

Title (en)  
SLIDING MEMBER

Title (de)  
GLEITELEMENT

Title (fr)  
ELEMENT COULISSANT

Publication  
**EP 1253220 A4 20060322 (EN)**

Application  
**EP 00985887 A 20001226**

Priority  

- JP 0009235 W 20001226
- JP 37114499 A 19991227

Abstract (en)  
[origin: EP1253220A1] The present invention provides a sliding member, of which the surface cavities do not disappear even after progress of wear of the sliding surface, which permits maintenance of a satisfactory seizure resistance, and has better seizure resistance, wear resistance and strength properties than in a sliding member having a porous chrome plating layer formed thereon in the conventional art. The sliding member of the invention has a laminated hard Cr plating layer comprising a plurality of hard Cr plating layers laminated on the sliding surface. Micro-cracks are formed on each hard Cr plating layer surface, and the micro-cracks of each hard Cr plating layer form micro-pores independent in the film-forming direction. On the cross-section of the laminated hard Cr plating layer, the porosity should be within a range of from 0.5 to 4.5%. <IMAGE>

IPC 1-7

**C23C 28/00**

IPC 8 full level

**C23C 26/00** (2006.01); **C23C 28/02** (2006.01); **C25D 3/04** (2006.01); **C25D 5/14** (2006.01); **C25D 5/18** (2006.01); **C25D 7/10** (2006.01)

CPC (source: EP KR US)

**C23C 26/00** (2013.01 - EP US); **C23C 28/00** (2013.01 - KR); **C23C 28/023** (2013.01 - EP US); **C25D 3/04** (2013.01 - EP US);  
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**C25D 7/10** (2013.01 - EP US); **Y10T 428/12639** (2015.01 - EP US); **Y10T 428/12847** (2015.01 - EP US); **Y10T 428/12854** (2015.01 - EP US)

Citation (search report)

- [X] EP 0668375 A1 19950823 - IND S R L [IT]
- [A] EP 0909839 A1 19990421 - FEDERAL MOGUL BURSCHEID GMBH [DE]
- [A] US 4846940 A 19890711 - NEUHAEUSER HANS-JOCHEM [DE], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 06 30 April 1998 (1998-04-30)
- See references of WO 0148267A1

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US7422797B2; WO2006097057A1

Designated contracting state (EPC)  
DE SE

DOCDB simple family (publication)  
**EP 1253220 A1 20021030; EP 1253220 A4 20060322; KR 100444566 B1 20040816; KR 20020013531 A 20020220;**  
US 2002197504 A1 20021226; WO 0148267 A1 20010705

DOCDB simple family (application)

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