

Title (en)  
Cup-shaped tappet for an internal combustion engine

Title (de)  
Tassenstößel für eine Brennkraftmaschine

Title (fr)  
Poussoir pour moteur à combustion interne

Publication  
**EP 1659268 A1 20060524 (DE)**

Application  
**EP 05024168 A 20051105**

Priority  
DE 102004056457 A 20041123

Abstract (en)  
The tappet has an anti-twist protection unit (6) inserted in a radial recess of a shell and stepping forward in a radial direction from the shell. The unit has an outer contour in a longitudinal section, where the contour has a head (20) and a shaft (21), which has dimension that is reduced opposite to the head. The shaft has a bulge (32) and is clamped into the recess under elastic deformation of the bulge.

IPC 8 full level  
**F01L 1/14** (2006.01); **F01L 1/25** (2006.01)

CPC (source: EP US)  
**F01L 1/143** (2013.01 - EP US); **F01L 1/25** (2013.01 - EP US); **F01L 2307/00** (2020.05 - EP US); **Y10T 74/2107** (2015.01 - EP US)

Citation (applicant)  
• DE 19600852 A1 19970717 - SCHAEFFLER WAEZLAGER KG [DE]  
• DE 2829423 C2 19881110  
• DE 4115670 A1 19921119 - BAYERISCHE MOTOREN WERKE AG [DE]  
• DE 4324756 C2 19970612 - IAV MOTOR GMBH [DE]  
• DE 19501061 A1 19960718 - SCHAEFFLER WAEZLAGER KG [DE]  
• DE 19957772 A1 20010607 - BAYERISCHE MOTOREN WERKE AG [DE]  
• DE 10123966 A1 20021121 - INA SCHAEFFLER KG [DE]  
• DE 4337330 A1 19950504 - IAV MOTOR GMBH [DE]

Citation (search report)  
• [X] DE 10110914 A1 20020912 - INA SCHAEFFLER KG [DE]  
• [E] EP 1619358 A1 20060125 - INA SCHAEFFLER KG [DE]  
• [DA] DE 19600852 A1 19970717 - SCHAEFFLER WAEZLAGER KG [DE]  
• [DA] DE 19957772 A1 20010607 - BAYERISCHE MOTOREN WERKE AG [DE]  
• [A] DE 19950989 A1 20000621 - SCHAEFFLER WAEZLAGER OHG [DE]  
• [DA] DE 4324756 A1 19950216 - IAV MOTOR GMBH [DE]  
• [DA] DE 19501061 A1 19960718 - SCHAEFFLER WAEZLAGER KG [DE]

Cited by  
US8616168B2; WO2010028204A1; WO2010048968A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 1659268 A1 20060524; EP 1659268 B1 20090114**; DE 102004056457 A1 20060608; DE 502005006459 D1 20090305;  
US 2006107917 A1 20060525; US 7159552 B2 20070109

DOCDB simple family (application)  
**EP 05024168 A 20051105**; DE 102004056457 A 20041123; DE 502005006459 T 20051105; US 28560805 A 20051122