

Title (en)  
INTEGRATED HELMET ILLUMINATION SYSTEM

Title (de)  
INTEGRIERTES HELMBELEUCHTUNGSSYSTEM

Title (fr)  
SYSTEME D'ECLAIRAGE DE CASQUE INTEGRE

Publication  
**EP 1384029 A4 20040630 (EN)**

Application  
**EP 02725286 A 20020322**

Priority  
• US 0208724 W 20020322  
• US 27782801 P 20010322

Abstract (en)  
[origin: WO02077520A1] An integrated helmet illumination system and process for forming thereof is described. The system comprises a protective helmet (102), a substrate affixed to the helmet, and an electroluminescent lamp (106) positioned between the substrate (104) and the protective helmet. The substrate is configured to be affixed to an exterior surface of the helmet to define a helmet outer shell. Also, the substrate is fabricated with a light transmissive viewing area through which the illumination of the electroluminescent lamp is viewed. Additionally, the substrate can be formed out of the transparent light reflective material to reflect light incident upon the helmet outer shell, the integrated helmet illumination system is formed by the following process steps: a substrate is formed to have a light transmissive viewing area; then, an electroluminescent lamp is affixed to a surface of the substrate over the light transmissive viewing area; then an electroluminescent lamp is affixed to a surface of the substrate over the light transmissive area; the substrate and electroluminescent lamp affixed thereto are then vacuum molded or formed, forming the substrate into the helmet outer shell; the helmet outer shell with electroluminescent lamp thereon is then attached to an exterior surface of a protective helmet such that the lamp is positioned between the outer shell and the protective helmet.

IPC 1-7  
**A42B 3/04**

IPC 8 full level  
**A42B 3/04** (2006.01); **G09F 21/02** (2006.01)

CPC (source: EP US)  
**A42B 3/044** (2013.01 - EP US); **G09F 21/02** (2013.01 - EP US)

Citation (search report)  
• [XAY] US 5559680 A 19960924 - TABANERA DENNIS A [US]  
• [X] US 5426792 A 19950627 - MURASKO MATTHEW M [US]  
• [X] US 5570946 A 19961105 - CHIEN TSENG L [TW]  
• [YA] US 4665342 A 19870512 - TOPP MARK [US], et al  
• See references of WO 02077520A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 02077520 A1 20021003**; EP 1384029 A1 20040128; EP 1384029 A4 20040630; JP 2004526879 A 20040902; US 2002157173 A1 20021031

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**US 0208724 W 20020322**; EP 02725286 A 20020322; JP 2002575531 A 20020322; US 10413502 A 20020322