

Title (en)
IRON-BASED SINTERED ALLOY VALVE SEAT

Title (de)
VENTILSITZ AUS EINER SINTERLEGIERUNG AUF EISENBASIS

Title (fr)
SIÈGE DE SOUPAPE EN ALLIAGE FRITTÉ À BASE DE FER

Publication
EP 2666981 A4 20150401 (EN)

Application
EP 12736573 A 20120120

Priority
• JP 2011009719 A 20110120
• JP 2012051191 W 20120120

Abstract (en)
[origin: EP2666981A1] A valve seat of an iron-based sintered alloy having high wear resistance in a wide temperature range, which can be used in direct injection engines with improved fuel efficiency, low emission and high power, is obtained by limiting the amount of a solid lubricant dispersed in the matrix of the valve seat of an iron-based sintered alloy, and dispersing at least two types of hard particles having different hardnesses in the matrix, thereby providing high strength and self-lubrication, as well as improved wear resistance under no lubrication in a wide temperature range.

IPC 8 full level
F01L 3/02 (2006.01); **B22F 1/00** (2006.01); **B22F 5/00** (2006.01); **C22C 27/04** (2006.01)

CPC (source: EP US)
B22F 5/008 (2013.01 - EP US); **C22C 27/04** (2013.01 - EP US); **C22C 33/0207** (2013.01 - EP US); **C22C 33/0221** (2013.01 - EP US); **C22C 33/0228** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **F01L 3/02** (2013.01 - EP US); **F01L 1/0532** (2013.01 - EP US); **F01L 1/143** (2013.01 - EP US); **F01L 2303/00** (2020.05 - EP US); **F01L 2800/18** (2013.01 - EP US); **F01L 2810/02** (2013.01 - EP US); **F01L 2820/01** (2013.01 - EP US)

Citation (search report)
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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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