Title (en)

Cr STEEL FOR STRUCTURAL USE AND METHOD FOR PRODUCING THE SAME

Title (de)

Cr-STAHL FüR DIE BAUANWENDUNG UND HERSTELLUNGSVERFAHREN DAFüR

Title (fr)

ACIER A BASE DE CR POUR UNE UTILISATION STRUCTURELLE ET PROCEDE DE PRODUCTION ASSOCIE

Publication

EP 1538230 A4 20071114 (EN)

Application

EP 03794112 A 20030828

Priority

- JP 0310908 W 20030828
- JP 2002257229 A 20020903

Abstract (en)

[origin: US2005241737A1] To provide structural Cr-containing steel with excellent low-temperature toughness and impact toughness, with low costs as compared with stainless steel, and with sufficient corrosion resistance. Specifically, this is structural Cr-containing steel and a manufacturing method thereof, wherein the Cr-containing steel contains C of 0.002 to 0.02%; N of 0.002 to 0.02%; Si of 0.05 to 1.0%; Mn of 0.05 to 1.0%; P of 0.04% or less; S of 0.02% or less; Al of 0.001 to 0.1%; and Cr of 6.0 to 10.0%, further may contain Cu of 0.1 to 1.0%, further may contain at least one of: Ni of 0.1 to 1.0%; and Mo of 0.1 to 1.0%, and further may contain at least one of: Nb of 0.005 to 0.10%; and V of 0.005 to 0.20%, the balance are formed of Fe and unavoidable impurities, and the Cr-concentration in the surface layer of the steel is equal to or more than the value wherein 1% is subtracted from the Cr-concentration within the steel.

IPC 1-7

C22C 38/00; C22C 38/18; C22C 38/48

IPC 8 full level

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Citation (search report)

- [X] JP H08143959 A 19960604 - NIPPON STEEL CORP
- [E] EP 1378580 A1 20040107 - JFE STEEL CORP [JP]
- [A] "Nichtrostende Stähle", 1989, STAHLEISEN, XP002428268
- See references of WO 2004022808A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

US 2005241737 A1 20051103; CN 1303242 C 20070307; CN 1678766 A 20051005; DE 60326247 D1 20090402; EP 1538230 A1 20050608; EP 1538230 A4 20071114; EP 1538230 B1 20090218; KR 100665128 B1 20070109; KR 20050057106 A 20050616; TW 200404904 A 20040401; TW I306123 B 20090211; WO 2004022808 A1 20040318

DOCDB simple family (application)

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