

Title (en)
CORROSION-RESISTANT PERMANENT MAGNET AND METHOD FOR PRODUCING THE SAME

Title (de)
KORROSIONSRÉSISTENTE DAUERMAGNET UND IHRES HERSTELLUNGSVERFAHREN

Title (fr)
AIMANT PERMANENT RÉSISTANT A LA CORROSION ET SON PROCÉDE DE FABRICATION

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Application
EP 99943247 A 19990910

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Abstract (en)
The present invention provides an Fe-B-R based permanent magnet, which has a chemical conversion coating film formed on its surface with an aluminum film interposed therebetween, the chemical conversion coating film containing at least one of titanium and zirconium, phosphorus, oxygen and fluorine as constituting elements, and a process for producing such an Fe-B-R based permanent magnet. In the permanent magnet, the chemical conversion coating film is adhered firmly to the magnet with the aluminum film interposed therebetween and hence, the magnet is excellent in corrosion resistance. Even if the magnet is left to stand for a long time under high-temperature and high-humidity conditions of a temperature of 80 DEG C and a relative humidity of 90 %, the magnet exhibits a stable high magnetic characteristic which cannot be deteriorated. Moreover, the film is free from hexa-valent chromium.

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