

Title (en)  
Exhaust braking method for a supercharged engine

Title (de)  
Motorbremsverfahren für eine aufgeladene Brennkraftmaschine

Title (fr)  
Méthode de frein moteur pour un moteur suralimenté

Publication  
**EP 0990781 A3 20001108 (DE)**

Application  
**EP 99116963 A 19990827**

Priority  
DE 19844573 A 19980929

Abstract (en)  
[origin: EP0990781A2] A method for controlling the engine braking in a turbocharged internal combustion engine has a hard braking mode and a soft braking mode. The geometry of the exhaust driven turbine is varied by adjustable vanes between a stalling setting and a full flow setting. For the soft braking mode the turbine geometry (4) is set between the stalling position and the point at which the engine fires while the hard braking mode is selected between the onset of engine firing and the full flow setting. The hard braking mode applies for the higher torque operation of the engine.

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**F02D 9/06**

IPC 8 full level  
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CPC (source: EP US)  
**F02D 9/06** (2013.01 - EP US)

Citation (search report)  
• [AD] DE 19637999 A1 19980319 - DAIMLER BENZ AG [DE]  
• [A] DE 19750331 A1 19980520 - MITSUBISHI MOTORS CORP [JP]  
• [A] DE 19727141 C1 19980820 - DAIMLER BENZ AG [DE]  
• [A] WO 9526466 A1 19951005 - VOLVO AB [SE], et al

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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**DE 19844573 A1 20000330**; DE 59909013 D1 20040506; EP 0990781 A2 20000405; EP 0990781 A3 20001108; EP 0990781 B1 20040331;  
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