

Title (en)
FLAT BENDING DEVICE

Publication
EP 0089904 B1 19860115 (FR)

Application
EP 83420042 A 19830314

Priority
FR 8205046 A 19820319

Abstract (en)
[origin: ES8401733A1] A sheet-metal bending brake has a stationary anvil having a flat and horizontal support surface bounded by and having a straight stationary bending edge and a cut-out back surface forming an acute angle with the support surface. A bending assembly displaceable perpendicular to and adjacent the anvil carries a movable bending blade having a movable bending edge parallel to the stationary edge and spaced therefrom in a direction parallel to the support surface and a clamp bar above the support surface adjacent the blade and having a clamp-bar face confronting and parallel to the support surface. This bar is supported on the bending assembly for limited vertical movement relative thereto between a lower position with the bar face below the movable edge and an upper position with the bar face above the movable edge and is normally spring-biased into the lower position. The assembly can be moved between an upper position with the bar face and the movable edge both above the support surface and a workpiece thereon and a lower position with the bar face pressing the workpiece against the support surface and the movable edge below the stationary edge and through an intermediate position with the bar face and the movable edge level with each other and both engaging the workpiece. Thus the bar clamps the workpiece to the anvil and movement from the intermediate position to the lower position of the blade bends over the workpiece edge region. When moving from the intermediate to the lower position the blade is pivoted forward to further bend the workpiece.

IPC 1-7
B21D 5/04

IPC 8 full level
B21D 5/04 (2006.01); **B21D 19/08** (2006.01)

CPC (source: EP US)
B21D 5/045 (2013.01 - EP US); **B21D 19/08** (2013.01 - EP US)

Cited by
WO2018055193A1; CN104190757A; FR2976197A1; CN109789466A; EP0475469A3; DE3511685A1; EP0576796A1; US5474437A; GB2154165A; US4658624A; EP0293964A3; EP0610706A1; WO2017067850A1; WO8500766A1; US11478835B2

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

DOCDB simple family (publication)
EP 0089904 A1 19830928; EP 0089904 B1 19860115; AT E17449 T1 19860215; DE 3361825 D1 19860227; ES 520766 A0 19840101; ES 8401733 A1 19840101; FR 2523483 A1 19830923; FR 2523483 B1 19850927; JP S58176023 A 19831015; US 4520646 A 19850604

DOCDB simple family (application)
EP 83420042 A 19830314; AT 83420042 T 19830314; DE 3361825 T 19830314; ES 520766 A 19830318; FR 8205046 A 19820319; JP 4533883 A 19830319; US 47652383 A 19830318