

Title (en)

Long-life heat-resisting low alloy steel welded component and method of manufacturing the same

Title (de)

Langlebiges, niedrig legiertes, hitzbeständiges geschweisstes Stahlwerkstück und Verfahren zu dessen Herstellung

Title (fr)

Pièce d'acier soudé, faiblement allié et résistant aux températures élevées ayant une vie élevée

Publication

EP 1418245 A3 20041006 (EN)

Application

EP 03025611 A 20031106

Priority

- JP 2002322969 A 20021106
- JP 2003357568 A 20031017

Abstract (en)

[origin: EP1418245A2] The method of manufacturing a long-life heat-resisting low alloy steel welded component, with which creep damages do not easily occur in the heat affected zone. The manufacturing method includes the steps of subjecting a base metal containing, at % by weight, C: 0.15% or less, Si: 0.5% or less, Mn: 0.3 to 0.8%, Cr: 1.9 to 2.6%, Mo: 0.87 to 1.20%, and a balance of iron and unavoidable impurities, to a hot working (S3), to a heat treatment (S5), and then to a welding (S8). In this method the base metal is normalized (S2) once or more times before the welding (S8) in addition to the hot working (S3). <IMAGE>

IPC 8 full level

B23K 9/23 (2006.01); **C21D 1/28** (2006.01); **C21D 8/00** (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/22** (2006.01); **C22C 38/32** (2006.01); **B23K 103/04** (2006.01)

CPC (source: EP US)

C21D 1/28 (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US)

Citation (search report)

- [XA] EP 1143026 A1 20011010 - SUMITOMO METAL IND [JP]
- [XA] US 4406711 A 19830927 - NAGUMO MICHIIHIKO [JP], et al
- [XA] EP 0560375 A2 19930915 - SUMITOMO METAL IND [JP], et al
- [XA] GB 1056971 A 19670201 - TRAFIKAKTIEBOLAGET GRAENGESBER
- [XA] US 2645574 A 19530714 - CLARK CLAUDE L
- [XA] EP 0505732 A1 19920930 - SUMITOMO METAL IND [JP], et al
- [XA] EP 0411515 A1 19910206 - MITSUBISHI HEAVY IND LTD [JP]
- [A] US 2002007871 A1 20020124 - NISHIMURA NOBUHIKO [JP], et al
- [A] US 4394187 A 19830719 - OHTANI HIROO [JP], et al
- [A] EP 0787813 A1 19970806 - SUMITOMO METAL IND [JP], et al
- [A] GB 1456949 A 19761201 - DALMINE SPA
- [A] US 4032333 A 19770628 - JOSEFSSON ERIK ANDERS AKE
- [XA] PATENT ABSTRACTS OF JAPAN vol. 016, no. 358 (C - 0970) 4 August 1992 (1992-08-04)
- [XA] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10 31 August 1998 (1998-08-31)
- [XA] PATENT ABSTRACTS OF JAPAN vol. 016, no. 358 (C - 0970) 4 August 1992 (1992-08-04)

Cited by

CN113275712A; US9352369B2; WO2013119980A1; EP2764127B1

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EP 1418245 A2 20040512; **EP 1418245 A3 20041006**; **EP 1418245 A9 20040811**; CA 2448091 A1 20040506; JP 2005139470 A 20050602; JP 4254483 B2 20090415; US 2004089701 A1 20040513

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EP 03025611 A 20031106; CA 2448091 A 20031104; JP 2003368915 A 20031029; US 69982503 A 20031104