

Title (en)

INFLATABLE TUBULAR SEAT RESTRAINT SYSTEM

Title (de)

AUFBLASBARES SCHLAUCHFÖRMIGES SITZ-RÜCKHALTESYSTEM

Title (fr)

SYSTEME DE HARNAIS D'AUTO TUBULAIRE GONFLABLE

Publication

EP 1117567 A4 20030917 (EN)

Application

EP 98957322 A 19981009

Priority

US 9821601 W 19981009

Abstract (en)

[origin: WO0021798A1] A seat restraint system (110) whose torso belt (101t) includes an inflatable structure (101) that inflates upon impact to protect the occupants of a vehicle such as an automobile. The inflatable structure is linked to a gas generator (122) and crash sensor. When an impact above a predetermined level of severity is detected, the gas generator is ignited, inflating the inflatable structure which contracts in length as it inflates. In a preferred embodiment, the inflatable structure is a braided tube. As the braided tube inflates, the diameter of the tube increases significantly and its length decreases significantly, due to the orientation of the fibers comprising the braided tube. The contraction in length pretensions the seat belt system by pulling any slack out of the seat belts system.

IPC 1-7

B60R 21/18

IPC 8 full level

B60R 22/14 (2006.01); **B60R 21/18** (2006.01); **B60R 22/46** (2006.01); **B60R 21/16** (2006.01); **B60R 21/231** (2011.01); **B60R 21/26** (2011.01); **B60R 21/261** (2011.01); **B60R 22/02** (2006.01); **B60R 22/18** (2006.01); **B60R 22/26** (2006.01)

CPC (source: EP KR)

B60R 21/18 (2013.01 - EP KR); **B60R 22/26** (2013.01 - EP); **B60R 2021/23153** (2013.01 - EP); **B60R 2021/2612** (2013.01 - EP); **B60R 2022/026** (2013.01 - EP); **B60R 2022/1818** (2013.01 - EP)

Citation (search report)

- [XAY] WO 9800314 A1 19980108 - SIMULA INC [US]
- [XAY] US 5393091 A 19950228 - TANAKA YOSHIHIKO [JP], et al
- [A] US 5746446 A 19980505 - BREED DAVID S [US], et al
- See references of WO 0021798A1

Designated contracting state (EPC)

DE ES FR GB IT NL SE

DOCDB simple family (publication)

WO 0021798 A1 20000420; AU 1360699 A 20000501; CA 2341509 A1 20000420; EP 1117567 A1 20010725; EP 1117567 A4 20030917; IL 141327 A0 20020310; JP 2002527282 A 20020827; KR 20010106490 A 20011129

DOCDB simple family (application)

US 9821601 W 19981009; AU 1360699 A 19981009; CA 2341509 A 19981009; EP 98957322 A 19981009; IL 14132798 A 19981009; JP 2000575727 A 19981009; KR 20017003821 A 20010326