

Title (en)
USE OF A STEEL IN ATMOSPHERES CONTAINING HYDROGEN SULFIDE

Publication
EP 0160616 A3 19861230 (DE)

Application
EP 85730016 A 19850201

Priority
DE 3415590 A 19840424

Abstract (en)
[origin: US4631095A] A ferritic perlite steel is used for pipes and tubing to be highly resistant against stress corrosion cracking when exposed to H₂S, and having following alloying range, all percentages by weight: from 0.3 to 0.45 C, from 1.4 to 1.8 Mn, from 0.2 to 0.5 Si, from 0.2 to 0.5 Cr, from 0.04 to 0.1 V, up to 0.06 Nb, ≤ 0.003 S, the remainder being iron whereby the combined Niobium and Vanadium content must obey the rule that the sum of the V content plus twice the Nb content must not be not less than 0.1%; tubing is made by hot working followed by cooling in air from the final temperature attained during hot working, so that a texture and grain size in accordance with ASTM finer than 8 obtains; the tubing has strength value of 552 N/mm² $\leq 0.2\%$ of rupture elongation limit ≤ 655 N/mm² and a tensile strength exceeding 655 N/mm².

IPC 1-7
C21D 8/10; **C22C 38/04**

IPC 8 full level
C22C 38/00 (2006.01); **C21D 8/10** (2006.01); **C22C 38/04** (2006.01)

CPC (source: EP US)
C21D 8/10 (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US)

Citation (search report)
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• [A] US 4282047 A 19810804 - YAMAGATA MITSUKUNI, et al
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• [A] US 3741822 A 19730626 - FORTON A [US]

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