

Title (en)

Auxiliary screw-down device for rolling stands

Title (de)

Hilfsanstellvorrichtung für Walzgerüste

Title (fr)

Dispositif de serrage auxiliaire pour des cages de laminoir

Publication

EP 1477243 B1 20070718 (DE)

Application

EP 04009478 A 20040422

Priority

DE 10322664 A 20030516

Abstract (en)

[origin: EP1477243A2] An auxiliary adjusting device for a rolling mill stand includes a adjusting shaft, a cylindrical member forming an adjusting spindle and having a first outer thread cooperating with the inner thread of a support sleeve fixedly connected to the cross-beam, and a central recess provided with longitudinal teeth, a carrier secured to a bottom of the cross-beam, projecting into the central recess of the cylindrical member, and carrying, at its end side, a tooth gear that functions as a planet gear that cooperates, on one hand, with a tooth gear secured at an end of the adjusting shaft which extends through the carrier, and serving as a sun gear, and, on another hand, with the longitudinal teeth of the central recess of the cylindrical member, and an adjusting pressure sleeve connected with the support sleeve for longitudinal displacement relative thereto but without a possibility of rotation relative thereto.

[origin: EP1477243A2] In a process to impart a trade mark or indicator mark to bread, a branding iron is applied to the unbaked dough prior to the baking. The branding iron is applied to the surface of the risen unbaked dough at a temperature of 200 to 250 [deg] C.

IPC 8 full level

B21B 13/00 (2006.01); **B21B 31/24** (2006.01); **B21B 31/20** (2006.01); **B21B 31/22** (2006.01)

CPC (source: EP US)

B21B 31/24 (2013.01 - EP US); **B21B 31/20** (2013.01 - EP US); **B21B 31/22** (2013.01 - EP US); **Y10T 74/18448** (2015.01 - EP US);
Y10T 74/18728 (2015.01 - EP US); **Y10T 74/19623** (2015.01 - EP US)

Cited by

CN105934287A; RU2631550C1; WO2015078822A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1477243 A2 20041117; EP 1477243 A3 20050907; EP 1477243 B1 20070718; AT E367216 T1 20070815; DE 10322664 A1 20041202;
DE 502004004329 D1 20070830; ES 2287606 T3 20071216; JP 2004337979 A 20041202; JP 4526017 B2 20100818;
RU 2004114829 A 20051027; RU 2343027 C2 20090110; TW 200425966 A 20041201; TW I315221 B 20091001; US 2004226335 A1 20041118;
US 7047783 B2 20060523

DOCDB simple family (application)

EP 04009478 A 20040422; AT 04009478 T 20040422; DE 10322664 A 20030516; DE 502004004329 T 20040422; ES 04009478 T 20040422;
JP 2004127012 A 20040422; RU 2004114829 A 20040514; TW 93110652 A 20040416; US 84712404 A 20040517