Title (en)

SEAT BELT TENSIONING SYSTEM

Title (de)

SPANNUNGSYSTEM FÜR SICHERHEITSGÜRTEL

Title (fr)

TENDEUR DE CEINTURE DE SECURITE

Publication

EP 1070005 A1 20010124 (EN)

Application

EP 99921340 A 19990407

Priority

- SE 9900571 W 19990407
- SE 9801261 A 19980407

Abstract (en)

[origin: WO9951469A1] A conventional seat belt rolling-up frame (101) is equipped with an electric motor (112) for tensioning the seat belt both to a comfort value for normal rides and to high forces in emergency situations. The motor can be activated as often as required without any need for maintenance. The power required to drive the motor is obtained from a high voltage capacitor (114) storing sufficient energy. The seat belt will then be independent of the resistance of the starter battery of the vehicle in which the seat belt is mounted. All electronic parts connected to the stator phases of the motor and to the capacitor are contained in a shielding enclosure (104, 119, 124) resulting in low emissions of high frequency electromagnetic noise. The motor is mounted at a first end of a belt roller shaft (102) to drive this shaft directly. The mounting is made so that the motor and the shaft will be displaced by the very high belt tensions created by a serious crash. Cog means (120) can then lock the rotor of the motor and thereby the shaft. Signal processing circuits (108, 109, 107) for low voltage signals are located inside a casing (101e) attached at a second opposite end of the shaft.

IPC 1-7

B60R 22/36; B60R 22/46

IPC 8 full level

B60R 22/44 (2006.01); **B60R 22/46** (2006.01)

CPC (source: EP)

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