

Title (en)

Frog roller apparatus

Title (de)

Herzstückrollvorrichtung

Title (fr)

Dispositif à rouleaux pour pointe de coeur de croisement

Publication

**EP 2708646 B1 20170329 (DE)**

Application

**EP 13181347 A 20130822**

Priority

DE 102012017982 A 20120912

Abstract (en)

[origin: EP2708646A2] The device comprises a fixed frame (2) with which the wing rails (10a,10b) are connected. A heart tip (1) is displaceably supported with a moving frame (3). The moving frame is moved relative to the fixed frame over roller assemblies (4,5). The roller assembly is arranged outside of space stretched by the wing rails.

IPC 8 full level

**E01B 7/14** (2006.01); **B61L 5/02** (2006.01)

CPC (source: BR EP RU)

**B61L 5/02** (2013.01 - EP); **E01B 7/10** (2013.01 - RU); **E01B 7/14** (2013.01 - BR EP)

Cited by

CN105780613A; ES2617562A1

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 2708646 A2 20140319; EP 2708646 A3 20151216; EP 2708646 B1 20170329**; BR 102013023216 A2 20141111;  
BR 102013023216 B1 20210921; DE 102012017982 A1 20140313; ES 2626556 T3 20170725; HU E033537 T2 20171228;  
LT 2708646 T 20170612; PL 2708646 T3 20170929; RU 2013141797 A 20150320; RU 2623360 C2 20170623

DOCDB simple family (application)

**EP 13181347 A 20130822**; BR 102013023216 A 20130911; DE 102012017982 A 20120912; ES 13181347 T 20130822;  
HU E13181347 A 20130822; LT 13181347 T 20130822; PL 13181347 T 20130822; RU 2013141797 A 20130911