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(54) **BETA TYPE TITANIUM ALLOY AND PROCESS FOR PRODUCING THE SAME**

(57) The present invention provides a β type titanium alloy **characterized by** consisting of, by mass %, V: 15 to 25%, Al: 2.5 to 5%, Sn: 0.5 to 4%, O (Oxygen): not more than 0.20%, H: not more than 0.03%, Fe: not more than 0.40%, C: not more than 0.05% and N: not more than 0.02%, and the balance Ti and impurities.

The present invention also provides a method of manufacturing a β type titanium alloy **characterized by** comprising the following steps (a) to (c):

(a) Preparing a β type titanium alloy consisting of, by mass %, V: 15 to 25%, Al: 2.5 to 5%, Sn: 0.5 to 4%, O (Oxygen): not more than 0.20%, H: not more than 0.03%, Fe: not more than 0.40%, C: not more than 0.05% and N: not more than 0.02%, and the balance Ti and impurities.

(b) Pickling the β type titanium alloy in an aqueous solution including 3 to 40 mass % of HF, and

(c) Further pickling the β type titanium alloy in an aqueous solution including 3 to 6 mass % of HF and 5 to 20 mass % of HNO_3 .

Fig. 1

