

Title (en)

TUBE HOLDER FOR A TUBE FILLING MACHINE

Title (de)

TUBENHALTER FÜR EINE TUBENFÜLLMASCHINE

Title (fr)

PORTE-TUBE POUR UNE MACHINE DE REMPLISSAGE DE TUBES

Publication

**EP 3685944 B1 20210811 (DE)**

Application

**EP 19000588 A 20191223**

Priority

DE 102019000473 A 20190124

Abstract (en)

[origin: US2020239166A1] A tube holder has a housing having an upwardly opening tube receptacle into which a tube can be inserted. A plurality of clamping elements arranged in the tube receptacle can be brought to abut an outer wall of the tube and a clamping force acting radially on the inserted tube can be applied by at least one spring element. The clamping elements are each pivotably mounted in a pivot bearing about a horizontal axis. Further clamping elements are below the first group of pivot elements arranged over the tube receptacle and are under the action of the spring element and/or at least one further spring element. The clamping surface of at least some clamping elements and/or at least some further clamping elements at least in sections has a convex contour, curved about a horizontal axis, in the direction of a longitudinal central axis of the tube receptacle.

IPC 8 full level

**B23B 31/117** (2006.01); **B65B 3/16** (2006.01); **B65B 43/54** (2006.01)

CPC (source: EP US)

**B65B 3/16** (2013.01 - US); **B65B 35/16** (2013.01 - US); **B65B 43/54** (2013.01 - EP US); **B65B 59/005** (2013.01 - US); **B65B 3/16** (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

DOCDB simple family (publication)

**EP 3685944 A1 20200729**; **EP 3685944 B1 20210811**; DE 102019000473 A1 20200730; US 11111041 B2 20210907;  
US 2020239166 A1 20200730

DOCDB simple family (application)

**EP 19000588 A 20191223**; DE 102019000473 A 20190124; US 202016750746 A 20200123