

Title (en)

METHOD FOR PROCESSING BETA TITANIUM ALLOYS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON BETA-TITANLEGIERUNGEN

Title (fr)

PROCEDE DE TRAITEMENT D'ALLIAGES DE BETA TITANE

Publication

EP 1466028 A4 20050420 (EN)

Application

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Abstract (en)

[origin: WO03052155A1] An embodiment of the present invention comprises processing a beta titanium alloy by a method including the steps of cold working the alloy and then direct aging the alloy for a total aging time of less than 4 hours. The method may include fabricating the alloy into the article of manufacture such as, for example, a bar, wire, or a coil spring. The method may be utilized to produce articles with high tensile strength while retain ductility. The beta titanium alloy may be any beta titanium alloy, for example, the alloy comprising, by weight, 3.0 % to 4.0 % aluminium, 7.5 to 8.5 % vanadium, 5.5 to 6.5 % chromium, 3.5 to 4.5 % molybdenum, 3.5 to 4.5 % zirconium, and titanium. The alloy may be hot worked, cold worked to provide a 5 to 60 % reduction, and irect aged for a total time of less than 4 hours.

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CPC (source: EP US)

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