

Title (en)  
Device for joining metal sheets together.

Title (de)  
Vorrichtung zum Durchsetzfügen von Blechwerkstücken.

Title (fr)  
Dispositif d'agrafage de pièce en tôle.

Publication  
**EP 0513473 B1 19940824**

Application  
**EP 92101047 A 19890215**

Priority  
• DE 3805688 A 19880224  
• EP 89102558 A 19890215

Abstract (en)  
[origin: EP0330061A2] The invention relates to a device for joining metal sheets together, comprising a punch and a die with elastically deflectable cutting parts. The dimensions of the punch, on the one hand, and of a closed contour of the die, on the other hand, define a joining region, such that none of the sheets is cut through and the joint has essentially isotropic tensile strength in all directions parallel to the sheets. The joint is also aesthetically pleasing on both sides. <IMAGE>

IPC 1-7  
**B21D 39/03**

IPC 8 full level  
**F16B 4/00** (2006.01); **B21D 39/03** (2006.01)

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Cited by  
DE19700465B4; US2013042450A1

Designated contracting state (EPC)  
AT BE CH DE ES FR GB GR IT LI LU NL SE

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**EP 0330061 A2 19890830; EP 0330061 A3 19900905; EP 0330061 B1 19920819**; AT E110310 T1 19940915; AT E79574 T1 19920915; DE 3805688 A1 19890907; DE 58902059 D1 19920924; DE 58908245 D1 19940929; EP 0513473 A1 19921119; EP 0513473 B1 19940824; ES 2035385 T3 19930416; ES 2062831 T3 19941216; JP 2517757 B2 19960724; JP H0259129 A 19900228; RU 1829979 C 19930723; US 5046228 A 19910910

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