

Title (en)

DIRECT PRINTER FOR APPLYING A PRINTED LAYER TO CONTAINERS

Title (de)

DIREKTDROCKMASCHINE ZUM AUFBRINGEN EINER DRUCKSCHICHT AUF BEHÄLTER

Title (fr)

MACHINE D'IMPRESSION DIRECTE POUR L'APPLICATION D'UNE COUCHE D'IMPRESSION SUR DES RÉCIPIENTS

Publication

**EP 3681724 A1 20200722 (DE)**

Application

**EP 18728586 A 20180528**

Priority

- DE 102017215433 A 20170904
- EP 2018063930 W 20180528

Abstract (en)

[origin: WO2019042600A1] The present invention relates to a direct printer for applying a printed layer to containers (130), such as bottles in the beverage-processing industry, with at least one print head (101) which comprises at least two nozzle rows for ejecting ink droplets onto a surface of a container, characterized in that the print head is oriented in such a way that the nozzle rows enclose an angle of greater than 0° with a plane (133) perpendicularly with respect to the transport direction (132) of the containers; and to a corresponding method. In one alternative embodiment, the printer can have two print heads (301, 302) which are arranged behind one another in the transport direction of the containers and are offset with respect to one another perpendicularly with respect to the transport plane, in which the containers are transported, by a distance (h) which is smaller than the spacing of two adjacent nozzles in a nozzle row.

IPC 8 full level

**B41J 3/407** (2006.01); **B41J 3/54** (2006.01); **B41J 11/00** (2006.01)

CPC (source: EP US)

**B41J 3/4073** (2013.01 - EP US); **B41J 3/40733** (2020.08 - EP US); **B41J 3/543** (2013.01 - EP); **B41J 11/0015** (2013.01 - EP)

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)

**WO 2019042600 A1 20190307**; CN 213413297 U 20210611; DE 102017215433 A1 20190404; EP 3681724 A1 20200722; EP 3681724 B1 20240529; EP 3681724 C0 20240529

DOCDB simple family (application)

**EP 2018063930 W 20180528**; CN 201890001146 U 20180528; DE 102017215433 A 20170904; EP 18728586 A 20180528