

Title (en)  
LIGHT WEIGHT COMPOSITE ARMOR WITH STRUCTURAL STRENGTH

Title (de)  
LEICHTGEWICHTIGE VERBUNDPANZERUNG MIT STRUKTURFESTIGKEIT

Title (fr)  
BLINDAGE COMPOSITE DE FAIBLE POIDS À RÉSISTANCE STRUCTURELLE

Publication  
**EP 2883015 A4 20151125 (EN)**

Application  
**EP 13827556 A 20130805**

Priority  
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• DK 2013000048 W 20130805

Abstract (en)  
[origin: WO2014023309A1] Future fighting vehicles will require lighter, stronger and more space efficient armor for better protection, better survivability and better mobility. The invented lightweight armor component consists of armor-grade material (2), such as ceramic, encapsulated in fiber reinforced cementitious composite (FRCC) (1). The encapsulation FRCC pre-stress the armor-grade material. The resulting armor component of the present disclosure provides excellent ballistic protection against most types and sizes of Kinetic Energy (KE) threats and Chemical Energy (CE) threats. The armor component has low areal density, reduced damage area, improved multi-hit capability, flexible design and also provides high structural strength. It furthermore has the advantage, that it can be formed in virtually any shape. The present disclosure results in superior ballistic characteristics of an armor component. An object of the present disclosure is to increase penetration resistance of especially ceramic based armor, while lowering system weight.

IPC 8 full level  
**F41H 5/04** (2006.01)

CPC (source: EP US)  
**F41H 5/0414** (2013.01 - EP US); **F41H 5/0428** (2013.01 - US); **F41H 5/0471** (2013.01 - EP US); **F41H 5/0492** (2013.01 - EP US)

Citation (search report)  
• [XYI] EP 0287918 A1 19881026 - CEMCOM CORP [US]  
• [YD] US 7157158 B2 20070102 - COLLIER STEVEN [US], et al  
• See references of WO 2014023309A1

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