

Title (en)
AN LED ILLUMINATED LAMP ASSEMBLY

Title (de)
LEUCHTE MIT LED-BELEUCHTUNG

Title (fr)
ENSEMBLE LAMPE A ECLAIRAGE PAR DEL

Publication
EP 0874964 A1 19981104 (EN)

Application
EP 97904726 A 19970107

Priority

- US 9700005 W 19970107
- US 1015096 P 19960117
- US 2402896 P 19960816
- US 76113996 A 19961206

Abstract (en)
[origin: CA2243593A1] The present invention provides for a lamp assembly that includes a lens (1) that optimizes and redirects light in a desirable direction in order to meet certain regulations. The lens of the present invention works in combination with specific LEDs (11) to efficiently redirect light emitted from the LEDs (11). The assembly includes a circuit board (9) including a plurality of rows of LEDs (11) and a lens (1), which has an exterior surface (7) and an interior surface (5). The interior surface (5) of the lens (1) comprises a plurality of rows of horizontal bands (3) with a single band being associated with a row of LEDs (11). Each of the bands (3) has an upper region (3a) and a lower region (3b) used to redirect some light rays downward, allow some rays to travel uninterrupted and redirect some light horizontally.

IPC 1-7
F21V 5/04; **F21Q 3/00**; **F21K 7/00**; **F21S 8/00**

IPC 8 full level
F21V 5/04 (2006.01); **B60Q 1/26** (2006.01); **F21K 99/00** (2016.01); **F21S 8/00** (2006.01); **G08G 1/095** (2006.01); **H01L 33/00** (2010.01); **H01L 33/30** (2010.01); **H01L 33/58** (2010.01)

CPC (source: EP US)
F21V 5/04 (2013.01 - EP US); **G08G 1/095** (2013.01 - EP); **F21Y 2115/10** (2016.07 - EP)

Cited by
EP2578930A2; US9086192B2; EP2677235A1; WO2013189768A1

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

DOCDB simple family (publication)
AT E305115 T1 20051015; AU 1744597 A 19970811; AU 708420 B2 19990805; BR 9707050 A 19991228; CA 2243593 A1 19970724; CA 2243593 C 20050329; DE 69734234 D1 20060202; DE 69734234 T2 20060706; EP 0874964 A1 19981104; EP 0874964 A4 20000112; EP 0874964 B1 20050921; JP 2000503431 A 20000321

DOCDB simple family (application)
AT 97904726 T 19970107; AU 1744597 A 19970107; BR 9707050 A 19970107; CA 2243593 A 19970107; DE 69734234 T 19970107; EP 97904726 A 19970107; JP 52601697 A 19970107