

Title (en)

High-strength steel for large-scaled forging, and crankshaft

Title (de)

Hochfester Stahl für die Herstellung von großen Schmiedestücken, insbesondere von Kurbelwellen

Title (fr)

Acier à haute résistance pour la fabrication de grosses pièces forgées notamment de vilebrequins

Publication

EP 1602742 B1 20090715 (EN)

Application

EP 05011252 A 20050524

Priority

JP 2004163638 A 20040601

Abstract (en)

[origin: EP1602742A1] A high-strength steel for a large-scaled forging consists essentially of, by mass, C: 0.30 to 0.50 %, Si: more than 0.15 %, but not more than 0.40 %, Mn: 0.80 to 1.20 %, Ni: 0.80 to 2.5 %, Cr: 1.0 to 3.0 %, Mo: 0.35 to 0.70 %, V: 0.10 to 0.25 %, and balance: Fe and unavoidable impurities. The high-strength steel is low in cost as compared to 3.5NiCrMo steel proposed as high-strength Ni-Cr-Mo steel for large forgings such as a rotor shaft of a generator, and has excellent strength and toughness as compared to 34CrNiMo6.

IPC 8 full level

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CPC (source: EP KR)

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Cited by

CN103233111A; CN104889295A; CN112658180A; EP2036992A4; CN105603169A; CN102728772A; US2014345756A1; CN104178699A; CN102722762A; EP2671963A1; CN103352113A; CN108474071A; EP3406747A4; US10253398B2; US8057737B2

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