

Title (en)  
Apparatus for joining by plastic deformation

Title (de)  
Fügevorrichtung zum umformtechnischen Fügen

Title (fr)  
Dispositif de connection par déformation plastique

Publication  
**EP 1762315 B1 20100303 (DE)**

Application  
**EP 06120237 A 20060906**

Priority  
DE 102005043211 A 20050909

Abstract (en)  
[origin: EP1762315A1] The joint-forming device has a frame (1) open at one side, a drive (4) on the frame with a movable punch (5) and a tool holder (12) supporting the tool (3) on the frame opposite the punch. As the load continues to build up, the tool holder deforms under it, providing at least partial compensation for the spread of the frame due to the load.

IPC 8 full level  
**B21J 15/10** (2006.01)

CPC (source: EP US)  
**B21J 15/10** (2013.01 - EP US); **B30B 15/047** (2013.01 - EP US); **Y10T 29/49833** (2015.01 - EP US); **Y10T 29/49835** (2015.01 - EP US); **Y10T 29/49943** (2015.01 - EP US); **Y10T 29/49956** (2015.01 - EP US); **Y10T 29/5307** (2015.01 - EP US); **Y10T 29/5343** (2015.01 - EP US); **Y10T 29/5377** (2015.01 - EP US)

Designated contracting state (EPC)  
DE ES FR GB SE

DOCDB simple family (publication)  
**EP 1762315 A1 20070314**; **EP 1762315 B1 20100303**; DE 102005043211 A1 20070315; DE 502006006316 D1 20100415; ES 2339585 T3 20100521; JP 2007075894 A 20070329; JP 5048289 B2 20121017; US 2007056153 A1 20070315; US 7971335 B2 20110705

DOCDB simple family (application)  
**EP 06120237 A 20060906**; DE 102005043211 A 20050909; DE 502006006316 T 20060906; ES 06120237 T 20060906; JP 2006231844 A 20060829; US 51727506 A 20060908