

Title (en)

Process for preparing secondary powder particles with a nanocrystalline structure and with a closed surface.

Title (de)

Verfahren zur Herstellung von Sekundärpulverteilchen mit nanokristalliner Struktur und mit versiegelter Teilchenoberfläche.

Title (fr)

Procédé pour la préparation de poudre secondaire à structure nanocristalline et à surface fermée.

Publication

**EP 0319786 B1 19931027 (DE)**

Application

**EP 88119570 A 19881124**

Priority

DE 3741119 A 19871204

Abstract (en)

[origin: JPH01208401A] PURPOSE: To advantageously produce powder having nanocrystalline structure and its compact by applying high external force to mixed powder of metal, compound, ceramic, etc., having a composition capable of adjusting an amorphous structure content. CONSTITUTION: Among a metal of Ti, Ni, etc., a compound having metallic property and a ceramic material, powders of two kinds or more capable of adjusting an amorphous structure content are mixed. The mixed powder is applied with the high external force of at least 12 g up to not to detect a crystal of <10 nm by transmission pick up in a electron microscope. By this method, A secondary powder particulate having a nanocrystalline structure and a sealed particulate surface is obtained. a compact having, nanocrystalline structure is obtained by compressing the secondary powder particulate at a temp. lower the recrystallization temp.

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