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**(54) Title (EN):** SPINAL PROTECTION SYSTEM FOR AUTOMOTIVE SEAT

**(54) Title (FR):** SYSTEME DE PROTECTION DORSALE POUR SIEGE AUTOMOBILE

**(57) Abstract:**

**(EN):** An energy absorption assembly for a seat assembly having a seatback including a first frame and a second frame includes a housing, a torsion bar rotatably supported by the housing in a first rotational direction and in a second rotational direction, and a clutch assembly engaged with the torsion bar. Engagement between the clutch assembly and the torsion bar permits rotation of the torsion bar relative to the housing in one of the first direction and the second direction to permit movement of the second frame relative to the first frame and restricts rotation of the torsion bar relative to the housing in the other of the first direction and the second direction to restrict movement of the second frame relative to the first frame. Restricting rotation of the torsion bar relative to the housing absorbs energy associated with movement of the second frame relative to the first frame.

**(FR):** L'invention concerne un ensemble amortisseur destiné à un ensemble siège comprenant un dossier de siège renfermant un premier cadre et un second cadre, lequel ensemble amortisseur comprend un logement, une barre de torsion soutenue rotative par le logement dans un premier sens de rotation et dans un second sens de rotation, et un ensemble embrayage en prise avec la barre de torsion. La mise en prise de l'ensemble embrayage avec la barre de torsion permet la rotation de la barre de torsion par rapport au logement dans le premier ou dans le second sens de rotation, autorisant par conséquent le mouvement du second cadre par rapport au premier cadre, et limite la rotation de la barre de torsion par rapport au logement dans l'autre sens, empêchant le mouvement du second cadre par rapport au premier cadre. La rotation limitée de la barre de torsion par rapport au logement permet d'amortir l'énergie associée au mouvement du second cadre par rapport au premier cadre.

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