

Title (en)

Flashlight with a battery device having plural joined-together batteries

Title (de)

Taschenlampe mit Batterievorrichtung mit mehreren miteinander verbundenen Batterien

Title (fr)

Lampe torche avec dispositif de batterie ayant plusieurs batteries assemblées entre elles

Publication

EP 1978292 B1 20120516 (EN)

Application

EP 07020908 A 20071025

Priority

CN 200710100403 A 20070405

Abstract (en)

[origin: EP1978292A2] A flashlight includes a shell (1), a battery device (2) held in the shell, a light emitting member installed on a front end of the shell, and a tail cap (3) for the shell; the battery device includes a casing, and several single-part batteries (A21,A22) held in the casing; the casing comprises two covering parts (A11,A12), which are joined together; the battery device further includes a socket on the casing; positive and negative poles of the battery device are exposed through front and rear ends of the casing respectively, and they are electrically connected with the sockets; a circuit board (4) is secured in the tail cap, and electrically connected with the battery device (2); the circuit board (4) has a built-in microcomputer controller to control power to the light emitting member; after a plug of a charger is inserted in the socket of the battery device, the batteries together will be charged through the charger.

IPC 8 full level

F21L 4/08 (2006.01); **F21V 23/04** (2006.01); **F21Y 101/00** (2016.01)

CPC (source: EP)

F21L 4/085 (2013.01); **F21V 23/0414** (2013.01)

Cited by

CN112671056A; EP2642177A4; CN103604097A; EP2660897A4

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1978292 A2 20081008; **EP 1978292 A3 20081231**; **EP 1978292 B1 20120516**; AU 2007237154 A1 20081023; CA 2612649 A1 20081005; JP 2008258138 A 20081023; JP 4629721 B2 20110209; TW 200848652 A 20081216; TW I317408 B 20091121

DOCDB simple family (application)

EP 07020908 A 20071025; AU 2007237154 A 20071126; CA 2612649 A 20071123; JP 2007305559 A 20071127; TW 96121911 A 20070615