

Title (en)

Process for producing steel strip for deep drawing and redrawing of steel cans

Title (de)

Verfahren zum Herstellen von Stahlband zum Tiefziehen von Stahldosen

Title (fr)

Procédé de fabrication d'une bande d'acier destinée à la fabrication par emboutissage et re-emboutissage de récipients en acier

Publication

EP 0718411 A1 19960626 (FR)

Application

EP 95402752 A 19951207

Priority

FR 9415350 A 19941221

Abstract (en)

A steel strip from which drink cans are to be made, is prepared from a hot-rolled strip of very low carbon steel, which is first cold-rolled, then annealed at 600-700 degrees C, then cold-rolled again with at least two passes to reduce its thickness by at least 35%, pref. 38-47%. Pref. the process is continuous, and the two passes reduce the thickness by at least 25% and 5% respectively. The steel may comprise $\geq 0.006\%$ C, $\geq 0.02\%$ Si, 0.15-0.35% Mn, $\geq 0.015\%$ S, $\geq 0.015\%$ P, $\geq 0.006\%$ N, 0.02-0.06% Al and the rest Fe apart from incidental impurities. The resulting strip has a thickness less than 0.2 mm, pref. less than 0.17 mm, and a bursting strength of at least 600 MPa.

Abstract (fr)

Procédé de fabrication d'une bande d'acier destinée à la fabrication par emboutissage et ré-emboutissage de récipients en acier, selon lequel on approvisionne une bande en acier du type ultra-bas carbone, laminée à chaud, on effectue un premier laminage à froid de la bande pour obtenir une ébauche, on soumet l'ébauche à un recuit, et on effectue un deuxième laminage à froid effectué en au moins deux passes. Bande en acier obtenue par le procédé.

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CPC (source: EP US)

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Citation (search report)

- [Y] EP 0524162 A2 19930120 - CENTRE RECH METALLURGIQUE [BE]
- [Y] DE 4319431 C1 19941103 - RASSELSTEIN AG [DE]
- [A] EP 0574814 A2 19931222 - KAWASAKI STEEL CO [JP]
- [A] FR 2115285 A1 19720707 - NIPPON KOKAN KK
- [A] FR 1438853 A 19660513 - YAWATA IRON & STEEL CO
- [A] J.R. FEKETE ET AL: "Advanced Sheet Steels for Automotive Applications", JOM, vol. 44, no. 1, WARRENDALE US, pages 17 - 21, XP000562415

Cited by

EP0943696A4; CN1055316C; EP0906961A1; FR2769251A1; WO9801242A1

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