

Title (en)
DEVICE AND METHOD FOR DETERMINING THE ANGLE OF ROTATION OF A CAMSHAFT IN RELATION TO THE CRANKSHAFT OF AN INTERNAL COMBUSTION ENGINE

Title (de)
VORRICHTUNG UND VERFAHREN ZUM BESTIMMEN DES VERDREHWINKELS EINER NOCKENWELLE GEGEN BER DER KURBELWELLE EINES VERBRENNUNGSMOTO RS

Title (fr)
DISPOSITIF ET PROCEDE DE DETERMINATION DE L'ANGLE DE ROTATION D'UN ARBRE A CAMES PAR RAPPORT AU VILEBREQUIN D'UN MOTEUR A COMBUSTION INTERNE

Publication
EP 1642011 A1 20060405 (DE)

Application
EP 04739675 A 20040608

Priority

- EP 2004006144 W 20040608
- DE 10330872 A 20030709

Abstract (en)
[origin: DE10330872A1] The device for determining the rotation angle between the cam and crankshafts of a combustion engine that has a camshaft positioner with an electronic regulator and means for measuring the camshaft position. The crankshaft has a crankshaft trigger wheel with reference and trigger markings attached to it. The camshaft has a three shaft gearbox (1) with a first shaft (3) connected to the camshaft (5), a second shaft (4) connected to the crankshaft via a camshaft drive wheel (7) and a third shaft acting as an adjustment shaft (6). The latter is connected to a permanent magnet rotor (8) of a brushless DC motor (2). The preferably 3-phase motor has a stator (9) fixed in a housing and electronically controlled switching that also serves to determine the camshaft angular position and which is used to calculate the angular displacement between cam and crankshafts. An independent claim is also included for a corresponding angle determination method.

IPC 1-7
F01L 1/34; **F01L 1/344**; **F01L 1/352**

IPC 8 full level
F01L 1/34 (2006.01); **F01L 1/344** (2006.01); **F01L 1/352** (2006.01)

CPC (source: EP US)
F01L 1/34 (2013.01 - EP US); **F01L 1/344** (2013.01 - EP US); **F01L 1/352** (2013.01 - EP US)

Citation (search report)
See references of WO 2005012698A1

Citation (examination)

- EP 1164318 A2 20011219 - KOYO SEIKO CO [JP], et al
- EP 1156234 A2 20011121 - SEW EURODRIVE GMBH & CO [DE]

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DE FR GB

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DOCDB simple family (application)
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