

Title (en)

Multi-position variable cam timing system having a vane-mounted locking piston device

Title (de)

Variable Ventilsteuerungseinrichtung mit einem Verriegelungsschieber

Title (fr)

Dispositif de variation de calage d'arbre à cames avec piston de verrouillage intégré à une ailette du rotor

Publication

EP 1128026 A2 20010829 (EN)

Application

EP 00311295 A 20001215

Priority

- US 17333099 P 19991228
- US 48890300 A 20000121

Abstract (en)

An internal combustion engine having a camshaft (14) and variable camshaft timing system, where a rotor (22) is secured to the camshaft (14) and is rotatable but non-oscillatable with respect to the camshaft (14). A housing (68) circumscribes the rotor(22), is rotatable with both the rotor (22) and the camshaft (14), and is further oscillatable with respect to both the rotor (22) and the camshaft (14) between a fully retarded position and a fully advanced position. A locking configuration prevents relative motion between the rotor and the housing (68), and is mounted within either the rotor (22) or the housing (68), and is respectively and releasably engageable with the other of either the rotor (22) and the housing (68) in the fully retarded position, the fully advanced position, and in positions therebetween. The locking device includes a locking piston (42) having keys (46) terminating one end (44) thereof, and serrations (60) mounted opposite the keys (46) on the locking piston (42) for interlocking the rotor (22) to the housing (68). A controlling configuration controls oscillation of the rotor (22) relative to the housing (68). <IMAGE>

IPC 1-7

F01L 1/344

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

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