

Title (en)  
ELECTRO-GALVANIZED SUPER-STRENGTH DUAL-PHASE STEEL RESISTANT TO DELAYED CRACKING, AND MANUFACTURING METHOD THEREFOR

Title (de)  
ELEKTROGALVANISierter SUPERFESTER ZWEIFASenSTAHL MIT BESTändigKEIT GEGEN VERZögERTES KRACKEN UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
ACIER BIPHASé ÉLECTRO-GALVANISÉE À SUPER-RÉSISTANCE RésISTANT À LA FISSURATION DIFFÉRÉE ET SON PROCÉDÉ DE FABRICATION

Publication  
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Application  
**EP 21813639 A 20210525**

Priority  
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• CN 2021095802 W 20210525

Abstract (en)  
[origin: EP4159887A1] Disclosed is an electro-galvanized super-strength dual-phase steel resistant to delayed cracking. A matrix structure thereof is ferrite + tempered martensite and the steel contains the following chemical elements in the following mass percentages: C: 0.07-0.1%, Si: 0.05-0.3%, Mn: 2.0-2.6%, Cr: 0.2-0.6%, Mo: 0.1-0.25%, Al: 0.02-0.05%, Nb: 0.02-0.04%, and V: 0.06-0.2%. Also disclosed is a method for manufacturing the electro-galvanized super-strength dual-phase steel resistant to delayed cracking, the method comprising the steps of: smelting and continuous casting, hot rolling, cold rolling, annealing, tempering, leveling and electroplating. The electro-galvanized super-strength dual-phase steel resistant to delayed cracking according to the present invention not only has better mechanical properties, but also has excellent delayed cracking resistance and low initial hydrogen content.

IPC 8 full level  
**C21D 1/18** (2006.01); **C21D 1/26** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/32** (2006.01); **C22C 38/38** (2006.01)

CPC (source: CN EP US)  
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