

Title (en)

Bending method for a double shaping machine and the relative double shaping machine with movable winged elements

Title (de)

Biegeverfahren für Doppelbiegevorrichtung und dazugehörige Doppelbiegevorrichtung mit bewegbaren drehenden Teilen

Title (fr)

Procédé de pliage pour machine de pliage à deux têtes et ladite machine de pliage comportant des éléments tournants

Publication

EP 0850707 B1 20010228 (EN)

Application

EP 97116477 A 19970922

Priority

IT UD960185 A 19961001

Abstract (en)

[origin: EP0850707A1] Bending method for a double shaping machine to bend metallic sections for making left-hand and right-hand bends of 90 DEG and more, the shaping machine comprising two bending stations (10a, 10b) between which there is a gripper element (17), each of the bending stations (10a, 10b) comprising a bending assembly (12) with a rotary disk (13) including a winged contrasting element (15) and a bending pin (14), in which, in order to carry out two consecutive bends, in opposite directions to each other, on the same round piece (16), the following steps are included: the first bend is made on the round piece (16); the winged contrasting element (15) is raised, and the round piece (16) is also raised, up to a level at least higher than the top (14a) of the bending pin; the rotary disk (13) is rotated so as to carry the bending pin (14) to the opposite side of the round piece (16) with respect to the position occupied for the first bend to be made; the winged contrasting element (15) is re-positioned; the round piece (16) advances to a position corresponding to the next bend to be made; a bend is made in the opposite direction to that of the bend made previously. Double shaping machine to carry out the method as above wherein each winged contrasting element (15) is associated with an actuator (18) to lift it above the bending plane by a level correlated to the height of the bending pin (14) and to the lower level on which the round piece (16) to be shaped lies. <IMAGE>

IPC 1-7

B21D 11/12

IPC 8 full level

B21D 11/12 (2006.01); **B21F 1/00** (2006.01); **B21D 7/06** (2006.01)

CPC (source: EP)

B21D 11/12 (2013.01)

Cited by

CN103084515A; FR2806943A1; CN106475490A; ITUB20153259A1; CN108348972A; CN108637131A; US6813922B2; US7124486B2; US11229938B2; WO0174509A1; WO2017033145A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)

EP 0850707 A1 19980701; **EP 0850707 B1 20010228**; AT E199334 T1 20010315; BR 9702934 A 19990615; DE 69704152 D1 20010405; DE 69704152 T2 20010621; DK 0850707 T3 20010326; ES 2156623 T3 20010701; GR 3035498 T3 20010629; IT 1288994 B1 19980925; IT UD960185 A0 19961001; IT UD960185 A1 19980401; JP H10113723 A 19980506; PT 850707 E 20010629

DOCDB simple family (application)

EP 97116477 A 19970922; AT 97116477 T 19970922; BR 9702934 A 19971001; DE 69704152 T 19970922; DK 97116477 T 19970922; ES 97116477 T 19970922; GR 20010400284 T 20010301; IT UD960185 A 19961001; JP 26882497 A 19971001; PT 97116477 T 19970922