

Title (en)

Apparatus for adjusting tool length of bending machine.

Title (de)

Vorrichtung zur Anpassung der Werkzeuglänge bei Biegemaschinen.

Title (fr)

Dispositif pour ajuster la longueur d'outil des machines à cintrer.

Publication

EP 0186909 A2 19860709 (EN)

Application

EP 85116595 A 19851227

Priority

- JP 27922485 A 19851213
- JP 28151984 A 19841229

Abstract (en)

An apparatus for adjusting the tool length of a bending machine comprises a ram having a lower end, a top tool body mounted on the lower end of the ram, a bottom tool mounted below the top tool body, a top tool including a pair of central dies mounted longitudinally movably on the lower and of the ram, a plurality of upper split dies arranged outside the central dies and mounted reversibly to the upper die row, a plurality of thin upper dies inserted reversibly between the central dies and being thinner than the upper split die, and upper corner dies arranged on both left and right ends of the upper split die, a shift mechanism for sliding the central dies reversely at the central portion of the lower portion of the ram, a drive mechanism for sliding the upper corner dies to the longitudinally symmetrical positions of the lower portion of the ram, shafts pivotably disposed at the back of the central dies and upper corner dies, a plurality of the upper split dies wedged to the shafts and reversed in pivoting of the shaft to be selectively inserted between said central die and upper corner die, a wedge releasing mechanism for releasing the upper split die from the wedge to be received in the corresponding upper die in pivoting the shaft, and a mechanism for selecting the number of the thin upper dies supported by the shaft at the back of the central dies so as to be reversed.

IPC 1-7

B21D 5/01

IPC 8 full level

B21D 5/01 (2006.01); **B21D 5/02** (2006.01); **B21D 5/04** (2006.01)

CPC (source: EP KR)

B21D 5/02 (2013.01 - EP KR); **B21D 5/0209** (2013.01 - EP); **B21D 5/0218** (2013.01 - EP); **B21D 5/04** (2013.01 - EP); **B21D 5/042** (2013.01 - EP); **B21D 5/047** (2013.01 - EP)

Cited by

CN108637100A; AT385690B; EP0713734A1; AT385689B; US4765171A; AT385688B; GB2317843A; GB2317843B; CN105992658A; EP0274159A3

Designated contracting state (EPC)

AT CH DE FR GB IT LI

DOCDB simple family (publication)

EP 0310145 A2 19890405; EP 0310145 A3 19891206; EP 0310145 B1 19930505; AT E54078 T1 19900715; DE 3578390 D1 19900802; DE 3587327 D1 19930609; DE 3587327 T2 19931007; EP 0186909 A2 19860709; EP 0186909 A3 19870325; EP 0186909 B1 19900627; KR 860004665 A 19860711; KR 890004036 B1 19891018

DOCDB simple family (application)

EP 88120283 A 19851227; AT 85116595 T 19851227; DE 3578390 T 19851227; DE 3587327 T 19851227; EP 85116595 A 19851227; KR 850009980 A 19851230