

Title (en)

LIFTING DEVICE FOR A TOOL

Title (de)

HUBVORRICHTUNG FÜR EIN WERKZEUG

Title (fr)

DISPOSITIF DE LEVAGE POUR OUTIL

Publication

EP 2675615 A1 20131225 (DE)

Application

EP 12718567 A 20120217

Priority

- DE 102011011560 A 20110218
- DE 2012000148 W 20120217

Abstract (en)

[origin: CA2827291A1] The invention relates to a lifting device for a tool, in particular for a lower tool of a deep drawing machine or traysealer, having a framework, at least one tool-receiving portion that is supported in the framework in a liftable manner, and at least one displacement transducer that is arranged between the framework and the tool receiving portion. The framework and the tool receiving portion are connected to each other via at least one knee joint rod assembly, said displacement transducer having at least one crank drive that acts on the knee joint rod assembly. The crank drive has two end positions, each of which is formed in the region of a dead center, and the knee joint rod assembly has an extended dead center position, said extended dead center position of the knee joint rod assembly being formed in one of the dead center positions of the crank drive.

IPC 8 full level

B30B 1/14 (2006.01)

CPC (source: EP KR US)

B21D 37/00 (2013.01 - KR); **B30B 1/14** (2013.01 - EP KR US); **B30B 15/00** (2013.01 - KR); **F16H 21/50** (2013.01 - US);
Y10T 74/18568 (2015.01 - EP US)

Citation (search report)

See references of WO 2012110027A1

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)

DE 102011011560 A1 20120823; CA 2827291 A1 20120823; CN 103747947 A 20140423; EP 2675615 A1 20131225;
JP 2014505596 A 20140306; KR 20140007900 A 20140120; RU 2013138363 A 20150410; US 2014007718 A1 20140109;
WO 2012110027 A1 20120823

DOCDB simple family (application)

DE 102011011560 A 20110218; CA 2827291 A 20120217; CN 201280009428 A 20120217; DE 2012000148 W 20120217;
EP 12718567 A 20120217; JP 2013553790 A 20120217; KR 20137024321 A 20120217; RU 2013138363 A 20120217;
US 201214000125 A 20120217