

Title (en)

Device and method for sheet metal forming in surface critical panels

Title (de)

Vorrichtung und Verfahren zum Umformen von Metallblechen an kritischen Flächen von Verkleidungsteilen

Title (fr)

Dispositif et procédé de formage de tôles dans des endroits critiques de panneaux

Publication

**EP 1552893 A1 20050713 (EN)**

Application

**EP 04000331 A 20040109**

Priority

EP 04000331 A 20040109

Abstract (en)

A sheet metal forming apparatus (8) for preventing surface defects (2) in a perimeter area (6) around a local depression (4) in a larger forming area (1). The apparatus (8) comprises a first main forming body (12) and a second main forming body (14), at least one of said main forming bodies (12, 14) being movable towards the other for forming a sheet metal blank (10) there-between into a desired shape. The invention is especially characterized in- a separate sub-forming member (18) provided in the first main forming body (12) at a position corresponding to said local depression (4). In a first phase, the forming of said local depression (4) is completed before the second main forming body (14) reaches a final abutment position and before the sub-forming member (18) reaches a retracted position. Then, in a second phase, the sheet metal blank (10) within said perimeter area (6) is stretched radially outwards around the local depression (4) due to continued travel of the sub-forming member (18) immediately before the second main forming body (14) reaches its final abutment position and before the sub-forming member (18) reaches its retracted position. <IMAGE>

IPC 1-7

**B21D 22/02**; **B21D 22/26**; **B21D 22/10**; **B21D 53/88**

IPC 8 full level

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