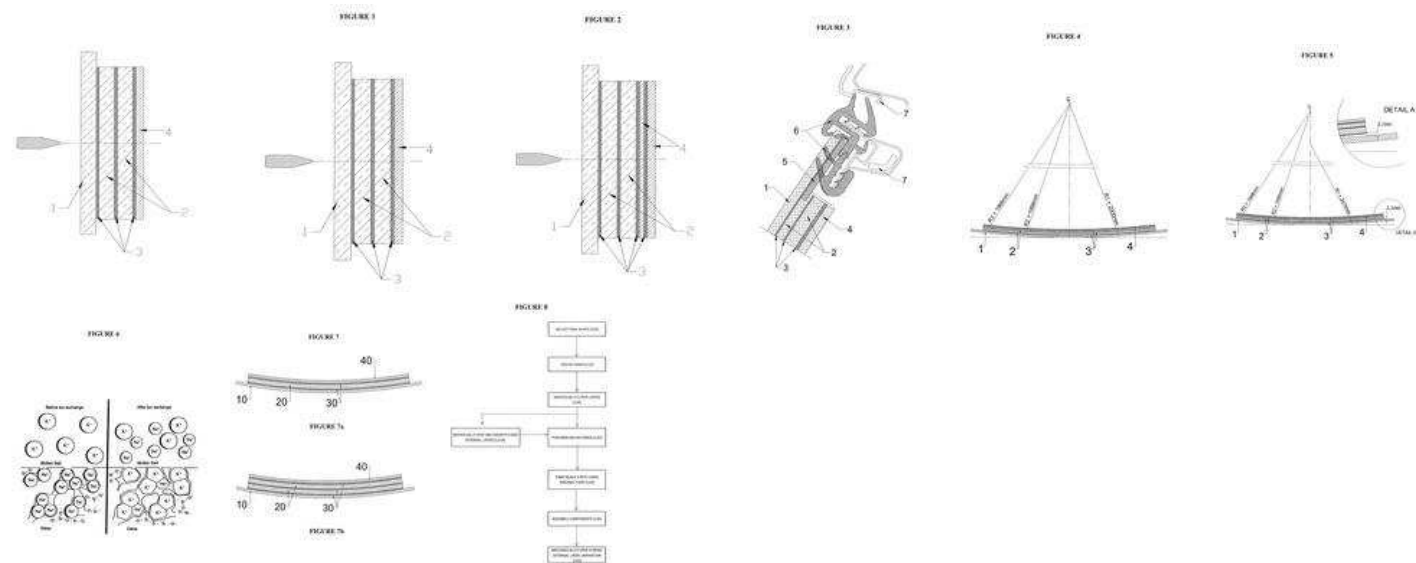
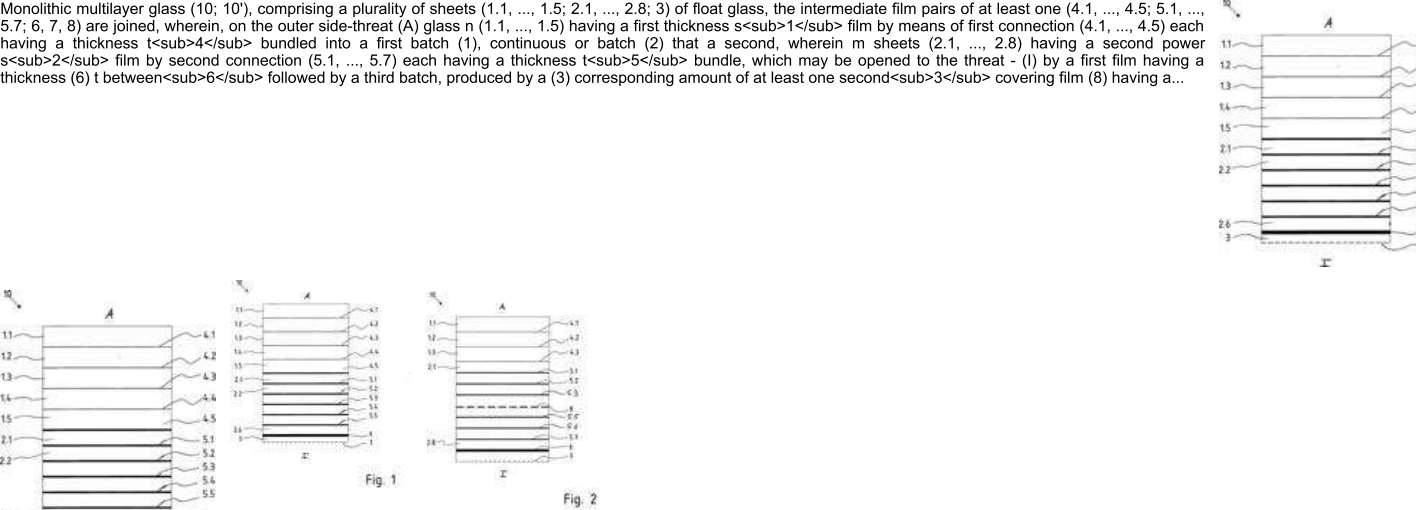


