

Publication

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Application

**EP 98104670 A 19940215**

Priority

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- EP 94890037 A 19940215

Abstract (en)

[origin: EP0611610A1] In a process for the alternative production of a hot-rolled strip (24), a hot-deformed, pre-strip (14) or a non-deformed slab made of steel by means of continuous casting, to achieve a high product quality for the thinnest possible strips and to achieve a high degree of operating flexibility, the following features are realised individually or in combination: - casting of a strand (4) of slab thickness (2) in an open-ended mould (1) having a constant cross-section throughout, - a first deformation step, comprising deformation of the strand (4) having a liquid core to reduce its thickness (2), - a second deformation step, comprising deformation of the strand (4) which has already completely solidified for further thickness reduction of the same to a pre-strip size (12), and - a third deformation step, comprising deformation of strand pieces (14) cut off from the strand (4) and preferably having a pre-strip size (12), by hot-rolling the strand pieces (14). <IMAGE>

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**B21B 1/46**

IPC 8 full level

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Citation (search report)

- [DA] WO 9200815 A1 19920123 - ARVEDI GIOVANNI [IT]
- [DA] EP 0504999 A2 19920923 - HOOGOVENS GROEP BV [NL]
- [DA] EP 0286862 B1 19920513
- [DA] EP 0327854 B1 19920401
- [A] WO 8911363 A1 19891130 - MANNESMANN AG [DE], et al
- [A] EP 0266564 A2 19880511 - SCHLOEMANN SIEMAG AG [DE]
- [A] EP 0264459 A1 19880427 - SCHLOEMANN SIEMAG AG [DE]
- [X] EHRENBERG H-J ET AL: "GIESSEN UND GIESSWALZEN DÜNNER BRAMMEN BEI DER MANNESMANNROHREN-WERKE AG", STAHL UND EISEN, no. 9/10, 16 May 1989 (1989-05-16), pages 453(87) - 462(96), XP000068364
- [A] FLEMMING G ET AL: "DIE CSP-ANLAGENTECHNIK UND IHRE ANPASSUNG AN ERWEITERTE PRODUKTIONSPROGRAMME", STAHL UND EISEN, vol. 113, no. 2, 15 February 1993 (1993-02-15), pages 37 - 46, 130, XP000358929

Cited by

CN102247987A; US7152661B2; WO2004004938A1

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**EP 0611610 A1 19940824; EP 0611610 B1 19990609**; AT 398396 B 19941125; AT A29293 A 19940415; AU 5511794 A 19940818; AU 675099 B2 19970123; BR 9400567 A 19940927; CA 2115489 A1 19940817; CN 1092343 A 19940921; DE 59408376 D1 19990715; DE 59409960 D1 20011220; EG 20366 A 19990131; EP 0853987 A2 19980722; EP 0853987 A3 19980819; EP 0853987 B1 20011114; JP 3157676 B2 20010416; JP H06238410 A 19940830; KR 100191298 B1 19990615; MX 9401190 A 19940831; TW 325421 B 19980121; US 5810069 A 19980922; US 5964275 A 19991012; ZA 941032 B 19940825

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