

Title (en)  
SHEET HOT ROLLING MILL

Title (de)  
WARMBANDWALZWERK

Title (fr)  
LAMINOIR A BANDES A CHAUD

Publication  
**EP 1033182 A4 20050601 (EN)**

Application  
**EP 99940680 A 19990906**

Priority  
• JP 9904822 W 19990906  
• JP 25316198 A 19980908

Abstract (en)  
[origin: EP1033182A1] A finishing mill (30) included in a hot rolling mill system has a front stage (31) and a back stage (32). The front stage (31) is provided with two or more CVC rolling mills (31A, 31B) and the back stage (32) is provided with two or more different-diameter-roll mills (32A, 32B). When producing a thin sheet of 1.2 mm or below in thickness by rolling, the formation of crown and edge-drop can be suppressed and the formation of pincher in a tail end part of the sheet can be prevented, so that a rolled sheet can be smoothly manufactured. <IMAGE>

IPC 1-7  
**B21B 1/26**; **B21B 13/14**; **B21B 45/00**; **B21B 37/40**; **B21B 37/28**

IPC 8 full level  
**B21B 1/26** (2006.01); **B21B 13/14** (2006.01); **B21B 37/28** (2006.01); **B21B 37/40** (2006.01); **B21B 45/00** (2006.01); **B21B 13/02** (2006.01); **B21B 15/00** (2006.01); **B21B 27/02** (2006.01); **B21B 37/44** (2006.01)

CPC (source: EP KR)  
**B21B 1/26** (2013.01 - EP KR); **B21B 13/023** (2013.01 - EP); **B21B 13/142** (2013.01 - EP); **B21B 37/28** (2013.01 - EP); **B21B 37/44** (2013.01 - EP); **B21B 45/004** (2013.01 - EP); **B21B 2015/0057** (2013.01 - EP); **B21B 2267/065** (2013.01 - EP); **B21B 2269/14** (2013.01 - EP); **B21B 2273/12** (2013.01 - EP)

Citation (search report)  
• [X] EP 0276743 A1 19880803 - HITACHI LTD [JP]  
• [X] EP 0451874 A2 19911016 - HITACHI LTD [JP]  
• [X] EP 0753359 A1 19970115 - KAWASAKI STEEL CO [JP]  
• [A] EP 0819481 A1 19980121 - KAWASAKI STEEL CO [JP]  
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 045 (M - 667) 10 February 1988 (1988-02-10)  
• [AD] PATENT ABSTRACTS OF JAPAN vol. 018, no. 380 (M - 1639) 18 July 1994 (1994-07-18)  
• See references of WO 0013812A1

Cited by  
EP1547700A4; CZ298565B6; KR100819834B1; US7942029B2; US7251978B2; WO02058860A1; WO2005028136A1; WO02074460A1

Designated contracting state (EPC)  
DE GB IT

DOCDB simple family (publication)  
**EP 1033182 A1 20000906**; **EP 1033182 A4 20050601**; CN 1126613 C 20031105; CN 1277568 A 20001220; JP 2000084601 A 20000328; JP 2933923 B1 19990816; KR 100396012 B1 20030827; KR 20010031851 A 20010416; TW 425316 B 20010311; WO 0013812 A1 20000316

DOCDB simple family (application)  
**EP 99940680 A 19990906**; CN 99801542 A 19990906; JP 25316198 A 19980908; JP 9904822 W 19990906; KR 20007004924 A 20000506; TW 88115528 A 19990907