

Title (en)
Camshaft for engine valve drive

Title (de)
Nockenwelle zur Betätigung von Ventilen einer Brennkraftmaschine

Title (fr)
Arbre à cames pour commande de soupapes de moteur à combustion interne

Publication
EP 1170465 A3 20020130 (DE)

Application
EP 01112335 A 20010519

Priority
DE 10033291 A 20000707

Abstract (en)
[origin: EP1170465A2] Camshaft comprises an arrangement for hydraulically adjusting the relative position of rotation of the camshaft by influencing the control times of the valves. The arrangement includes a drive wheel (16) for the camshaft, a bucket wheel (17), and an impeller positioned with radial vanes in the cells of the bucket wheel. A locking device effective in the start phase of the internal combustion engine is provided between the bucket wheel and the impeller. The locking device comprises an axial spring-loaded hydraulic piston (37) positioned in one of the vanes of the impeller and a recess (40) for the piston. The piston protruding into the recess with a blocking section (39) and guided in a vane interacts with an operating element (44). The piston is loaded by a first pressure space and the operating element by a second pressure space. Preferred Features: The operating element is a bolt (47) which is guided on a stop (48) of the piston.

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)

Citation (search report)

- [A] EP 0848140 A1 19980617 - AISIN SEIKI [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 03 30 March 2000 (2000-03-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 02 29 February 2000 (2000-02-29)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 04 30 April 1999 (1999-04-30)

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