

Title (en)
DRIVE SHAFT CONNECTING DEVICE FOR COLD ROLL FORMING MACHINE

Title (de)
ANTRIEBSWELLENVERBINDUNGSVORRICHTUNG FÜR PROFILWALZEINRICHTUNG

Title (fr)
DISPOSITIF D'ACCOUPLEMENT D'ARBRE POUR LAMINOIR A PROFILER LES FEUILLARDS A FROID

Publication
EP 0721814 A1 19960717 (EN)

Application
EP 94917150 A 19940603

Priority
• JP 9400899 W 19940603
• JP 26429093 A 19930927

Abstract (en)
It is an objective of the present invention to provide a connecting apparatus for a driving unit in a cold-roll forming machine by which an intermediate stand slides over a common base to connect with a roll shaft by one operational procedure, and desired position changing can be achieved simultaneously while corresponding to the adjustment of the pushing-down force of the roll stands. In order to achieve the aforementioned objective, the presently invented connecting apparatus comprises (i) mounting couplings 21,22 being connected with a driving unit and an expandable type universal joint on a coupling holders 14,15 in both horizontal and vertical directions; said coupling holders being provided on a linear guide being able to slide vertically, (ii) pushing down the coupling holders 14,15 which have been pulled up previously while sliding the intermediate stand 10 supporting said couplings and coupling holders over a common base 1, (iii) stopping the coupling holders at guides 14d,15d for a purpose of an automatic center-positioning, and (iv) putting couplings 21,22 to oppose against the roll shaft end portions 31,32. As a result, said couplings can connect to roll shafts by one operational procedure without any reading-out and adjustment of coupling heights. Furthermore, since said couplings are free along the vertical direction, an adjustment of the pushing-down force can be freely achieved during the roll forming operations. <IMAGE>

IPC 1-7
B21D 5/08

IPC 8 full level
B21B 35/14 (2006.01); **B21D 5/08** (2006.01)

CPC (source: EP KR)
B21B 35/148 (2013.01 - EP); **B21D 5/08** (2013.01 - EP KR); **B21B 35/14** (2013.01 - EP)

Cited by
EP2251112A1; EP2251110A1; EP4112199A1; EP2452760A1; WO2006043291A1; WO2015085340A3

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI

DOCDB simple family (publication)
WO 9509060 A1 19950406; AU 6856494 A 19950418; CN 1131920 A 19960925; EP 0721814 A1 19960717; EP 0721814 A4 19980304; JP 3362072 B2 20030107; JP H0796329 A 19950411; KR 960704654 A 19961009

DOCDB simple family (application)
JP 9400899 W 19940603; AU 6856494 A 19940603; CN 94193533 A 19940603; EP 94917150 A 19940603; JP 26429093 A 19930927; KR 19960701459 A 19960321