

Title (en)  
Ceramic adjusting shim.

Title (de)  
Keramisches Spielausgleichselement.

Title (fr)  
Cale de réglage en céramique.

Publication  
**EP 0523691 B1 19951102 (EN)**

Application  
**EP 92112147 A 19920716**

Priority  
JP 17951191 A 19910719

Abstract (en)  
[origin: EP0523691A2] The present invention provides a ceramic adjusting shim (4) capable of minimizing the abrasion of parts contacting the adjusting shim, for example, a cam (2) and a tappet or valve lifter (3). The ceramic adjusting shim is produced from a ceramic material and has a surface roughness of not more than 2.0  $\mu\text{m}$  in ten-point average roughness (Rz). <IMAGE>

IPC 1-7  
**F01L 1/14; F01L 1/20; F01L 1/16**

IPC 8 full level  
**C04B 35/584** (2006.01); **F01L 1/14** (2006.01); **F01L 1/16** (2006.01); **F01L 1/20** (2006.01)

CPC (source: EP)  
**F01L 1/143** (2013.01); **F01L 1/16** (2013.01); **F01L 1/205** (2013.01)

Cited by  
EP0682171A3; EP0675264A1; EP0651140A1; US5647313A; EP0617198B1

Designated contracting state (EPC)  
DE FR GB IT SE

DOCDB simple family (publication)  
**EP 0523691 A2 19930120; EP 0523691 A3 19930303; EP 0523691 B1 19951102**; CA 2073887 A1 19930120; CA 2073887 C 19961119;  
DE 69205742 D1 19951207; DE 69205742 T2 19960704; JP H08226311 A 19960903

DOCDB simple family (application)  
**EP 92112147 A 19920716**; CA 2073887 A 19920715; DE 69205742 T 19920716; JP 17951191 A 19910719