

Title (en)

BEARING HAVING EMBEDDED HARD PARTICLE LAYER AND OVERLAY AND METHOD OF MANUFACTURE

Title (de)

LAGER MIT EINGEBETTETER HARTTEILCHENSCHICHT UND ÜBERZUG UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

PALIER AYANT UNE COUCHE DE PARTICULES DURES INCORPORÉES ET UNE COUVERTURE ET PROCÉDÉ DE FABRICATION

Publication

EP 1957810 A1 20080820 (EN)

Application

EP 05853553 A 20051209

Priority

US 2005044669 W 20051209

Abstract (en)

[origin: WO2007067182A1] A multilayer sliding bearing includes a rigid metal backing (12) having a metal bearing liner (14) attached thereto. The metal bearing liner includes a metal bearing liner layer (16) which is attached to the bearing surface of the metal backing layer and at least one metal overplate layer deposited over an outer surface of the metal bearing liner layer. The metal bearing liner layer has a layer (30) of hard particles embedded in an outer surface thereof which is adjacent to the inner surface of the at least one metal overplate layer. The bearing may also include a barrier layer (22) interposed between the metal bearing liner layer and the metal over plate layer to inhibit diffusion therebetween and/or promote adhesion of the metal over plate layer to the metal bearing liner layer. The invention may also include a thin metal protective coating layer (28) over the outer surface of the bearing liner and backing layer. The invention also includes a method of making a multilayer sliding bearing which includes the steps of fabricating a metal backing layer having a bearing surface, attaching a metal bearing liner layer having an outer surface to the bearing surface of the metal backing layer, embedding a layer of hard particles in the outer surface of the metal bearing liner layer and depositing at least one metal overplate layer over the outer surface of the metal bearing liner layer. The method may also include a step of depositing a barrier layer over the outer surface of the metal bearing liner layer prior to depositing the metal overplate layer.

IPC 8 full level

F16C 33/12 (2006.01); **F16C 33/14** (2006.01)

CPC (source: EP KR)

C23C 28/021 (2013.01 - EP); **C23C 28/023** (2013.01 - EP); **C23C 28/027** (2013.01 - EP); **C23C 30/005** (2013.01 - EP); **C25D 7/10** (2013.01 - EP); **F16C 33/12** (2013.01 - EP KR); **F16C 33/122** (2013.01 - EP); **F16C 33/14** (2013.01 - EP); **F16C 33/24** (2013.01 - KR); **F16C 33/44** (2013.01 - KR); **F16C 2220/60** (2013.01 - EP); **F16C 2220/70** (2013.01 - EP); **F16C 2223/02** (2013.01 - EP); **F16C 2223/32** (2013.01 - EP); **F16C 2223/70** (2013.01 - EP)

Cited by

US9885386B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2007067182 A1 20070614; BR PI0520738 A2 20091006; CN 101371057 A 20090218; EP 1957810 A1 20080820; EP 1957810 A4 20090701; KR 101288336 B1 20130722; KR 20080078022 A 20080826

DOCDB simple family (application)

US 2005044669 W 20051209; BR PI0520738 A 20051209; CN 200580052532 A 20051209; EP 05853553 A 20051209; KR 20087015758 A 20051209