Title (en)
Drawing die with stabilizer

Title (de)
Ziehwerkzeug mit einem Stabilizator

Title (fr)
Outil d'emboutissage avec un dispositif stabilisateur

Publication
EP 1657006 B1 20071003 (EN)

Application
EP 05110559 A 20051109

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Abstract (en)
[origin: EP1657006A1] An object of the invention is to standardize a stabilizer of a drawing die, to easily manufacture and to achieve a cost reduction. The invention provides a stabilizer of a drawing die that includes a punch (2), a blank holder (3) outside fitted to the punch (2) and supported by a cushion pin (4) and provided so as to freely move upward and downward, and a die (7) arranged so as to face to the punch (2) and moves upward and downward, and with which a thin plate (51) mounted on the blank holder (3) moved upward by the cushion pin (4) and pinched between the blank holder (3) and the die (7) by moving the die (7) downward is drawn by the punch (2), wherein a plurality of boxes (5) are arranged around the blank holder (3) between the cushion pin (4) and the blank holder (3) so as to be freely moved upward and downward by the cushion pin, a buffer gas spring (11) is interposed between the boxes (5) and the blank holder (3) so as to form a run-up gap of the blank holder (3) between the boxes (5) and the blank holder (3), a run-up lever (13) pressing the blank holder (3) so as to make the blank holder (3) run up before the die (7) comes into collision with the thin plate (51) on the blank holder (3) is rotatably provided in the boxes (5), and a driver (31) driving the run-up lever (13) is arranged at a position facing to the run-up lever (13) of the die (7), whereby the die (7) comes into collision with the thin plate (51) on the blank holder (3) after the blank holder (3) runs up.

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