

Title (en)

WINDING DEVICE AND WINDING SYSTEM FOR CUSHIONING

Title (de)

WICKELVORRICHTUNG UND POLSTERWICKELSYSTEM

Title (fr)

DISPOSITIF D'ENROULEMENT ET SYSTÈME D'ENROULEMENT DE REMBOURRAGE

Publication

**EP 3774318 A1 20210217 (DE)**

Application

**EP 19714581 A 20190326**

Priority

- DE 102018107156 A 20180326
- EP 2019057553 W 20190326

Abstract (en)

[origin: WO2019185614A1] A winding device (1) for spirally winding a three-dimensional cushioning material (3) which is produced by a cushioning forming machine (5) from a web-type starting material, in particular from a roll or a concertina fold, for example of paper, the device comprising a coiler (11) with at least two deflector elements, such as mandrels (21, 21', 23, 23"), hooks (25), deflection edges (23\*), or the like, and with an axis of rotation (D) extending in the vertical direction (V).

IPC 8 full level

**B31D 5/00** (2017.01); **B65H 54/58** (2006.01)

CPC (source: EP US)

**B31D 5/0047** (2013.01 - EP US); **B65B 55/20** (2013.01 - US); **B65H 54/10** (2013.01 - EP); **B65H 55/02** (2013.01 - EP); **B31D 2205/0011** (2013.01 - EP); **B31D 2205/0023** (2013.01 - US); **B31D 2205/0029** (2013.01 - EP); **B31D 2205/0047** (2013.01 - US); **B31D 2205/007** (2013.01 - EP); **B31D 2205/0082** (2013.01 - EP US); **B31D 2205/0088** (2013.01 - EP US)

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 102018107156 A1 20190926**; EP 3774318 A1 20210217; US 11904569 B2 20240220; US 2021086466 A1 20210325; WO 2019185614 A1 20191003

DOCDB simple family (application)

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