

Title (en)
COMPACT ELECTRIC CAM PHASER

Title (de)
KOMPAKTER ELEKTRISCHER NOCKENVERSTELLER

Title (fr)
DISPOSITIF DE MISE EN PHASE DE CAME ÉLECTRIQUE COMPACT

Publication
EP 2373875 A1 20111012 (EN)

Application
EP 09799789 A 20091208

Priority
• US 2009067070 W 20091208
• US 12169408 P 20081211

Abstract (en)
[origin: WO2010068613A1] An electric cam phaser (ECP) for a camshaft of an internal combustion engine includes an axial flux electric machine (13) which is axially integrated with a positive differential gear train (12), and which is capable of providing frictional locking. The differential gear train (12) has three co-axial relatable branches. The first branch is connected to an input shaft (11), the second to the output shaft (14), and the third is integrated with a rotor (24) of the electric machine (13). The third branch is the control branch through which the differential gear train (12) can be unlocked from a neutral or "locked" mode of operation during phase adjustment by applying either a resistive torque in a second mode of operation, or a driving torque in a third mode of operation, through the electric machine (13) to the control branch.

IPC 8 full level
F01L 1/352 (2006.01)

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Citation (search report)
See references of WO 2010068613A1

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