

Title (en)

Method of and devices for assembling workpieces by hemming a peripheral edge

Title (de)

Verfahren und Vorrichtungen zum Zusammenfügen von Werkstücken durch Falzen des Umfangrandes

Title (fr)

Procédé et dispositifs d'assemblage de pièces par sertissage d'un bord périphérique

Publication

EP 1389498 B1 20120509 (FR)

Application

EP 03291934 A 20030731

Priority

FR 0210283 A 20020813

Abstract (en)

[origin: EP1389498A1] Two thin metal plates (5,6) such as might be used for a car door are placed on a die (7) and a robot (1) with arm (2) and head (3) joins them at the edges. The head consists of an arm (9), roller (8) and means to pull or push the roller evenly which use an electric motor with a mechanical or hydraulic transmission. The edge of the lower plate is bent over the edge of the second plate and the two are then crimped by the same roller and robot : An independent claim is also included for : Equipment able to assemble thin metal plates which uses a robot head and roller able to bend one peripheral plate edge over the other and then crimp the two together in consecutive uninterrupted operations.

IPC 8 full level

B21D 39/02 (2006.01)

CPC (source: EP)

B21D 39/021 (2013.01); **B21D 39/023** (2013.01)

Cited by

CN104801619A; CN110000297A; FR2895690A1; EP2108466A3; EP1958714A4; ES2232271A1; EP2868403A1; CN104608114A; US9908160B2; US7124611B2; WO2009015785A3; WO2007077377A3; WO2005082560A1; US8272243B2; US8914964B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1389498 A1 20040218; **EP 1389498 B1 20120509**; AT E556792 T1 20120515; ES 2382732 T3 20120613; FR 2843549 A1 20040220; FR 2843549 B1 20050527; PT 1389498 E 20120606

DOCDB simple family (application)

EP 03291934 A 20030731; AT 03291934 T 20030731; ES 03291934 T 20030731; FR 0210283 A 20020813; PT 03291934 T 20030731