

Title (en)  
LOST MOTION HYDRAULIC OVERHEAD WITH INTEGRATED RETARDING

Title (de)  
HYDRAULISCHE VENTILBETÄTIGUNG MIT TOTGANG UND INTEGRIERTER VERZÖGERUNG

Title (fr)  
SOUPAPE EN TETE HYDRAULIQUE A MOUVEMENT PERDU AVEC SYSTEME DE RALENTISSEMENT INTEGRE

Publication  
**EP 1030964 A1 20000830 (EN)**

Application  
**EP 98957925 A 19981113**

Priority  
• US 9824246 W 19981113  
• US 6581697 P 19971114

Abstract (en)  
[origin: WO9925970A1] The present invention is directed to a valve actuation system for an internal combustion engine. The valve actuation system includes an intake valve actuation assembly for operating at least one intake valve in response to an intake cam. The valve actuation system further includes an exhaust valve actuation assembly operating at least one exhaust valve in response to at least one exhaust cam to produce at least one of a main exhaust event, an engine retarding event and an exhaust gas recirculation event. The exhaust valve actuation assembly is capable of operating in two modes. In the first operating mode, the at least one exhaust valve is operated to produce the main exhaust event. In the second operating mode, the at least one exhaust valve is operated to produce at least one of the main exhaust event, the engine retarding event and the exhaust gas recirculation event.

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IPC 8 full level  
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**F01L 9/10** (2021.01 - EP); **F01L 13/06** (2013.01 - EP); **F02D 13/0246** (2013.01 - EP); **F02D 13/0273** (2013.01 - EP);  
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Citation (search report)  
See references of WO 9925970A1

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DE FR GB IT

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