

Title (en)  
ZIRCONIUM NIOBIUM-TIN-IRON ALLOY FOR USE IN NUCLEAR REACTORS AND METHOD OF ITS MANUFACTURE

Title (de)  
ZIRKON-NIOB-ZINN-EISEN-LEGIERUNG ZUR VERWENDUNG IN KERNREAKTOREN UND VERFAHREN ZUR DEREN HERSTELLUNG

Title (fr)  
ALLIAGES ZIRCONIUM-NIOBIUM-ETAIN MODIFIES DESTINES A L'UTILISATION DANS DES REACTEURS NUCLEAIRES ET PROCEDE DE FABRICATION

Publication  
**EP 1259653 A1 20021127 (EN)**

Application  
**EP 01906602 A 20010119**

Priority  
• US 0101845 W 20010119  
• US 50691300 A 20000218

Abstract (en)  
[origin: WO0161062A1] A corrosion resistant zirconium based alloy for use in nuclear fuel cladding is made of a low tin content zirconium alloy consisting essentially of: by weight percent, 0.60-2.0 Nb; when Sn is 0.25, then Fe is 0.50; when Sn is 0.40, then Fe is 0.35 to 0.50; when Sn is 0.50, then Fe is 0.25 to 0.50; when Sn is 0.70, then Fe is 0.05 to 0.50; when Sn is 1.0, then Fe is 0.05 to 0.50 (area 10 of FIG. 1); where the weight percent of Fe plus Sn is greater than 0.75, with no more than 0.50 additional other component elements and with the remainder Zr.

IPC 1-7  
**C22C 16/00**; **C22F 1/18**; **G21C 3/07**

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AT FR

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