

Title (en)  
FE-BASED HARDFACING ALLOY

Title (de)  
AUFSCHWEISSMETALLLEGIERUNG AUS FE-BASIS

Title (fr)  
ALLIAGE A BASE DE FE, TRAITE PAR SURFACAGE DE RENFORT

Publication  
**EP 1563108 A4 20050921 (EN)**

Application  
**EP 02760859 A 20020826**

Priority  
KR 0201608 W 20020826

Abstract (en)  
[origin: WO2004018724A1] An iron-based (Fe-based) hardfacing alloy is provided. The Fe-based hardfacing alloy has excellent wear resistance, excellent cavitation erosion resistance, and excellent corrosion resistance, thereby being substituted for a cobalt-based (Co-based) stellite alloy, which has been used for the hardfacing of a nuclear power plant valve. When the provided Fe-based hardfacing alloy is used for the hardfacing of the nuclear power plant valve, inexpensive Fe can be substituted for expensive Co and radiation fields formed by 58Co and 60Co radioactive isotopes can be efficiently reduced.

IPC 1-7  
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IPC 8 full level  
**G21D 1/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/18** (2006.01); **C22C 38/36** (2006.01)

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**G21D 1/00** (2013.01 - EP US)

Citation (search report)  
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• [A] GB 1366894 A 19740918 - FELTZ M  
• [A] US 3926622 A 19751216 - KIYONAGA KINGO, et al  
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• [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 03 27 February 1998 (1998-02-27)  
• [A] VIKSTROEM JUSSI: "Galling resistance of hardfacing alloys replacing Stellite", ELSEVIER SCIENCE S.A., WEAR, 1994, pages 143 - 146, XP009050805  
• See references of WO 2004018724A1

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