

Title (en)
CLAMPING DEVICE FOR A LONG PIECE SUCH AS A PUNCH, A DIE OR SUCH A TOOL ON A TABLE OF A PRESS BENDING MACHINE

Publication
EP 0387121 B1 19930922 (FR)

Application
EP 90400497 A 19900222

Priority
FR 8902694 A 19890302

Abstract (en)
[origin: EP0387121A1] Device for the instant clamping of a press-bending machine tool on its tool holder allowing its positioning and extraction from the front of the machine without having to displace the adjacent tools. <??>It comprises a clamp (6) articulated about a longitudinal pin (7), the said clamp having a shoulder (9) on which is hooked the heel of the tool which has an appropriate shape. When, after having hooked the tool, it is pushed from its position of equilibrium towards the rear, it drives the clamp in rotation by the contact of the surfaces (21 and 22), which operates a locking cam (12) which ensures the tightening of the clamp on the tool in the working position. In order to unclamp the tool, it suffices to retract the cam; the tool then remains hooked and can be extracted by forward pivoting. <??>The invention can be used for the attachment and immobilization of any suspended part or any part standing on a base. <IMAGE>

IPC 1-7
B21D 5/02

IPC 8 full level
B21D 5/02 (2006.01); **B21D 37/04** (2006.01); **B21D 37/14** (2006.01)

CPC (source: EP US)
B21D 5/0209 (2013.01 - EP US); **B21D 5/0236** (2013.01 - EP US)

Cited by
US5685191A; EP0630700A1; CN103143944A; US5507170A; US5619885A; US5511407A; EP0644002A3; EP0569880A3; EP0577974A1; US5495743A; US5642642A; EP0715905A1; US5513514A; EP0767015A1; US5794486A; CN1076645C; EP0630699A1; US5390527A; US5572902A; CN109396222A; US10953453B2; US11383284B2; WO2018049056A1; WO2012145781A1; US10792716B2

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0387121 A1 19900912; EP 0387121 B1 19930922; CA 2011218 A1 19900902; CA 2011218 C 20001003; DE 69003417 D1 19931028; DE 69003417 T2 19940310; ES 2046720 T3 19940201; FR 2643838 A1 19900907; FR 2643838 B1 19910531; JP H02280927 A 19901116; JP H0722790 B2 19950315; US 4993255 A 19910219

DOCDB simple family (application)
EP 90400497 A 19900222; CA 2011218 A 19900301; DE 69003417 T 19900222; ES 90400497 T 19900222; FR 8902694 A 19890302; JP 5157490 A 19900302; US 48297590 A 19900222