

Title (en)  
Bending machine for sheet metal.

Title (de)  
Biegmachine für Bleche.

Title (fr)  
Machine à plier les tôles.

Publication  
**EP 0338949 A1 19891025 (FR)**

Application  
**EP 89420140 A 19890419**

Priority  
FR 8805481 A 19880420

Abstract (en)  
Plate metalworking. <??>The sheet metal bending machine is characterised in that: .the moveable component is a carriage (32) which can be moved in a cradle defining the support and guiding channel (31) which has the shape of a concave cylindrical casing portion open in the direction of the shoes, .the channel is carried by a frame (20) suspended on the holder (3) by means (23, 24) for adjusting the vertical and horizontal positions, .and the flap (41) comprises a radial plane of symmetry (P') passing through the centre (C) of the casing portion and possesses a bending head (44) having a symmetrical profile, on either side of the said plane. <??>Application to the machines for producing either positive or negative bends. <IMAGE>

IPC 1-7  
**B21D 5/04**

IPC 8 full level  
**B21D 5/04** (2006.01)

CPC (source: EP US)  
**B21D 5/042** (2013.01 - EP US)

Citation (search report)

- [AD] EP 0023894 A1 19810211 - SALVAGNINI TRANSFERICA SPA [IT]
- [AD] EP 0077314 A1 19830420 - VOEST ALPINE AG [AT]
- [AD] EP 0022122 A1 19810107 - VOEST ALPINE AG [AT]
- [AD] FR 2502518 A1 19821001 - FAVRIN PIERRE [FR]
- [X] US 4043165 A 19770823 - BADGER DOUGLAS V, et al
- [X] DE 288029 C
- [Y] DE 584362 C 19330919 - HILTMANN & LORENZ AKT GES MASC
- [Y] US 3786666 A 19740122 - YORK J
- [A] FR 1525688 A 19680517 - SMERALOVY ZD Y NARODNI PODNIK

Cited by  
DE3935658A1; CN101947576A; EP0483641A3; EP2871006A1; FR3012352A1; EP0609767A1; CN106660095A; CN109092940A; US10464115B2; WO2015188208A1; WO9106383A1; WO9200154A1

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