

Title (en)
PROCESS FOR THE TWO-DIRECTIONAL BENDING OF SHEET METAL.

Title (de)
VERFAHREN ZUM GEGENLÄUFIGEN BIEGEN EINES BLECHES.

Title (fr)
PROCEDE DE CINTRAGE OPPOSE D'UNE TOLE.

Publication
EP 0497780 B1 19931020 (DE)

Application
EP 90913054 A 19900830

Priority
DE 3935658 A 19891026

Abstract (en)
[origin: WO9106383A1] A process for the two-directional bending of sheet metal comprises the following stages: The bending cheek of a swivel press is laid on a first side of a sheet metal section which is bent about a predetermined angle in a first direction of rotation; the bending cheek is then withdrawn from the bent sheet in a first direction of movement perpendicularly to its pivoting axis and pivoted further in the first direction of rotation until it lies against the second side of the sheet opposite the first; the bending cheek is shifted in a second direction perpendicularly to the first; after the bent sheet has been suitably moved between the lower and upper cheeks of the bending machine, the bending cheek is laid against the second side of the sheet, which is bent about a predetermined angle by pivoting the bending cheek in a second direction of rotation opposite that of the first. In the bending machine for implementing this process, the bending cheek is fitted so that it can perform both mutually perpendicular movements in the first and second directions of travel.

IPC 1-7
B21D 5/04

IPC 8 full level
B21D 5/04 (2006.01)

CPC (source: EP)
B21D 5/042 (2013.01)

Cited by
DE102013106764A1; DE102006047108B4; DE102006047108A1; WO2014206817A1; US10427893B2

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

DOCDB simple family (publication)
WO 9106383 A1 19910516; CA 2067732 A1 19910427; CA 2067732 C 20000215; DE 3935658 A1 19910502; DE 59003171 D1 19931125; DK 0497780 T3 19931129; EP 0497780 A1 19920812; EP 0497780 B1 19931020; ES 2046795 T3 19940201; JP 3122126 B2 20010109; JP H05500774 A 19930218

DOCDB simple family (application)
EP 9001446 W 19900830; CA 2067732 A 19900830; DE 3935658 A 19891026; DE 59003171 T 19900830; DK 90913054 T 19900830; EP 90913054 A 19900830; ES 90913054 T 19900830; JP 51175890 A 19900830