

Title (en)

NATURAL FIBER BASED LID WITH UNDERCUT

Title (de)

NATURFASERBASIERTER DECKEL MIT HINTERSCHNITT

Title (fr)

COUVERCLE À BASE DE FIBRES NATURELLES AVEC CONTRE-DÉPOUILLE

Publication

EP 4133128 A1 20230215 (EN)

Application

EP 21717805 A 20210406

Priority

- DE 102020109686 A 20200407
- EP 2021058887 W 20210406

Abstract (en)

[origin: WO2021204771A1] The invention relates to a manufacturing component (1) as a first tool in a forming station (10) at least for endforming a preformed lid (100) made from a material (M) to form an undercut (140) comprising natural fibres, the preformed lid (100) comprising a top part (130) and a side part (110) circumferencing the top part (130), where the manufacturing component (1) is adapted to contact an outer side (110) of the preformed lid (100) to endform the preformed lid (100) by exerting a first movement (FM) in axial direction along a center axis (R) of the manufacturing component (1) and a later second movement (SM) in a second direction towards the side part (120) of the preformed lid (100), where multiple side forming elements (2) of the manufacturing component (1) are arranged to exert the second movement (SM) applying an outer pressure (PA) onto an outer side (110) of the side part (120) to form an undercut (140) into the side part (120). The invention further relates to a forming station (10) with such a manufacturing component (1), a forming device (80) comprising such forming station (10), an endformed lid (100') manufactured with such forming station (10) comprising an undercut (140) and a methode (200) to manufacture such lid (100') with undercut (140).

IPC 8 full level

D21J 5/00 (2006.01); **B65D 43/02** (2006.01)

CPC (source: EP US)

B65D 43/065 (2013.01 - US); **D21J 5/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2021204771A1

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 102020109686 A1 20211007; CN 115298390 A 20221104; EP 4133128 A1 20230215; US 2023151555 A1 20230518; WO 2021204771 A1 20211014

DOCDB simple family (application)

DE 102020109686 A 20200407; CN 202180021185 A 20210406; EP 2021058887 W 20210406; EP 21717805 A 20210406; US 202117995555 A 20210406