

Title (en)
Member for use in contact with molten nonferrous metals

Title (de)
Tauchteil für Schmelzbad aus Nichteisenmetallen

Title (fr)
Élément d'immersion pour bain de métaux non-ferreux

Publication
EP 0808914 A1 19971126 (EN)

Application
EP 97108034 A 19970516

Priority
JP 16659296 A 19960522

Abstract (en)
The member for use in contact with molten nonferrous metals comprises a substrate made of an Fe-base alloy and a dense surface layer composed of an oxide or oxynitride. The oxide or oxynitride surface layer is formed by preheating the substrate in a non-oxidizing atmosphere such as a nitrogen gas, and then heat-treating it in an oxidizing or oxynitriding atmosphere containing steam such as a mixture of the air and an overheated steam, or in an atmosphere generating oxygen and steam such as a mixed gas comprising a hydrogen gas and a carbon dioxide gas, at a temperature of 650 DEG C and 1100 DEG C.

IPC 1-7
C23C 8/18; **C23C 2/00**

IPC 8 full level
C23C 2/00 (2006.01); **C23C 8/18** (2006.01)

CPC (source: EP)
C23C 8/18 (2013.01)

Citation (search report)
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• [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 273 (C - 445) 4 September 1987 (1987-09-04)
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US2015104333A1; US10711335B2; WO02068708A1

Designated contracting state (EPC)
DE FR

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