

Title (en)

A passive armor assembly including an armor member made of a brittle material

Title (de)

Passive Panzerung die ein Panzelement aus sprödem Material umfasst

Title (fr)

Blindage passif qui comprend un élément de blindage en matériau fragile

Publication

EP 1605224 A2 20051214 (EN)

Application

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Priority

IL 16235104 A 20040603

Abstract (en)

Disclosed is a passive armor assembly for protecting a body disposed behind it from an impact of a long rod penetrator (hereinafter LRP). The armor assembly includes an armor surface (8) that is capable of exerting asymmetric forces on the oncoming LRP and an armor member (12) being disposed behind the armor surface. The armor member is made of a high compression strength, low density, brittle material, and its thickness along the direction of the impact exceeds the length of the LRP. Preferably, the thickness is at least 1.5 the length of the LRP. In a preferred embodiment the armor member is made of a material exhibiting the combination of fracture toughness smaller than $3\text{MPa}\sqrt{\text{m}}$, density of less than 2g/cc , and compression strength of from 10^2 to 10^3 MPa. <IMAGE>

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