Title (en)
DRILLING/ROLLING METHOD IN MANUFACTURING SEAMLESS TUBE

Title (de)
BOHR-/WALZVERFAHREN BEI DER HERSTELLUNG VON NAHTLOSEN ROHREN

Title (fr)
PROCEDE DE PER AGE/LAMINAGE DESTINE A LA FABRICATION D'UN TUBE SANS SOUDURE

Publication
EP 1649945 A4 20070418 (EN)

Application
EP 04745554 A 20040603

Priority
- JP 2004007698 W 20040603
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Abstract (en)
[origin: EP1649945A1] A piercing method for manufacturing a seamless pipe capable of suppressing the rotary forging effects and suppressing the redundant shear strain without excessive narrowing of the roll diameter is provided. This method is characterized by holding a feed angle ² and a cross angle ³ of main rolls in a range satisfying the following expressions (1) to (3), setting the relationship between outer diameter "do" of the solid billet and the outer diameter "d" and thickness "t" of a hollow piece after piercing so as to satisfy the following expression (4), and further setting the relationship between inlet diameter D 1 and outlet diameter D 2 of the main roll with the above-mentioned "do", "d" and ³ so as to satisfy the following expression (5). 8 ° #¤ ² #¤ 20 ° 5 ° #¤ ³ #¤ 35 ° 15 ° #¤ ² + ³ #¤ 50 ° 1.5 #¤ ## ¨ r / ¨ ¸ #¤ 4.5 (d / d 0) / (0.75 + 0.025 ³) #¤ D 2 / D 1 In the expression (4), ¨ r = ln (2 t / d 0) ## and ## ¨ ¸ = ln { 2 (d ## t) / d 0 }

IPC 8 full level
B21B 19/04 (2006.01)

CPC (source: EP)
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- [A] DE 3844802 C2 19950511 - SUMITOMO METAL IND [JP]
- [A] GB 2202778 A 19881005 - SUMITOMO METAL IND
- [A] JP S6431505 A 19890201 - SUMITOMO METAL IND
- [A] DE 3212742 A1 19821104 - SUMITOMO METAL IND [JP]
- [A] DE 2054541 A1 19710519
- See references of WO 2004108310A1

Cited by
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DE IT

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