

Title (en)  
BUMPER EQUIPPED WITH SHOCK ABSORBING MEANS

Title (de)  
STOSSFÄNGER MIT STOSSDÄMPFUNGSMITTELS

Title (fr)  
PARE-CHOC EQUIPE DE MOYENS D'AMORTISSEMENT

Publication  
**EP 1093424 A1 20010425 (FR)**

Application  
**EP 99960675 A 19990622**

Priority  

- FR 9901487 W 19990622
- FR 9808865 A 19980709
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Abstract (en)  
[origin: US6334639B1] A vehicle bumper with shock-absorbers, including a rigid support attached to a vehicle onto which a bumper shell is fitted, the shock-absorbers including at least two pyrotechnic actuators linking the rigid support to the vehicle, the actuators being connected for activation by a control system including an impact or deceleration sensor, and each pyrotechnic actuator including at least two gas-generating powder tablets to be primed individually by the control system.

IPC 1-7  
**B60R 19/20**; **B60R 19/40**; **B60R 19/18**

IPC 8 full level  
**B60R 19/18** (2006.01); **B60R 19/20** (2006.01); **B60R 19/40** (2006.01); **B60R 21/16** (2006.01); **B60R 21/231** (2006.01)

CPC (source: EP US)  
**B60R 19/18** (2013.01 - EP US); **B60R 19/205** (2013.01 - EP US); **B60R 19/40** (2013.01 - EP US); **B60R 2021/23123** (2013.01 - EP US)

Citation (search report)  
See references of WO 0002751A1

Designated contracting state (EPC)  
DE ES GB IT SE

DOCDB simple family (publication)  
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**US 74332301 A 20010109**; EP 99960675 A 19990622; FR 9901487 W 19990622