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(54) Title: A METHOD TO SAFELY RESTRAIN OCCUPANTS IN A CRASHING VEHICLE AND A SEAT CONSTRUCTED TO PERFORM SAID METHOD

(57) Abstract

The present invention relates to a method for a safe restraintment of occupants in a crashing vehicle using safety belts, and a double tube frame construction at the same time being a supporting body of the vehicle seat. The method is characterized in that in a crash the kinetic energy of the occupant is restrained by said belt and by the cooperating resiliently deformable double tube frame construction in such a way that, at a moderate load, the upper portion of this double tube frame construction will move resiliently, but with a bigger load a permanent deformation will be the result in said double tube frame construction at the same time as the resilient movability in a phase of permanent deformation also can cooperate in bringing the occupant back to the back rest of the seat by a resetting elasticity of the upper portion of the double tube frame construction. The device is characterized in a seat frame with a seat portion and a back rest portion (B; A) being made of a parallel tube frame having two tubes (1, 2) arranged above/under and forward/behind, at the seat portion (B) and at the back rest portion (A) respectively, up to a height at the breast (D) of the occupant, and that the tubes are twisted above said height to a position side by side, and in reinforcing, deformable form plates (12) rigidly arranged between the parallel tubes (1, 2), at least at the seat portion (B) and at the lower portion of the back rest portion (A).

