

Abstract of the Disclosure

AN ALLOYING SYSTEM

An alloying system for preparing a titanium alloy, the system comprising a rotating mill to mechanically alloy a mixture of elemental powders in predetermined proportions, the elemental powders including titanium particles, alpha stabilizer particles and beta stabilizer particles; wherein the mixture is mechanically alloyed using low impact energy to layer the titanium particles with beta stabilizer particles whereby sintering of the mechanically alloyed mixture produces alternate layers of alpha and beta stabilizer particles.

Fig. 2