

## Title (en)

Connecting element for fixation of a lever type cam follower

## Title (de)

Verbindungselement zur verliersicheren Halterung eines hebelartigen Nockenfolgers

## Title (fr)

Élément de liaison pour fixation d'un suiveur de came du type a levier

## Publication

**EP 1617047 A1 20060118 (DE)**

## Application

**EP 05011276 A 20050525**

## Priority

DE 102004033973 A 20040714

## Abstract (en)

The element -type cam follower has a spherical end on which the cam follower is pivotally mounted through a concave depression. The element engages into an annular groove under the spherical end where a central portion of the connecting element bears against an underside of the cam follower oriented toward the support element and forms, through two legs and a crossbar connecting these legs to each other, a U-shaped recess in longitudinal direction of the cam follower. The recess engages around the groove after the manner of a fork and orthogonally to a pivoting direction of the cam follower without lash. Angled retaining claws bent from the legs extend in transverse direction of the cam follower and engage with pincers over side walls of the cam follower, so that by a clamping of the retaining claws through shaped sections directed toward inner surfaces of the side walls, the U-shaped recess is fixed in respect of position in transverse direction of the cam follower and in respect of shape. The element can be pushed onto the cam follower in parallel orientation to a longitudinal direction of the cam follower. The spherical end of the support element is already in place in the concave cavity when the connecting element is pushed onto the cam follower.

## IPC 8 full level

**F01L 1/18** (2006.01)

## CPC (source: EP US)

**F01L 1/185** (2013.01 - EP US); **F01L 1/2405** (2013.01 - EP US); **F01L 1/46** (2013.01 - EP US); **F01L 2001/187** (2013.01 - EP US); **Y10T 74/20882** (2015.01 - EP US); **Y10T 74/2107** (2015.01 - EP US)

## Citation (search report)

- [A] DE 10249560 A1 20040506 - INA SCHAEFFLER KG [DE]
- [A] WO 2004038185 A1 20040506 - INA SCHAEFFLER KG [DE], et al
- [A] DE 10249561 A1 20040506 - INA SCHAEFFLER KG [DE]
- [A] US 5775280 A 19980707 - SCHMIDT DIETER [DE], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 2002, no. 09 4 September 2002 (2002-09-04)

## Cited by

EP2189631A1; DE102008029293A1; WO2010057648A1; WO2014079425A1

## Designated contracting state (EPC)

DE FR GB HU IT

## DOCDB simple family (publication)

**EP 1617047 A1 20060118**; **EP 1617047 B1 20070627**; CN 100540854 C 20090916; CN 1737341 A 20060222; DE 102004033973 A1 20060216; DE 502005000919 D1 20070809; US 2006011162 A1 20060119; US 7146950 B2 20061212

## DOCDB simple family (application)

**EP 05011276 A 20050525**; CN 200510081980 A 20050714; DE 102004033973 A 20040714; DE 502005000919 T 20050525; US 17259205 A 20050630