

Title (en)

Surface-blasted steam generator parts or power plant components

Title (de)

Oberflächengestrahlte Dampferzeugerbauteile oder Kraftwerkskomponenten

Title (fr)

Composants grenaillés d'une chaudière ou d'une centrale électrique

Publication

**EP 1985919 A3 20091223 (DE)**

Application

**EP 07150101 A 20071219**

Priority

DE 102006062348 A 20061222

Abstract (en)

[origin: US2008149047A1] A steam boiler module or steam boiler assembly or a power station component is composed essentially of an alloyed, in particular chromium-containing material and consists, at least in part of a material which has been treated by surface blasting (shot-peening/shot blasting). With steam boilers having outlet temperatures of  $\geq 700^{\circ}\text{C}$ . in power station components, in particular steam generator modules, the material provides an adequate strength, in particular long-term rupture strength and an adequate corrosion resistance as well as oxidation resistance. The material has a ferritic or martensitic or austenitic structure having a mean chromium content  $\leq 18\%$  by weight, and at least a module surface or module group surface or component surface that has been treated, at least in part, by surface blasting (shot-peening/shot blasting).

IPC 8 full level

**F22B 37/04** (2006.01); **C21D 7/06** (2006.01)

CPC (source: EP US)

**B24C 1/10** (2013.01 - EP US); **C21D 6/002** (2013.01 - EP US); **C21D 7/06** (2013.01 - EP US); **C21D 9/08** (2013.01 - EP US); **F22B 37/04** (2013.01 - EP US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US); **Y10T 428/12993** (2015.01 - EP US)

Citation (search report)

- [XY] EP 1637785 A1 20060322 - SUMITOMO METAL IND [JP]
- [X] FR 2318229 A1 19770211 - NIPPON KOKAN KK [JP]
- [E] EP 2060641 A1 20090520 - NKKTUBES [JP]
- [Y] US 3648498 A 19720314 - VOSS RICHARD F, et al
- [Y] EP 0937782 A2 19990825 - SUMITOMO METAL IND [JP]
- [A] WO 03046242 A1 20030605 - INTEGRAN TECHNOLOGIES INC [CA]
- [A] QIURONG CHEN ET AL: "NEW BOILER AND PIPING MATERIALS DESIGN CONSIDERATION FOR ADVANCED CYCLE CONDITIONS// AUSLEGUNGSKRITERIEN NEUER KESSELUND ROHRIETUNGSWERKSTOFFE FUER FORTGESCHRITTENE DAMPFPARAMETER", VGB POWERTECH, VGB POWERTECH, ESSEN, DE, vol. 83, no. 11, 1 January 2003 (2003-01-01), pages 91 - 98, XP001185009, ISSN: 1435-3199
- [A] HUSEMANN R U ET AL: "VERARBEITUNG UND BETRIEBSEINSATZ VON NEUEN WERKSTOFFEN IM KRAFTWERKSBAU", 1 March 1995, VGB KRAFTWERKSTECHNIK, VGB KRAFTWERKSTECHNIK GMBH. ESSEN, DE, PAGE(S) 265 - 279, ISSN: 0372-5715, XP000498095

Cited by

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Designated extension state (EPC)

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**US 2008149047 A1 20080626**; AU 2007231720 A1 20080710; CA 2609019 A1 20080622; DE 102006062348 A1 20080703; DE 102006062348 B4 20161006; DK 1985919 T3 20140526; EP 1985919 A2 20081029; EP 1985919 A3 20091223; EP 1985919 B1 20140219; ES 2473624 T3 20140707; PL 1985919 T3 20140731; RU 2007145088 A 20090620; RU 2399836 C2 20100920; SI 1985919 T1 20140630; ZA 200711099 B 20081126

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**US 461207 A 20071221**; AU 2007231720 A 20071029; CA 2609019 A 20071031; DE 102006062348 A 20061222; DK 07150101 T 20071219; EP 07150101 A 20071219; ES 07150101 T 20071219; PL 07150101 T 20071219; RU 2007145088 A 20071206; SI 200731455 T 20071219; ZA 200711099 A 20071220