

Title (en)
Sinterable metal powder mixture for the production of autolubricant parts

Title (de)
Sinterfähige Metallpulvermischung zur Herstellung von selbstschmierenden Teilen

Title (fr)
Mélange de poudres apte à être fritté pour former un matériau solide autolubrifiant

Publication
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Application
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Priority
FR 0500287 A 20050112

Abstract (en)
[origin: EP1681116A1] The powder mixture consists of powder of metal alloy, particles of cerium trifluoride (solid lubricant A), and particles of solid lubricant (B) for reacting with component of metal alloy during sintering of powder to form lubricating phase. The powder of metal alloy is a precursor for matrix of self-lubricating solid material. The solid lubricant (A) is inserted in the matrix without reacting with metal alloy during sintering of powder. The solid lubricant (B) is tungsten disulfide or molybdenum disulfide. The lubricating phase contains sulfur compound(s) of hexagonal structure such as chromium sulfide (Cr 7S 8). The metal alloy is an alloy based on iron, nickel or cobalt. The component of metal alloy is chromium. Independent claims are included for the following: (1) preparation of self-lubricating solid material; and (2) mechanical component made of self-lubricating solid material.

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