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### **EUROPEAN PATENT APPLICATION**

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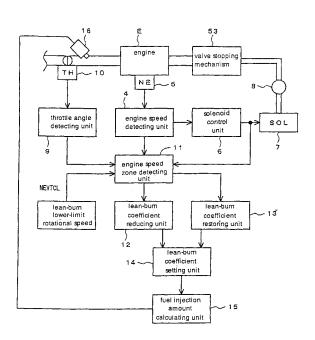
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#### (54)Fuel injection control apparatus

(57)The invention avoids an over-rich state which temporarily occurs when a stop valve is switched from an inactive state to an active state.

To achieve this, a valve stopping mechanism 53 holds at least one of a plurality of intake valves provided for each cylinder in a closed state in a scheduled engine speed zone. A fuel injection valve 16 is provided at a common intake path which is branched to a plurality of intake ports 441 and 451 which are opened/closed with a plurality of intake valves. A fuel injection amount calculating unit 15 determines a fuel request amount on the basis of an engine state. A lean-burn coefficient reducing unit 13 decreases a lean-burn coefficient with respect to a fuel request amount to set an air-fuel mixture to the lean side in an operation zone which is out of the scheduled engine speed zone and in which the valve stopping mechanism 53 is switched to the inactive state. The operation of setting the air-fuel mixture to the lean side is performed in stages.





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Application Number EP 02 01 8366

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