Title (en)

METHOD FOR CONTROLLING THE MATERIAL FLOW DURING THE DEEP-DRAWING OF SHEET METAL, AND DEEP-DRAWING TOOL

Title (de)

VERFAHREN ZUR MATERIALFLUSSSTEUERUNG BEIM TIEFZIEHEN VON BLECHEN UND TIEFZIEHWERKZEUG

Title (fr)

PROCEDE DE GESTION DU FLUX DE MATIERES LORS D'UN PROCESSUS D'EMBOUTISSAGE DE TOLES ET OUTIL D'EMBOUTISSAGE

Publication

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Application

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Abstract (en)

[origin: US7086265B2] A method for controlling the material flow during the deep-drawing of sheet metal involves compressing the edges of the sheet metal (1) between at least one upper stopper (13) and at least one lower stopper (6, 7) during the deep-drawing process, with a controllable elastic force (8, 9). A corresponding deep-drawing tool is also provided. A Z-shaped blocking step (11) is stamped into the edge (1 a) of the sheet metal when the upper and lower stoppers (13, 6, 7) are closed, the basic shape is then produced by deep-drawing, maintaining the blocking step (11) and completely blocking the sheet metal between the stoppers. The sheet metal (1) is outwardly stretched, and the blocking step (11) is then reduced in terms of height, facilitating the outward displacement of the sheet metal towards the outside. The deep-drawing tool has a lower stopper including an inner stopper (6) and an outer stopper (7). The stoppers are arranged in an annular manner on the edge of the sheet metal (1) and can be displaced in relation to each other in the holding direction.

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