

Title (en)

NITRIDED VALVE LIFTER AND METHOD FOR MANUFACTURE THEREOF

Title (de)

NITRIDIERTER VENTILSTÖSSEL UND ZUGEHÖRIGES HERSTELLUNGSVERFAHREN

Title (fr)

POUSSOIR DE SOUPAPE NITRURE ET SON PROCEDE DE FABRICATION

Publication

**EP 1602743 B1 20071226 (EN)**

Application

**EP 04718747 A 20040309**

Priority

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- JP 2003063450 A 20030310

Abstract (en)

[origin: EP1602743A1] A sliding surface (2) of a valve lifter (1) or a shim (3) is subjected to a gaseous nitriding to have a surface hardness of Hv 660 or higher and a thickness of a compound layer (6) of 1 to 5  $\mu$ m. The nitrided layer on the surface is a dense compound layer (6) with a porosity of 5 % or less. <IMAGE>

IPC 8 full level

**C23C 8/32** (2006.01); **C23C 8/02** (2006.01); **C23C 8/26** (2006.01); **C23C 8/34** (2006.01); **F01L 1/14** (2006.01); **F01L 1/16** (2006.01)

CPC (source: EP KR US)

**C23C 8/02** (2013.01 - EP KR US); **C23C 8/26** (2013.01 - EP KR US); **C23C 8/32** (2013.01 - KR); **C23C 8/34** (2013.01 - EP US); **F01L 1/14** (2013.01 - KR); **F01L 1/16** (2013.01 - EP US); **F01L 2303/00** (2020.05 - EP US)

Cited by

EP1890353A1; US8220609B2; US8230986B2; US11007572B2

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**EP 1602743 A1 20051207**; **EP 1602743 A4 20070124**; **EP 1602743 B1 20071226**; CN 1784505 A 20060607; CN 1784505 B 20101103; DE 602004010890 D1 20080207; DE 602004010890 T2 20081211; ES 2295833 T3 20080416; JP 4141473 B2 20080827; JP WO2004081252 A1 20060615; KR 20050118175 A 20051215; TW 200506181 A 20050216; US 2006144359 A1 20060706; US 2008066703 A1 20080320; WO 2004081252 A1 20040923

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