

Title (en)
Electronic position sensor assembly and control system

Title (de)
Elektronischer Winkelgeber mit Steuerungssystem

Title (fr)
Capteur électronique de position associé à système de commande

Publication
EP 0879956 A1 19981125 (EN)

Application
EP 98112946 A 19890420

Priority
• EP 95110314 A 19890420
• EP 89107080 A 19890420
• US 19423788 A 19880516

Abstract (en)
An electronic position sensor assembly and engine control system (10) in which two sensing elements (13, 14) in a dual sensor (12) provide separate, independent position signals (A, B) related to multi-cylinder engine cycle position by sensing the angular position of a engine-rotated slotted wheel (11). The sensing elements provide identical sensing signals shifted from each other by a predetermined angular amount (d). In response to the simultaneous providing of a pulse by both sensing elements, a first reference signal (at 22) identifying a reference cylinder is provided for controlling electronic distribution of spark timing and/or fuel injection signals to engine cylinders (17-20). In response to a selected one of the sensing elements producing a pulse which has a predetermined longer duration than a preceding produced pulse, a second reference signal (after 50) is produced indicative of top-dead center engine cylinder cycle position for one of the cylinders. In response to detecting a fault in the position signal produced by the one selected sensing element, a switch (27) selects the other of the sensing elements for utilization in producing the second reference signal, and a substitute reference signal circuit (40) provides a substitute first reference signal. A less expensive and more reliable engine position sensor assembly and engine control system is provided since proper system operation is maintained despite a fault in one of the position signals. <IMAGE>

IPC 1-7
F02P 7/073; **F02P 7/077**; **F02P 15/00**

IPC 8 full level
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CPC (source: EP)
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Citation (search report)
• [A] US 4442822 A 19840417 - KONDO TETSUYA [JP], et al
• [A] FR 2374528 A1 19780713 - CII [FR]
• [A] EP 0230560 A2 19870805 - AUDI AG [DE]

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