Title (en)

VERY THIN 2-PIECE CONTAINER STEEL SHEET EXCELLENT IN PUCKER RESISTANCE AT NECK DIAMETER REDUCTION AND IN EARING AND PRODUCTION METHOD THEREFOR

Title (de)

SEHR DÜNNES, 2 TEILIGES BEHÄLTERSTAHLBLECH MIT HERVORRAGENDEN KRÄUSEL- UND ZIPFELBILDUNGSEIGENSCHAFTEN BEI DER REDUKTION DES HALSTEILS UND VERFAHRE ZU DESSEN HERSTELLUNG

Title (fr)

TOLE D'ACIER TRES MINCE DESTINEE A UN CONTENANT EN DEUX MORCEAUX, TRES RESISTANTE A LA FORMATION DE PLIS ET CORNES D'EMBOUTISSAGE LORS DE LA REDUCTION DU DIAMETRE DU COL, ET PROCEDE DE PRODUCTION ASSOCIE

Publication

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Application

EP 00915519 A 20000413

Priority

- JP 0002426 W 20000413
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Abstract (en)

[origin: EP1088905A1] The present invention provides a steel sheet for a two-piece can characterized in that the equation, (N existing as AlN)/(N content)>0.5, is satisfied, the average diameter of AlN is in the range of 0.01 to 0.10 mu m, the ratio of the number of AlN with a diameter of 0.01 mu m or less to the number of AlN with a diameter of at least 0.005 mu m is 10% or less, the average diameter of MnS is in the range of 0.03 to 0.40 mu m, and the ratio of the number of MnS with a diameter of 0.03 mu m or less to the number of MnS with a diameter of at least 0.005 mu m is 50% or less. Further, by specifying chemical composition, slab reheating temperature and coiling temperature in hot rolling, and re-cold-rolling reduction ratio after annealing, a high yield of steel sheet and good can formability can be achieved, the wrinkle generation rate during neck diameter reduction after drawing, ironing and stretching can be reduced and, further, good properties can be obtained even processed at a low annealing temperature. Thus the production of a highly efficient steel sheet for a two-piece can capable of averting heat-buckle is made possible. Further, buckling generation at an annealing process, earing generation during cup forming and wrinkle generation during the diameter reduction of a can body opening can be avoided. And thus a steel sheet for a two-piece can with a thickness of 0.19mm or less can be provided. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- [Y] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 14 31 December 1998 (1998-12-31)
- [AD] PATENT ABSTRACTS OF JAPAN vol. 014, no. 382 (C - 0749) 17 August 1990 (1990-08-17)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 02 28 February 1997 (1997-02-28)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 03 29 March 1996 (1996-03-29)
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