Appication

**EP 21720245 A 20210419**

Priority

- DE 102020111238 A 20200424
- EP 2021060113 W 20210419

Abstract (en)

[origin: WO2021213990A1] The invention relates to a method for individualizing plates, having the following steps: continuously conveying a sheet metal strip (2) in a transport direction (T) to a laser cutting station (3), concurrently cutting the sheet metal strip (2) using at least one cutting laser, wherein a cut sheet metal strip (2) is made from successive sections (AT) with the same cut geometry, and each section (AT) comprises at least one plate (P) and at least one scrap plate (RP) adjoining the plate (P), transporting the cut sheet metal strip (2) on a first transport belt (4) in the transport direction (T), transferring the cut sheet metal strip (2) from the first transport belt (4) using a suction conveyor (5) which is operated using negative pressure, transporting the cut sheet metal strip (2) in the transport direction (T) in a suspended manner using the suction conveyor (5), separately dropping the at least one scrap plate (RP) of each section (AT) by interrupting the negative pressure a first time in specified regions of the suction conveyor (5), transporting the at least one plate (P) of each section (AT) so as to overlap with a second transport belt (6) and dropping the at least one plate (P) from the suction conveyor (5) by interrupting the negative pressure a second time, and horizontally transporting the plates (P) dropped one after the other by the suction conveyor to a collection station (7) in the transport direction (T).

IPC 8 full level

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CPC (source: EP KR US)

**B26D 1/015** (2013.01 - US); **B65H 29/241** (2013.01 - EP KR US); **B65H 29/32** (2013.01 - EP KR US); **B65H 29/64** (2013.01 - EP KR); **B65H 2301/4473** (2013.01 - EP KR US); **B65H 2406/3124** (2013.01 - EP KR); **B65H 2406/351** (2013.01 - EP KR US); **B65H 2406/364** (2013.01 - EP KR); **B65H 2406/365** (2013.01 - EP KR US); **B65H 2701/1113** (2013.01 - EP KR); **B65H 2701/12422** (2013.01 - EP KR); **B65H 2701/173** (2013.01 - EP KR US)

C-Set (source: EP)

1. **B65H 2301/4473** + **B65H 2220/01**
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Designated extension state (EPC)

BA ME

Designation validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**DE 102020111238 A1 20211028**; CN 115413268 A 20221129; EP 4097037 A1 20221207; JP 2023522044 A 20230526; KR 20230017161 A 20230203; US 11919734 B2 20240305; US 2023146251 A1 20230511; WO 2021213990 A1 20211028

DOCDB simple family (application)

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