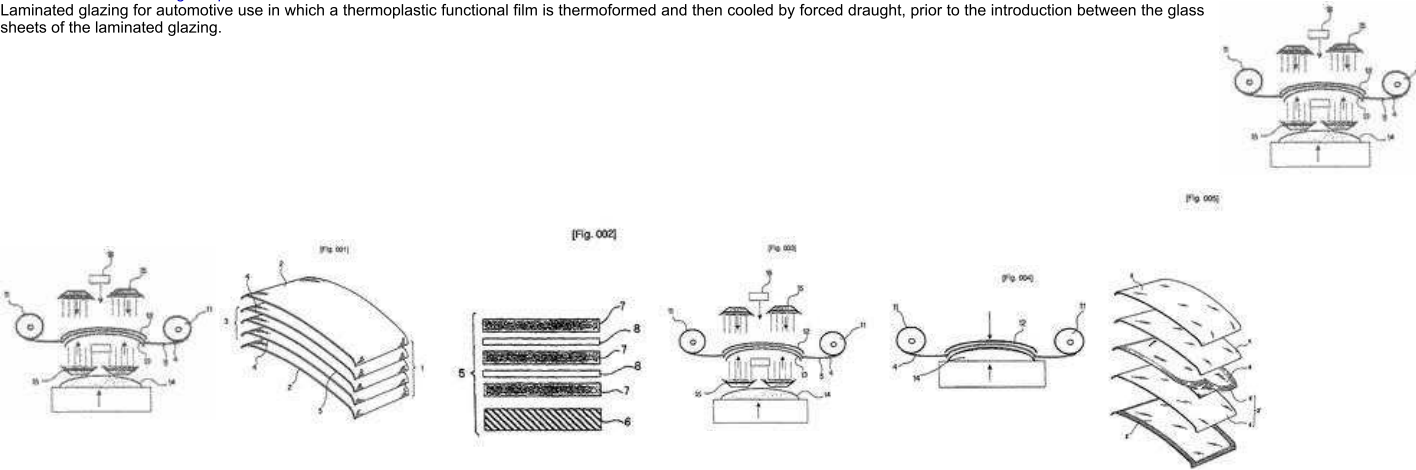
The present invention discloses a curved bullet-proof composite having glass, glass- ceramic or flexible ceramic in the strike-face layer in order to be mechanically curved during a low heat (temperature) and pressure lamination process. The composites can be made of one or more gravity and heat-curved glass, glass-ceramic or ceramic layers in one or more intermediate layers. In addition, the present invention discloses a process for manufacturing the glass of the instant invention, comprising the following steps: a) size (cut) glass or glass-ceramic in the strike-face layer and intermediate layers to the geometry or shape of the curved bullet-proof composite; b) edge glass finishing, glass-ceramic or ceramic; c) individually curve by means of gravity and temperature the glass or glass-ceramic intermediate layers; d) carryout an ion exchange process of one or several glass and/or glass-ceramics of the strike-face layer and intermediate layers; e) paint the black stripe using organic paint on the strike-face layer and/or one of the intermediate layers; f) assemble the strike-face layer, intermediate layers, adhesive materials and the internal plastic layer; and g) mechanically curve during pressure and heat lamination the strike-face layer, intermediate layers, adhesive materials and the internal plastic layer.



Monolithic multilayer glass (10; 10'), comprising a plurality of sheets (1.1, ..., 1.5; 2.1, ..., 2.8; 3) of float glass, the intermediate film pairs of at least one (4.1, ..., 4.5; 5.1, ..., 5.7; 6, 7, 8) are joined, wherein, on the outer side-throat (A) glass n (1.1, ..., 1.5) having a first thickness $s_{sub>1</sub>}$ film by means of first connection (4.1, ..., 4.5) each having a thickness $t_{sub>4</sub>}$ bundled into a first batch (1), continuous or batch (2) that a second, wherein m sheets (2.1, ..., 2.8) having a second power $s_{sub>2</sub>}$ film by second connection (5.1, ..., 5.7) each having a thickness $t_{sub>5</sub>}$ bundle, which may be opened to the throat - (I) by a first film having a thickness (6) t between $s_{sub>6</sub>}$ followed by a third batch, produced by a (3) corresponding amount of at least one second $s_{sub>3</sub>}$ covering film (8) having a...



Laminated glazing for automotive use in which a thermoplastic functional film is thermoformed and then cooled by forced draught, prior to the introduction between the glass sheets of the laminated glazing.



An improved lightweight armored vehicle and cost effective method of retrofitting standard automobiles to make them lightweight armored vehicles is disclosed. Metal caps and channels fit about laminated windows to protect the laminated edges from stress, moisture and atmosphere and fit within the standard automobile's original window frame. Alternative laminated break-in resistant windows fit within a standard automobile's original window frames. Prefabricated, rigidly formed, lightweight opaque armor is molded to closely fit within the standard automobile. In addition, smaller pieces of ballistic steel are utilized to add armoring and structural integrity to various points in the armored vehicle. In general, the armor is designed for cost effective on-site manufacture of components and cost effective installation procedures to produce an affordable lightweight armored vehicle.

