科技大學

CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY

102 年 專 利

系別:工業工程與管理系

題目:具頸部保暖安全氣囊之安全

帽

airbag for neck

Department: Industrial Engineering

Subject: Helmet with a warm-keeping

and Management

Main Planner: Kou-Huang Chen

計畫主持人: 陳國晃

研究成果:

一種具頸部保暖安全氣囊之安全帽,其包括一布囊、一觸發劑、及一觸發裝置; 該布囊可選擇式地收容於該安全帽之下緣或展開於該安全帽下方,該安全帽在外殼 與內襯的夾層空間內設有一收容空間;其中:該布囊由高強度布料所構成,具有兩 開口端的環形封閉空間,其一端結合在該安全帽的下緣,另一端為自由端向下垂 伸;該觸發劑被收容在該安全帽的該收容空間中,該收容空間與該布囊的該封閉空 間連通;該觸發裝置至少包含一點火單元、及一感測器,該感測器電性連接該點火 單元,當該感測器偵測到該安全帽有劇烈移動時,該點火單元引爆該觸發劑而產生 大量氣體充填於該布囊的該封閉空間內,並撐開該布囊而構成一安全氣囊。

英文摘要:

This creation is a kind of helmet with a warm-keeping airbag for neck. It includes a cloth bag, a trigger, and a triggering device. The cloth bag can be selectively contained under the lower edge of helmet, or extended under the helmet. There is an interval space between the shell and lining of the helmet for collecting. The cloth bag is made of high strength cloth, and has a closed ring space with two open ends. One of which is conned to the lower of helmet and the other is a free and extending end. The trigger is contained inside the interval space of the helmet, and this space is connected with the closed space of the cloth bag. The trigger device includes an igniter unit and a sensor. This sensor is connected electrically to the igniter unit. When the sensor detects a violent vibration from the helmet, the igniter unit will kindle the trigger and a great deal of gas can be generated, which will fill up with the closed space of the cloth bag, expending the cloth bag and forming a safety air bag.

圖片介紹:



