

## Title (en)

CAMSHAFT FOR CONTROLLING THE GAS INLET AND EXHAUST VALVES OF AN INTERNAL-COMBUSTION ENGINE

## Publication

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## Application

**EP 87109060 A 19870624**

## Priority

DE 3624827 A 19860723

## Abstract (en)

[origin: EP0254058A2] In an internal-combustion engine, in order to be able to vary the control times for opening and closing the gas inlet and outlet valves, the camshaft controlling the valves is constructed of two assemblies moving with respect to one another. A first assembly, supported on the internal-combustion engine, consists of a hollow outer shaft (1) with a first half of the control cams (5), for only the gas inlet or outlet valves, fixed thereto. The second assembly is an inner shaft (3), supported concentrically in the outer shaft (1), on which is mounted the second half of the control cams (4) via pins (7) protruding through radial slots in the outer shaft (1). The control cams (4) connected fixedly to the inner shaft (3) are supported on the outer shaft (1) such that they can rotate. By means of an adjusting device (10) integrated into the drive wheel (gear wheel 13), the angular position between the two halves of the control cams (4, 5) can be continuously adjusted over a predetermined range. The adjusting device (10) may be operated hydraulically or by means of an electrical stepping motor. The control signals for the adjusting device (10) are derived from selected engine operating data and namely, in particular, the air induction flow rate. <IMAGE>

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## IPC 8 full level

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## CPC (source: EP)

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