

Title (en)  
LIGHTING DEVICE

Title (de)  
BELEUCHTUNGSAPPARATUR

Title (fr)  
APPAREIL D'ECLAIRAGE

Publication  
**EP 1112458 A1 20010704 (DE)**

Application  
**EP 99968702 A 19990903**

Priority

- DE 9902817 W 19990903
- DE 19840475 A 19980904

Abstract (en)  
[origin: US6572246B1] In order to develop a lighting apparatus having a light source unit which has at least one light source and a first reflector, and having at least one optical element, with the light which is emitted from the light source being focused by the first reflector to form a light beam which can be influenced by the optical element further, in such a manner that the type of structure, in particular the diameter of the light outlet openings of the lamp housing, does not restrict the optical elements which can be used, said apparatus has a reflector unit having a second reflector and having a concave third reflector, with the concave third reflector having an opening for the light beam and the light beam being reflected by the second reflector onto the third reflector, and with the optical element being arranged between the light source unit and the reflector unit.

IPC 1-7  
**F21S 10/02**

IPC 8 full level  
**F21S 10/02** (2006.01); **F21V 7/10** (2006.01); **F21V 13/08** (2006.01)

CPC (source: EP US)  
**F21V 7/10** (2013.01 - EP US); **F21V 13/08** (2013.01 - EP US); **F21W 2131/205** (2013.01 - EP US)

Citation (search report)  
See references of WO 0014447A1

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

DOCDB simple family (publication)  
**US 6572246 B1 20030603**; AT E232279 T1 20030215; AU 1147900 A 20000327; DE 19840475 A1 20000330; DE 59904233 D1 20030313;  
EP 1112458 A1 20010704; EP 1112458 B1 20030205; ES 2190285 T3 20030716; WO 0014447 A1 20000316

DOCDB simple family (application)  
**US 78639501 A 20010709**; AT 99968702 T 19990903; AU 1147900 A 19990903; DE 19840475 A 19980904; DE 59904233 T 19990903;  
DE 9902817 W 19990903; EP 99968702 A 19990903; ES 99968702 T 19990903