

Title (en)
HOT ROLLING METHOD AND HOT ROLLING LINE

Title (de)
WARMWALZVERFAHREN UND WARMWALZSTRASSE

Title (fr)
PROCEDE DE LAMINAGE A CHAUD ET TRAIN DE LAMINOIRS A CHAUD

Publication
EP 1346780 A4 20050316 (EN)

Application
EP 01272853 A 20011226

Priority

- JP 0111401 W 20011226
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- JP 2001116897 A 20010416
- JP 2001302509 A 20010928
- JP 2001355265 A 20011120

Abstract (en)
[origin: US2003084972A1] A hot rolling line and a hot rolling method capable of finer refining crystal grains are provided. Specifically, the hot rolling line for a metal sheet is composed of a finish rolling mill, a leveler, and a cooling apparatus installed from upstream to downstream in this sequence in a metal sheet transporting direction. The hot rolling method is such that, in the above hot rolling line, a metal sheet obtained by finish rolling a metal piece is subjected to repeated bending processing by the leveler and then cooled.

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IPC 8 full level
B21B 1/26 (2006.01); **B21B 37/76** (2006.01); **B21D 1/02** (2006.01); **C21D 8/02** (2006.01); **B21B 15/00** (2006.01); **B21B 45/02** (2006.01)

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Citation (search report)

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- [X] WO 9831482 A1 19980723 - TIPPINS INC [US], et al
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- [DX] PATENT ABSTRACTS OF JAPAN vol. 009, no. 172 (M - 397) 17 July 1985 (1985-07-17)
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- See references of WO 02053301A1

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DE FR IT

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US 2003084972 A1 20030508; CN 1426330 A 20030625; EP 1346780 A1 20030924; EP 1346780 A4 20050316; KR 20020079921 A 20021019; WO 02053301 A1 20020711

DOCDB simple family (application)
US 20417102 A 20020819; CN 01808728 A 20011226; EP 01272853 A 20011226; JP 0111401 W 20011226; KR 20027011298 A 20020828