

Title (en)

Arrangement for the connection of thin-walled metal structures

Title (de)

Anordnung zur Verbindung von dünnwandigen Metallstrukturen

Title (fr)

Système d'assemblage de structures métalliques à parois minces

Publication

EP 1393835 A3 20040714 (DE)

Application

EP 03015345 A 20030708

Priority

DE 10238820 A 20020823

Abstract (en)

[origin: EP1393835A2] Two or more metal plates (2,3) are connected via an overlap section (4), defining a contact area (5), and a row of rivets (6), subjected to cyclical tensile loads. An additional row of rivets (7) is positioned next and parallel to the first one, in the end area (4A) of the overlap. These have rivet elements (8) to hold the plates in the contact area, so as to permit relative movement of the plates. The rivet element applies a defined clamp force to the plates between rivet head (17) and closing head (18). The force is adjusted by a closure ring. The rivet element is a hi-lock-rivet with hi-lock-collar.

IPC 1-7

F16B 5/04; B64C 1/12

IPC 8 full level

B21J 15/02 (2006.01)

CPC (source: EP US)

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Citation (search report)

- [A] US 5297760 A 19940329 - HART-SMITH LEONARD J [US]
- [A] WO 9222751 A1 19921223 - SFS STADLER HOLDING AG [CH]
- [A] DATABASE WPI Section PQ Week 199120, Derwent World Patents Index; Class Q61, AN 1991-147224, XP002279633

Cited by

FR2994888A1; US9353785B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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