

Title (en)

WINDING APPARATUS WITH ELECTRIC CHARGING OF THE WEB MATERIAL

Title (de)

AUFWICKELVORRICHTUNG MIT ELEKTRISCHER AUFLADUNG DES BAHNMATERIALS

Title (fr)

ENROULEUR AVEC STOCKAGE D'UNE CHARGE ÉLECTRIQUE D'UN MATÉRIAU EN BANDE

Publication

**EP 3222421 B1 20211215 (DE)**

Application

**EP 17153282 A 20170126**

Priority

DE 202016101601 U 20160323

Abstract (en)

[origin: US2017275115A1] A winding device for a substantially electrically insulating web material having a winding roller on which the web material can be wound, characterized in that an apparatus exists for transferring an electric charge to the web material on the winding roller, and/or when deflecting to the winding roller, and the apparatus for transferring an electric charge is connected to at least one electrical high-voltage source with a positive or negative polarity.

IPC 8 full level

**B41F 13/02** (2006.01); **B41F 13/70** (2006.01); **B41F 23/00** (2006.01); **B65H 18/16** (2006.01); **H05F 1/00** (2006.01); **H05F 3/00** (2006.01)

CPC (source: EP US)

**B41F 13/02** (2013.01 - EP US); **B41F 13/70** (2013.01 - EP US); **B41F 21/00** (2013.01 - US); **B41F 23/00** (2013.01 - EP US); **B65H 18/08** (2013.01 - US); **B65H 18/16** (2013.01 - EP US); **B65H 2301/5133** (2013.01 - EP US); **B65H 2404/186** (2013.01 - EP US); **B65H 2801/21** (2013.01 - EP US)

Citation (examination)

EP 1975101 A2 20081001 - HEIDELBERGER DRUCKMASCH AG [DE]

Cited by

DE202018101356U1; DE202018102961U1; EP3575249A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**DE 202016101601 U1 20170627**; EP 3222421 A1 20170927; EP 3222421 B1 20211215; ES 2906731 T3 20220420; PL 3222421 T3 20220411; PT 3222421 T 20220224; US 10745230 B2 20200818; US 2017275115 A1 20170928

DOCDB simple family (application)

**DE 202016101601 U 20160323**; EP 17153282 A 20170126; ES 17153282 T 20170126; PL 17153282 T 20170126; PT 17153282 T 20170126; US 201715463149 A 20170320