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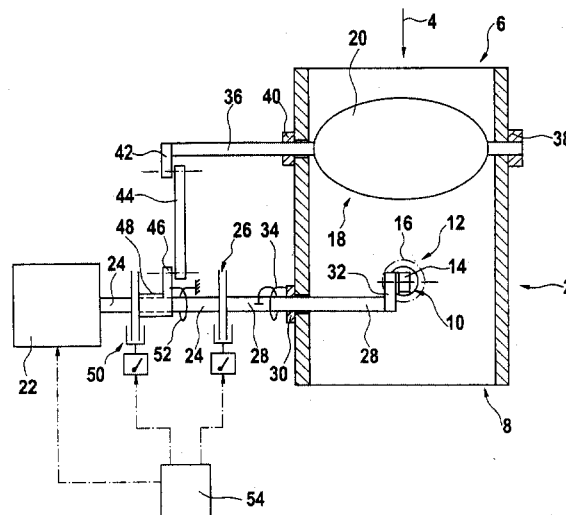
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(54) **Exhaust gas re-circulation device for an internal combustion engine**

(57) An exhaust gas re-circulation device for an internal combustion engine comprises an intake air channel (2), an intake air control valve (18), an exhaust gas re-circulation valve (12) and an actuator (22), a first motion transmission mechanism between the actuator (22) and the exhaust gas re-circulation valve (12) and a second motion transmission mechanism between the actuator (22) and the intake air control valve (18). A first uncoupling means (26) is included in the first motion transmission mechanism and a first pull-back spring (34) biases the exhaust gas re-circulation valve (12) in a closed position.

The device enables to control exhaust gas re-circulation rates by simultaneously driving the two valves in opposite senses and to obtain a smooth engine shut-off, by simultaneously closing the two valves. In a preferred embodiment, with a second uncoupling means (50) in the second motion transmission mechanism and a second pull-back spring (52) biasing the intake air control valve (18) in an open position, low exhaust gas re-circulation rates can be controlled with the intake air control valve (18) fully open.





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 01 10 4948

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 April 2002	Examiner Raposo, J
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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