

Title (en)
IMPROVED MULTI-LAYER SAFETY HELMET

Title (de)
VERBESSERTER MEHRSCICHTIGER SCHUTZHELM

Title (fr)
CASQUE DE SÉCURITÉ MULTICOUCHE AMÉLIORÉ

Publication
EP 3977884 A4 20230726 (EN)

Application
EP 19930412 A 20191212

Priority
• KR 20190063545 A 20190530
• KR 2019017533 W 20191212

Abstract (en)
[origin: US2021100310A1] Provided is an improved multi-layer safety helmet comprising: a lower buffer portion worn on the user's head; and an upper buffer portion coupled to an upper portion of the lower buffer portion, wherein an impact applied from the outside is firstly absorbed by the upper buffer portion and is secondly absorbed by the lower buffer portion.

IPC 8 full level
A42B 3/12 (2006.01); **A42B 3/28** (2006.01)

CPC (source: EP KR US)
A42B 3/12 (2013.01 - KR); **A42B 3/124** (2013.01 - US); **A42B 3/128** (2013.01 - EP); **A42B 3/28** (2013.01 - KR); **A42B 3/281** (2013.01 - EP)

Citation (search report)
• [A] EP 1016352 A1 20000705 - CAMAU SYSTEM DI CASALE & C S N [IT]
• [A] US 2019090574 A1 20190328 - SHAFFER SAMUEL J [US]
• [A] WO 2008085108 A1 20080717 - POC SWEDEN AB [SE], et al
• See references of WO 2020241994A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2021100310 A1 20210408; CN 112601471 A 20210402; EP 3977884 A1 20220406; EP 3977884 A4 20230726; JP 2021529266 A 20211028; JP 7026265 B2 20220225; KR 102052335 B1 20191206; WO 2020241994 A1 20201203

DOCDB simple family (application)
US 202017124861 A 20201217; CN 201980044356 A 20191212; EP 19930412 A 20191212; JP 2020571678 A 20191212; KR 20190063545 A 20190530; KR 2019017533 W 20191212