

Title (en)
PRESS MOLDING METHOD AND PRESS MOLDING DEVICE

Title (de)
PRESSFORMVERFAHREN UND PRESSFORMVORRICHTUNG

Title (fr)
PROCÉDÉ D'EMBOUTISSAGE ET DISPOSITIF D'EMBOUTISSAGE

Publication
EP 2754509 A4 20150429 (EN)

Application
EP 12830768 A 20120821

Priority
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Abstract (en)
[origin: EP2754509A1] Provided is a means for efficiently imparting high tensile stiffness to a press stamping product by high forming stability, wherein that means can narrow a sacrificial constricted part, can greatly improve material yields, and can effectively resolve strain due to actual cross-sectional length differences in punch shapes in press forming accompanied by restriction of a sheet-shaped workpiece. When pressing between a punch (11) and a die (21) accompanied by expansion from a peripheral side while constraining the peripheral part of the sheet shaped workpiece (P1) by a plurality of blank holders (3) formed from a pair of sandwiching members (3a, 3b), in a process up to pressing after contact of a sheet shaped workpiece (P1) with a forming surface (10) of the punch (11), each blank holder (3) is displaced in the pressing direction and the sheet shaped workpiece (P1) is superimposed on the forming surface (10) of the punch (11), and then displaced in the outside direction and the sheet shaped workpiece (P1) is expanded. After completion of pressing, each blank holder (3) is displaced along the opposite of the pressing direction, and the press stamping product (P1) is disengaged from the punch (11). Furthermore, after both sandwiching members (3a, 3b) are made to detach and the press stamping product (P) removed, both sandwiching members (3a, 3b) are displaced toward the inside direction, and a sheet shaped workpiece (P1) is returned to an initial position prior to being constrained.

IPC 8 full level
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Citation (search report)
• [X1] JP 2011110581 A 20110609 - DAIHATSU MOTOR CO LTD
• [XD1] JP H065723 U 19940125
• [XA1] JP H1085850 A 19980407 - HONDA MOTOR CO LTD
• [A] DE 10334483 A1 20050310 - DAIMLER CHRYSLER AG [DE]
• See references of WO 2013035520A1

Cited by
EP4268990A1; EP3315224A1; FR3057791A1; EP4035790A4; KR20180098583A; US2019009322A1; US11389852B2

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