

Title (en)  
MOVING PART EXTREME POSITION SENSING DEVICE

Publication  
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Application  
**EP 85114945 A 19851126**

Priority  
DE 3445983 A 19841217

Abstract (en)  
[origin: US4722313A] A method is disclosed for detecting an extreme value position of a movable part by means of a position detecting sensor. The method is especially suitable for detecting the idle position of the throttle flap of an internal combustion engine with the aid of a potentiometer. In this method, a stored value (extreme value) corresponding to the extreme position is corrected upon the detection of deviating measured values, provided that the deviating measured values lie within a correction range around the extreme value. The range of movement of the movable part has to lie within the range coverable by the position sensor. After a predetermined number of identical measured values are sensed in the correction range during an operating cycle, such a measured value is stored in memory as the new extreme value. For dynamic adaptation, this next extreme value is modified cyclically, preferably prior to each operating cycle, by a predetermined value away from the outermost position. While detecting the extreme position with a high accuracy, the method of the invention has a very small hysteresis, with the full function capability being restored after a short period, even under irregular operating conditions.

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