

Title (en)
METHOD AND APPARATUS FOR STAMPING SHEET MATERIALS WITH SLIGHT ELONGATION

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Application
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Priority
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Abstract (en)
[origin: US4770015A] Process for press-forming sheet materials and in particular metal sheets on a double-action press of the type comprising a cushion (5) of an elastically yieldable material, the process comprising disposing the sheet on a support, applying a first outer slide (1) on the peripheral portion of the sheet (4), then applying a second central slide (10) on a central portion of the sheet, the process further comprising disposing the peripheral portion of the sheet on a lower blank holder (3) forming a tank for the cushion (5) and having an upper surface (6) for maintaining the sheet and located at a higher level than the level of the working surface (7) of the cushion (5), applying the first outer slide, which has a body (8) having a cross-section less than the lower blank holder (3) and includes on its periphery an upper blank holder (2) cooperative with the lower blank holder (3) for gripping the sheet (4), continuing the descent of the outer slide (1) against the cushion for turning up an edge portion (20) of the sheet and causing the flow of the mass of the cushion and deform the central portion of the sheet in such manner as to impart thereto an area substantially equal to the area of the finished part to be obtained, then displacing the central slide (10) so as to shape the angular volumes and the central portion of the sheet by a final flow of the cushion. The invention also provides a press-forming device of the double-action press type. Application in the press-forming of sheets of large size and small elongation.

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