

Title (en)

Rolling mill equipped with work roll shift function

Title (de)

Walzwerk, das mit einer Arbeitswalzenverlagerungsfunktion ausgerüstet ist

Title (fr)

Laminoir doté d'une fonction de commutation de cylindre de travail

Publication

EP 2656933 B1 20160210 (EN)

Application

EP 13002093 A 20130422

Priority

JP 2012099722 A 20120425

Abstract (en)

[origin: EP2656933A1] A rolling mill equipped with a work roll shift function is provided that can improve yield and realize stable rolling with a simple means. In a six-high rolling mill or a four-high rolling mill, a pair of upper and lower work rolls (2) are provided with tapered portions (2b) in upper and lower positions in point symmetry, shift cylinders (13) are provided for shifting the pair of upper and lower work rolls (2) in roll axial directions and a strip widthwise end position detector (32) is provided for detecting strip widthwise ends of a metal strip (1), and a controller (35) is further provided for performing shift control of the shift cylinders (13) so as to cause taper start positions (2a) of the tapered portions (2b) of the pair of upper and lower work rolls (2) to coincide with the vicinities of the insides of the strip widthwise ends or the vicinities of the outsides of the strip widthwise ends detected by the strip widthwise end position detector (32).

IPC 8 full level

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CPC (source: EP)

B21B 13/142 (2013.01); **B21B 37/40** (2013.01); **B21B 38/00** (2013.01); **B21B 2263/02** (2013.01); **B21B 2269/14** (2013.01); **B21B 2269/16** (2013.01)

Citation (opposition)

Opponent : SMS group GmbH

- DE 69104169 T2 19950223 - KAWASAKI STEEL CO [JP]
- EP 1228818 A2 20020807 - HITACHI LTD [JP]
- JP H0780526 A 19950328 - SUMITOMO METAL IND
- JP S62244506 A 19871024 - NIPPON STEEL CORP
- JP S5850111 A 19830324 - MITSUBISHI HEAVY IND LTD, et al
- JP 2007196261 A 20070809 - JFE STEEL KK
- JP H0224405 A 19900126 - YAMASHITA YOSHIO
- JP 2006021210 A 20060126 - HITACHI LTD

Cited by

CN106552826A; CN114728315A; CN114728316A; EP4074430A4

Designated contracting state (EPC)

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EP 2656933 A1 20131030; EP 2656933 B1 20160210; CN 103372566 A 20131030; CN 103372566 B 20150708; IN 1488MU2013 A 20150417; JP 2013226573 A 20131107; JP 5905322 B2 20160420

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