Title (en)

METHOD FOR PRODUCING LARGE LIGHTWEIGHT SHEET METAL

Title (de

VERFAHREN ZUM HERSTELLEN GROSSER LEICHTBLECHE

Title (fr)

PROCÉDÉ DE FABRICATION DE TÔLES LÉGÈRES DE GRANDE TAILLE

Publication

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Application

EP 13702422 A 20130128

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Abstract (en)

[origin: WO2013156166A1] The invention relates to a method for producing lightweight sheet metal (sandwich sheet metal) which is composed of layers from at least two metallic cover layers (1, 2) and at least one non-metallic core layer (3) that is preferably formed of plastic, in particular for the use in motor vehicle construction, wherein at least one of the cover layers (1, 2) is formed by at least two metal sheets (1.1, 1.2, 1.3, 2.1, 2.2, 2.3; 1.1', 1.2', 2.1', 2.2') which in each case have a thickness 0 of less than 1 mm, preferably less than 0.6 mm and are connected to one another by a butt joint or overlap joint in a force-fitting and/or positive manner. In order to be able to offer such a lightweight sheet metal (sandwich sheet metal) for an economic production of light and optionally large car body components (6, 7, 9) at low cost, the method according to the invention provides that the metal sheets (1.1, 1.2, 1.3, 2.1, 2.2, 2.3; 1.1', 1.2', 2.1', 2.2') consist of steel and are measured and selected in such a way that the cover layer formed by said material has a width of at least 1,350 mm, preferably at least 1,500 mm, wherein at least one of the metal sheets consisting of steel material are measured and selected in such a manner as to have a width of at least 1/4 of the cover layer width, preferably at least 1/3 of the cover layer width.

IPC 8 full level

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Citation (search report)

See references of WO 2013156166A1

Citation (examination)

- EP 1431026 A1 20040623 STORK FOKKER AESP BV [NL]
- DE 102009039452 A1 20110303 DAIMLER AG [DE]
- DE 102009024622 A1 20100121 DAIMLER AG [DE]
- DE 4307563 A1 19930923 BAYERISCHE MOTOREN WERKE AG [DE]
- · WO 2007009796 A1 20070125 AIRBUS GMBH [DE], et al

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