

Title (en)
Stainless austenitic steel suitable for the manufacture of wires

Title (de)
Rostfreier austenitischer Stahl geeignet für die Herstellung von Drähte

Title (fr)
Acier inoxydable austénitique pour l'élaboration notamment de fil

Publication
EP 0738783 A1 19961023 (FR)

Application
EP 96400736 A 19960405

Priority
FR 9504782 A 19950421

Abstract (en)
Austenitic stainless steel consists of wt.%:- max. 0.2 C; max 0.2 N; 0.3-4 Mn; 14-23 Cr; 5-17 Ni; 0.3-2 Si; max 0.1 S; 0.005-0.012 O; 0.00001-0.002 Al. max 0.0002 Mg; 0.00001-0.0005 Ca; max 0.005 Ti. Inside the steel area oxide inclusions as follows:- 40-60 SiO₂; 5-50 MnO; 1-30 CaO; 0.1-20 MgO; 3-25 Al₂O₃; 0.1-10 Cr₂O₃.

Abstract (fr)
Acier inoxydable austénitique pour la réalisation de fil pouvant être utilisé dans le domaine du tréfilage en diamètre inférieur à 0,3 mm et dans le domaine de la réalisation de pièces soumises à la fatigue, caractérisé en la composition pondérale suivante: carbone <= 200. 10<-3>%, azote <= 200. 10<-3>%, 0,3% <= manganèse <= 4%, 14% <= chrome <= 23%, 5% <= nickel <= 17%, 0,3% <= silicium <= 2%, soufre <= 10.10-3%, 50.10<-4>% <= oxygène total <= 120.10<-4>%, 0,1.10<-4>% <= aluminium <= 20.10<-4>%, magnésium <= 2.10<-4>%, 0,1.10<-4>% <= calcium <= 5.10<-4>%, titane <= 5.10<-3>%, des impuretés inhérentes à la fabrication, et dans lequel des inclusions d'oxydes ont, sous forme de mélange vitreux, les proportions pondérales suivantes: 40% <= SiO₂ <= 60%, 5% <= MnO <= 50%, 1% <= CaO <= 30%, 0,1% <= MgO <= 20%, 3% <= Al₂O₃ <= 25%, 0,1% <= Cr₂O₃ <= 10% <IMAGE>

IPC 1-7
C22C 38/40

IPC 8 full level
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CPC (source: EP KR US)
C21D 8/065 (2013.01 - EP US); **C22C 38/40** (2013.01 - EP KR US)

Citation (search report)
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• [A] FR 2456785 A1 19801212 - DAIDO STEEL CO LTD [JP]
• [A] US 5314549 A 19940524 - MISAO HITOSHI [JP], et al
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