

Title (en)

PROCESS FOR MACHINING CROSS PINS ON LATHES

Title (de)

BEARBEITUNGSPROZESS VON ZAPFENKREUZEN AUF DREHMASCHINEN

Title (fr)

PROCÉDÉ D'USINAGE DE CROISILLONS DE CARDAN SUR DES TOURS

Publication

**EP 2934815 A1 20151028 (DE)**

Application

**EP 13807978 A 20131213**

Priority

- DE 102012113022 A 20121221
- EP 2013076554 W 20131213

Abstract (en)

[origin: WO2014095638A1] Instead of receiving, as hitherto, cross pins (1) in a special chuck of a lathe and machining in each case one pin (2) and subsequently advancing the workpiece cyclically through 90°, according to the invention a supporting surface (18) having a clamping device (19) is provided in the working area, it being possible to place the unmachined part on said supporting surface (18) and to clamp said unmachined part such that, in this first setup, two mutually opposite end faces can already be machined, including centring holes, clamping between locating centres (22) subsequently taking place at said end faces for the machining of the adjoining lateral surfaces. After only one cyclic advance through 90° on this supporting surface (18), the same operation takes place for the second pair of pins, wherein it is even possible for the mutually aligned pins (2) to be machined simultaneously, given appropriate machinery.

IPC 8 full level

**B23P 23/02** (2006.01); **B23B 3/16** (2006.01); **B23B 5/00** (2006.01); **B23B 49/04** (2006.01); **B23Q 7/04** (2006.01); **B23Q 39/02** (2006.01); **F16D 3/40** (2006.01)

CPC (source: CN EP US)

**B23B 3/16** (2013.01 - CN); **B23B 3/168** (2013.01 - EP US); **B23B 5/00** (2013.01 - CN EP US); **B23B 49/04** (2013.01 - CN); **B23P 23/02** (2013.01 - CN EP US); **B23Q 7/04** (2013.01 - CN); **B23Q 39/021** (2013.01 - CN); **B23Q 39/026** (2013.01 - EP US); **F16D 3/40** (2013.01 - CN US); **F16D 3/405** (2013.01 - EP); **B23P 2700/11** (2013.01 - EP US); **B23Q 2039/008** (2013.01 - EP US)

Citation (search report)

See references of WO 2014095638A1

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 102012113022 B3 20140515**; BR 112015011899 A2 20170711; CN 104781037 A 20150715; EP 2934815 A1 20151028; JP 2016505395 A 20160225; KR 20150097468 A 20150826; MX 2015005480 A 20150723; RU 2015128014 A 20170127; US 2016001372 A1 20160107; WO 2014095638 A1 20140626

DOCDB simple family (application)

**DE 102012113022 A 20121221**; BR 112015011899 A 20131213; CN 201380058410 A 20131213; EP 13807978 A 20131213; EP 2013076554 W 20131213; JP 2015548387 A 20131213; KR 20157011861 A 20131213; MX 2015005480 A 20131213; RU 2015128014 A 20131213; US 201314654294 A 20131213