Title (en)
DIE FOR BENDING-PRESS FORMING

Title (de)
MATRIZE ZUM BIEGEPRESSEN

Title (fr)
MATRICE POUR CINTRAGE-FORMAGE SOUS PRESSION

Publication
EP 3127624 A1 20170208 (EN)

Application
EP 15772740 A 20150330

Priority
• JP 2014072523 A 20140331
• JP 2015046163 A 20150309
• JP 2015059833 W 20150330

Abstract (en)
[PROBLEM] Disclosed is a bending-press forming punch which is hardly affected by the bending moment and can obtain a cylinder with good roundness. [SOLUTION] Provided is a bending-press forming punch which includes a pair of left and right dies 1 that are disposed at intervals along a widthwise direction of a plate material S to support the plate material S at two locations; and a punch 2 that is movable in a direction of getting close to or away from the dies 1 and sequentially presses the plate material S in the widthwise direction while interposing the plate material together with the dies 1 to perform the bending, wherein the punch 2 includes a punch head 2a having a working surface K which comes into direct contact with the plate material S to press the plate material S into a concave shape, and a punch supporter which is held by connection to the punch head 2a to support the punch head 2a. Moreover, the punch head 2a has a working surface K having a working surface center O which matches an axis q of the punch supporter 2b and being formed by a non-uniform circular arc in which a radius in a central region in the widthwise direction is a maximum radius.

IPC 8 full level
B21D 5/01 (2006.01)

CPC (source: EP KR RU)
B21D 5/01 (2013.01 - RU); **B21D 5/015** (2013.01 - EP KR); **B21D 37/10** (2013.01 - KR)

Cited by
EP3127625A4

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)
EP 3127624 A1 20170208; **EP 3127624 A4 20170426**; **EP 3127624 B1 20221130**; BR 112016022887 B1 20210112; CN 106132577 A 20161116; CN 106132577 B 20190129; JP 2015199126 A 20151112; JP 6262166 B2 20180117; KR 101945091 B1 20190201; KR 20160124848 A 20161028; RU 2016138627 A 20180402; RU 2016138627 A3 20180402; RU 2650468 C2 20180413; SA 516371950 B1 20201230; WO 2015152107 A1 20151008

DOCDB simple family (application)
EP 15772740 A 20150330; BR 112016022887 A 20150330; CN 201580016678 A 20150330; JP 2015046163 A 20150309; JP 2015059833 W 20150330; KR 20167025853 A 20150330; RU 2016138627 A 20150330; SA 516371950 A 20160929