

Title (en)

MULTI-STAGE RESISTANCE WELDING OF SANDWICH PANELS

Title (de)

MEHRSTUFIGES WIDERSTANDSSCHWEIßEN VON SANDWICHBLECHEN

Title (fr)

SOUDAGE PAR RÉSISTANCE DE TÔLES EN SANDWICH EN PLUSIEURS ÉTAPES

Publication

**EP 3166743 A1 20170517 (DE)**

Application

**EP 15734151 A 20150703**

Priority

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- EP 2015065205 W 20150703

Abstract (en)

[origin: WO2016005283A1] The invention relates to a method for resistance welding of a sandwich panel to at least one further metal component, wherein the sandwich panel has two metal cover layers and a thermoplastic plastic layer arranged between the metal cover layers, wherein at least one first region of the sandwich panel to be welded is heated in such a way that the thermoplastic plastic layer softens and is displaced from the welding region by the pressing together of the cover layers, the cover layers and the further component are welded to each other by a flow of electric current in a first circuit via a first and a second welding electrode, wherein the first welding electrode is arranged on the side of the sandwich panel and the second welding electrode is in electrical contact with the metal component. The problem addressed by the invention is that of providing a method and a device, by means of which further improvement with regard to economical provision, i.e., also a reduction in the cycle times in the production of joints between sandwich panels and metal components, can be achieved with low equipment expense. This problem is solved by means of a method according to claim 1.

IPC 8 full level

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Citation (search report)

See references of WO 2016005283A1

Citation (examination)

- DE 102013108563 A1 20150212 - THYSSENKRUPP STEEL EUROPE AG [DE]
- FR 2638668 A3 19900511 - LORRAINE LAMINAGE [FR]

Designated contracting state (EPC)

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