

Title (en)  
Compression release mechanism for internal combustion engine

Title (de)  
Dekompressionsanordnung für Brennkraftmaschine

Title (fr)  
Dispositif de décompression pour moteur à combustion interne

Publication  
**EP 1380729 A1 20040114 (EN)**

Application  
**EP 03015089 A 20030703**

Priority  
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Abstract (en)  
A compression release device (70) for a small internal combustion engine, including a flyweight (102) operatively coupled to a cam member (90) via a cam pivot shaft (100), wherein a lever arm (LA1-LA1) associated with the flyweight is longer than a lever arm (LA2-LA2) associated with the cam member, such that a relatively small component of pivotal movement of the flyweight is translated into a relatively large component of rotation of the cam member. At engine cranking speeds, a spring (112) biases the flyweight to a first position, such that a cam surface (96) of the cam member extends beyond the base circle of the exhaust cam lobe (58b) to partially open the exhaust valve (62b) and allow release of pressure within the combustion chamber of the engine. At engine running speeds, the flyweight is moved under centrifugal force to a second position, rotating the cam member to a corresponding second position in which the cam surface is disposed within the base circle of the exhaust cam lobe, such that combustion may occur in a conventional manner. <IMAGE> <IMAGE>

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**F01L 13/08**; **F02N 17/08**

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