

Licensing opportunity

Body armour with weight transfer to the wearer's belt

Overview

The wearing of body armour is a necessity in certain applications but can add a significant weight burden to the user. This is a particular problem where body armour is worn on the upper body as a jacket or other garment, with the resulting weight of the armour being supported solely, or in the majority, by the user's shoulders. A known technique for easing this burden is to transfer the weight of the armour from the shoulders and onto the hip of the user using a support belt structure. However, previous applications of such a technique have been found to be cumbersome and result in uneven weight loading. This patent overcomes these issues by providing a user friendly, reliable body armour system, with improved stability and weight distribution, achieved through use of a new jacket and belt interface.

Key benefits

A novel channel and rim interface design that can be integrated into a body armour jacket and support belt ensures that the interface is made automatically upon the wearing of the body armour system vice needing to tighten straps or connect clips, thereby providing ease of use and time saving benefits.

A single interface extending completely or partially around a user provides stability and

even weight distribution upon the support belt and therefore upon the user.

Applications

The invention is suited to applications where a user is required to wear body armour upon his or her upper body in the form of a jacket or other garment that would otherwise create an additional and undesirable weight burden. Therefore the invention is particularly suited to security and military applications.

IP status

A PCT application was filed and has published with international publication number WO2015/136236A1. Subsequently both GB and European patent applications were filed and are currently pending grant, details of which are provided below:

- GB patent GB1615235.7 filed on 12 March 2015
- European patent EP15710548.7 filed on 12 March 2015

The abstract from the PCT application is as follows: There is provided a body armour system comprising a jacket and a belt for supporting the jacket. An interface between the jacket and the belt extends at least part way around a waist of a person when the body armour system is worn, and the interface comprises a channel and a rim for fitting into the channel. The channel is integrally formed with one of the jacket and the belt, and the rim is integrally formed with an other one of the jacket and the belt.

Commercial opportunity

The opportunity exists for a body armour manufacturer interested in reducing user weight burden to incorporate an innovative system for load carriage into their designs.

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