

Title (en)
METHOD FOR SHAPING METAL SHEETS

Title (de)
VERFAHREN ZUM UMFORMEN VON BLECHEN

Title (fr)
PROCEDE DE FORMAGE DE TOLES

Publication
EP 1658148 A1 20060524 (DE)

Application
EP 04801928 A 20040823

Priority
• EP 2004009389 W 20040823
• DE 10339350 A 20030825

Abstract (en)
[origin: WO2005021177A1] Disclosed is a method for shaping metal sheets, especially for warm working or hot working blanks (1, 2, 3, 4), in a shaping tool (8). According to said method, one or several reinforcement blanks (2, 3, 4) are applied to a basic blank (1) so as to partially reinforce the same, the basic blank (1) and the at least one reinforcement blank (2, 3, 4) are fixed on top of each other and/or are aligned relative to each other by means of appropriate means, and the basic blank (1) and the at least one reinforcement blank (2, 3, 4) are jointly shaped. The basic blank (1) and the at least one reinforcement blank (2, 3, 4) are separated following the shaping process, are provided with at least one connecting layer (11), and are joined back together, and/or a surface coating (20, 30, 40) is applied to the at least one reinforcement blank (2, 3, 4) as a connecting layer or so as to form a connecting layer, and/or the basic blank (1) and the at least one reinforcement blank (2, 3, 4) are provided with a connecting layer and are jointly shaped while warm.

IPC 1-7
B21D 22/02; **B21D 49/00**; **B32B 7/12**; **B21D 39/03**

IPC 8 full level
B21D 22/02 (2006.01); **B21D 39/03** (2006.01); **B21D 49/00** (2006.01)

CPC (source: EP)
B21D 22/02 (2013.01); **B21D 35/007** (2013.01); **B21D 39/03** (2013.01); **B21D 49/00** (2013.01)

Citation (search report)
See references of WO 2005021177A1

Designated contracting state (EPC)
DE ES FR

DOCDB simple family (publication)
WO 2005021177 A1 20050310; DE 10339350 A1 20050407; DE 10339350 B4 20110630; DE 502004008042 D1 20081023;
EP 1658148 A1 20060524; EP 1658148 B1 20080910; EP 1658148 B2 20151028

DOCDB simple family (application)
EP 2004009389 W 20040823; DE 10339350 A 20030825; DE 502004008042 T 20040823; EP 04801928 A 20040823