

Title (en)
X-H ROLLING METHOD FOR PARALLEL-FLANGE STEEL SECTIONS (SUPPORTS)

Title (de)
ARBEITSVERFAHREN ZUM X-H-WALZEN VON PARALLELFLENSCHIGEN STAHLPROFILIEN (-TRÄGERN)

Title (fr)
PROCEDE DE LAMINAGE X-H DE PROFILES (SUPPORTS) EN ACIER A BRIDES PARALLELES

Publication
EP 1417048 B1 20050112 (DE)

Application
EP 02758349 A 20020717

Priority
• DE 10135601 A 20010721
• EP 0207941 W 20020717

Abstract (en)
[origin: US2004221636A1] The invention relates to an X-H rolling method for parallel-flange steel sections (supports) with an H profile, in a tandem operation in a compact roll group, consisting of a first universal frame, an upsetting frame located downstream of the latter and a subsequent second universal frame. The rolls of the frames have surfaces that run at a slant or vertically in relation to the roll axes. According to the invention, if vertical rolls comprising rolling surfaces that are inclined away from one another at an angle of between 0 and 10° are used in the first universal frame and vertical rolls comprising cylindrical rolling surfaces are used in the second universal frame, the lateral surfaces of the horizontal rolls, which together with the rolling surfaces of the vertical rolls form the H pass, are inclined at an angle of approximately 0 to 0.5°, thus obtaining in the second universal frame a reduction of the material to be rolled that equates to approximately 0-100% of the reduction attained in the first universal frame.

IPC 1-7
B21B 1/08

IPC 8 full level
B21B 1/088 (2006.01); **B21B 1/08** (2006.01); **B21B 27/02** (2006.01)

CPC (source: EP KR US)
B21B 1/08 (2013.01 - KR); **B21B 1/088** (2013.01 - EP US); **B21B 2267/24** (2013.01 - EP US)

Cited by
CN110814023A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
US 2004221636 A1 20041111; **US 7043953 B2 20060516**; AT E286787 T1 20050115; BR 0211205 A 20040713; BR 0211205 B1 20101005; CN 1264617 C 20060719; CN 1533311 A 20040929; DE 10135601 A1 20030206; DE 50202012 D1 20050217; EP 1417048 A1 20040512; EP 1417048 B1 20050112; ES 2235073 T3 20050701; JP 2004535934 A 20041202; KR 100613134 B1 20060817; KR 20040013149 A 20040211; PL 367037 A1 20050221; RU 2004105159 A 20050520; RU 2264871 C2 20051127; WO 03011488 A1 20030213

DOCDB simple family (application)
US 48460104 A 20040302; AT 02758349 T 20020717; BR 0211205 A 20020717; CN 02814623 A 20020717; DE 10135601 A 20010721; DE 50202012 T 20020717; EP 0207941 W 20020717; EP 02758349 A 20020717; ES 02758349 T 20020717; JP 2003516711 A 20020717; KR 20047000611 A 20020717; PL 36703702 A 20020717; RU 2004105159 A 20020717