

Title (en)  
SWITCHABLE CAM FOLLOWER

Title (de)  
SCHALTBARER SCHLEPPHEBEL

Title (fr)  
LEVIER OSCILLANT COMMUTABLE

Publication  
**EP 2643561 B1 20150415 (DE)**

Application  
**EP 11738728 A 20110802**

Priority  
• DE 102010052551 A 20101125  
• EP 2011063296 W 20110802

Abstract (en)  
[origin: WO2012069215A1] A switchable cam follower (1) of a valve train of an internal combustion engine is proposed, having an inner lever and an outer lever (2, 3), wherein the levers (2, 3) can be connected to one another via coupling means (12) and run on a common pin (15) such that they can be moved pivotably relative to one another, which pin (15) is projected around by at least one group of turns (16) of a swivel pin spring (17) as cam restoring spring, wherein a first limb (19) which protrudes from an end side (18) of the group of turns (16) acts on a first clamping point (20) of the outer lever (3) and a second limb (22) which protrudes from another end side (21) of the group of turns (16) acts on a second clamping point (23) of the inner lever (2), in the rotational direction in such a way that the levers (2, 3) are present such that they are stressed towards one another, wherein the pin (15) runs in a "floating" manner with respect to the holes (13, 14), wherein the group of turns (16) comprises a bush (24) with play, wherein axial fixing of the pin (15) is produced via the offset contact of the group of turns (16) on the bush (24), which offset contact is brought about by the system stressing, and therefore the offset contact of said bush (24) on the pin (13), and wherein, in order to reduce a resulting contact force (FR) in the region of the contact of the group of turns (16) on the bush (24), the clamping points (20, 23) of the two limbs (19, 22) of the group of turns (16) are positioned in such a way that an angle (a) which is enclosed by intersecting force vectors at the clamping points (20, 23) [direction of action of the two contact forces (F1, F2)] lies in the range  $(90^\circ < a < 180^\circ)$ .

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