

Title (en)  
Metal sheet clinching unit

Title (de)  
Vorrichtung zum Krimpen von Metallblechen

Title (fr)  
Appareil de sertissage pour tôles

Publication  
**EP 1477246 B1 20061102 (EN)**

Application  
**EP 04102074 A 20040512**

Priority  
IT TO20030349 A 20030513

Abstract (en)  
[origin: EP1477246A1] A unit (8) for clinching metal sheets (4) has a preclinching tool (48) and a clinching tool (49), which are fitted to a frame (16) which is slid by a pneumatically powered guide and slide device (17) between a forward work position and a withdrawn rest position; the frame (16) supports a shaft (10) operating three cam and tappet devices (32, 60, 61), which lock the frame (16) in the forward work position, and move the tools (48, 49) along respective work paths to perform a first and second bending operation successively on a tab (6) on a metal sheet (4). <IMAGE>

IPC 8 full level  
**B21D 39/02** (2006.01)

CPC (source: EP)  
**B21D 39/021** (2013.01)

Citation (examination)  
EP 1136153 A2 20010926 - NISSAN MOTOR [JP]

Cited by  
EP1707286A1

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 PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1477246 A1 20041117; EP 1477246 B1 20061102; EP 1477246 B9 20070425**; AT E344110 T1 20061115; DE 602004002985 D1 20061214; DE 602004002985 T2 20070830; ES 2275179 T3 20070601; IT TO20030349 A1 20041114

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