

Title (en)
FILLING MACHINE COMPRISING AIRFLOW SYSTEM

Title (de)
FÜLLMASCHINE MIT LUFTSTROMSYSTEM

Title (fr)
MACHINE DE REMPLISSAGE COMPRENANT UN SYSTÈME D'ÉCOULEMENT D'AIR

Publication
EP 4335764 A1 20240313 (EN)

Application
EP 22194483 A 20220907

Priority
EP 22194483 A 20220907

Abstract (en)
A paperboard container filling machine (10) comprising an aseptic chamber (30, 40), the aseptic chamber having: an upper air distribution chamber (35, 45); a lower processing chamber (36, 46) housing processing equipment (32, 42, 49) configured for interacting with paperboard containers passing through the processing chamber; a throughflow plate (37, 47) separating the air distribution chamber and the processing chamber; a paperboard container transport sub-system (12) configured for transporting the paperboard containers through the processing chamber along a container transport path (14) from an inlet opening (31, 41) to an outlet opening (33, 43) of the processing chamber; and an elongated air distribution duct (50, 53) configured for receiving air from an air supply channel and comprising a plurality of throughflow holes (51) configured for distributing the air in the air distribution chamber. The air distribution duct displays a semi-tubular convex surface (52) facing the throughflow plate and comprising a rectilinear duct axis (A) extending orthogonal or substantially orthogonal to the container transport path. A related method is also disclosed.

IPC 8 full level
B65B 55/02 (2006.01); **B65B 31/02** (2006.01)

CPC (source: EP)
B65B 31/025 (2013.01); **B65B 55/025** (2013.01); **B65B 55/027** (2013.01)

Citation (search report)
• [I] WO 2022176907 A1 20220825 - SHIKOKU KAKOKI CO LTD [JP]
• [I] JP 2019501086 A 20190117
• [A] US 6461233 B1 20021008 - GILKISON KEVIN C [US], et al
• [A] WO 2006072403 A1 20060713 - SIG TECHNOLOGY AG [CH], et al

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)
EP 4335764 A1 20240313; WO 2024052360 A1 20240314

DOCDB simple family (application)
EP 22194483 A 20220907; EP 2023074350 W 20230905