

Title (en)

ADAPTER DEVICE FOR MOUNTING BENDING PUNCHES ON A BENDING PRESS

Publication

EP 0119108 B1 19870506 (FR)

Application

EP 84400107 A 19840119

Priority

FR 8302386 A 19830215

Abstract (en)

[origin: US4534203A] Punches having attachment heels of different types are mounted on a bending press by means of an adapter consisting of a bar or a series of bar segments secured to the top die-shoe of the press. The bottom portion of the adapter body is provided in one vertical face with a recess of greater depth than any type of punch attachment heel. A bearing spacer having the same height as the adapter body recess is placed against the punch heel either at the bottom of the recess or in an external position. The spacer and heel of the corresponding punch are held in position by a cramp which is tightly applied against the adapter body on the same side as the recess opening.

IPC 1-7

B21D 5/02; **B21D 37/04**

IPC 8 full level

B21D 5/02 (2006.01); **B21D 37/04** (2006.01)

CPC (source: EP US)

B21D 5/0209 (2013.01 - EP US); **B21D 5/0236** (2013.01 - EP US); **B21D 37/04** (2013.01 - EP US)

Cited by

US5067340A; EP0630699A1; EP0494714A1; US5245854A; US7021116B2; US7004008B2; US7661288B2; US6928852B2; WO2004052570A1; WO8910807A1; US6732564B2; US6467327B1; US7721586B2

Designated contracting state (EPC)

BE CH DE GB IT LI

DOCDB simple family (publication)

FR 2540756 A1 19840817; **FR 2540756 B1 19850322**; CA 1208534 A 19860729; DE 3463457 D1 19870611; EP 0119108 A1 19840919; EP 0119108 B1 19870506; JP H0532138 B2 19930514; JP S59159223 A 19840908; US 4534203 A 19850813

DOCDB simple family (application)

FR 8302386 A 19830215; CA 447436 A 19840215; DE 3463457 T 19840119; EP 84400107 A 19840119; JP 2594784 A 19840214; US 57350184 A 19840124