

Title (en)
Hollow valve for internal combustion engines.

Title (de)
Hohlventil für Brennkraftmaschinen.

Title (fr)
Soupape creuse pour moteurs à combustion interne.

Publication
EP 0530720 B1 19950104 (DE)

Application
EP 92114808 A 19920829

Priority
DE 4129519 A 19910906

Abstract (en)
[origin: EP0530720A1] A filling additive is proposed for a hollow valve for internal combustion engines, which filling additive is composed of a chemical compound of zirconium, that is zirconium tetrafluoride. The advantage of the use of this filling additive is considered to be, in particular, the easy, highly uncomplicated handling, when the additive is used, for example, in the form of solid, crystalline ZrF₄.

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F01L 3/14

IPC 8 full level
F01L 3/14 (2006.01)

CPC (source: EP)
F01L 3/14 (2013.01)

Designated contracting state (EPC)
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DOCDB simple family (publication)
DE 4129519 C1 19930211; DE 59201141 D1 19950216; EP 0530720 A1 19930310; EP 0530720 B1 19950104; ES 2067986 T3 19950401; JP H05195730 A 19930803

DOCDB simple family (application)
DE 4129519 A 19910906; DE 59201141 T 19920829; EP 92114808 A 19920829; ES 92114808 T 19920829; JP 23812892 A 19920907