BALLISTIC ARMOR

ABSTRACT

A composite armor plate for ballistic protection of a body against a threat, is provided, the plate comprising an inner, main armor layer of high density pellets in a binder matrix, and a front layer adapted for facing the threat, each pellet having a domed front face and a body portion merging with the front face along a perimeter line. The domed front face has a juncture point and is formed of sectors, each defined between two side edges have the form of arcs and a portion of the perimeter line extending between two spaced-apart points lying thereon, and constituting the sector's base edge. Each side edge spans between the juncture point and one of the spaced apart points. The shape of each sector is such that the intersection of the sector and a first plane crossing said two side edges, has a form of a straight line extending therebetween; and the intersection of the sector and a second plane crossing said base edge, has a form of a convexly curved line. The front layer is made of a material other than the binder matrix and is bonded to at least the majority of the pellets at the domed front faces thereof.

Figure 3A