

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 H<sub>2</sub>S, 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,  $\leq 0.003$  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/mm<sup>2</sup>  $\leq 0.2\%$  of rupture elongation limit  $\leq 655$  N/mm<sup>2</sup> and a tensile strength exceeding 655 N/mm<sup>2</sup>.

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)  
• [AD] GB 2101014 A 19830112 - MANNESMANN AG [DE]  
• [A] GB 839063 A 19600629 - FAGERSTA BRUKS AB  
• [A] US 4282047 A 19810804 - YAMAGATA MITSUKUNI, et al  
• [A] US 4256517 A 19810317 - WAID GEORGE M, et al  
• [A] US 3741822 A 19730626 - FORTON A [US]

Cited by  
EP0940476A4; EP0924312A4; EP0461734A1

Designated contracting state (EPC)  
AT BE FR GB IT

DOCDB simple family (publication)  
**EP 0160616 A2 19851106**; **EP 0160616 A3 19861230**; **EP 0160616 B1 19881019**; AT E38059 T1 19881115; BR 8501925 A 19851224; CA 1239332 A 19880719; DE 3415590 A1 19851031; DE 3415590 C2 19871112; JP S60234952 A 19851121; US 4631095 A 19861223

DOCDB simple family (application)  
**EP 85730016 A 19850201**; AT 85730016 T 19850201; BR 8501925 A 19850423; CA 479760 A 19850423; DE 3415590 A 19840424; JP 8436985 A 19850419; US 72679985 A 19850424