

Title (en)
DEVICE FOR ADJUSTING THE RELATIVE ANGLE OF A CAM SHAFT

Title (de)
VORRICHTUNG ZUR RELATIVEN WINKELVERSTELLUNG EINER NOCKENWELLE

Title (fr)
DISPOSITIF D'AJUSTAGE ANGULAIRE RELATIF D'UN ARBRE A CAMES

Publication
EP 1088154 B1 20040407 (DE)

Application
EP 00909182 A 20000216

Priority
• DE 19916675 A 19990414
• EP 0001252 W 20000216

Abstract (en)
[origin: WO0061920A1] The invention relates to a device (1) for adjusting the relative angle of a cam shaft, especially for a cam shaft that actuates outlet valves, vis-à-vis a crankshaft that drives said cam shaft. The inventive device is characterized by the following features: A drive element (2) that is driven by the crankshaft, a power take-off element (4) that drives said cam shaft and that can be adjusted vis-à-vis the drive element, and control means for adjusting the drive element vis-à-vis the power take-off element. Said power take-off element (4) is mounted in an at least substantially coaxial relation to the drive element. At least one spring element (8) that holds the drive element in a normal position is arranged between the drive element and the power take-off element.

IPC 1-7
F01L 1/344

IPC 8 full level
F01L 1/34 (2006.01); **F01L 1/344** (2006.01)

CPC (source: EP US)
F01L 1/3442 (2013.01 - EP US); **F01L 2001/34483** (2013.01 - EP US); **Y10T 74/2102** (2015.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 0061920 A1 20001019; DE 19916675 A1 20001130; DE 19916675 B4 20050707; DE 50005967 D1 20040513; EP 1088154 A1 20010404; EP 1088154 B1 20040407; JP 2002541380 A 20021203; US 6336433 B1 20020108

DOCDB simple family (application)
EP 0001252 W 20000216; DE 19916675 A 19990414; DE 50005967 T 20000216; EP 00909182 A 20000216; JP 2000610951 A 20000216; US 71958401 A 20010222