

Title (en)

Signal light with several light sources arranged in line, especially complementary brake light for vehicle

Title (de)

Signalleuchte mit mehreren in Reihe angeordneten Lichtquellen, insbesondere komplementäre Bremsleuchte für Kraftfahrzeuge

Title (fr)

Feu de signalisation à plusieurs sources alignées, notamment feu stop complémentaire pour véhicule automobile

Publication

EP 0762049 B1 20030625 (FR)

Application

EP 96401938 A 19960911

Priority

FR 9510599 A 19950911

Abstract (en)

[origin: EP0762049A1] The lamp includes a low-profile housing which encloses a dozen generally aligned light sources (preferably LEDs) (20) spaced 25 mm apart on an elongated printed circuit board. Emission from each hemispherical end (22) is concentrated by a cylindro-parabolic reflector (40) through the Fresnel lens (50) on to an array of scattering spheres or toroids (61) on the inside of a U-section moulding (60). The body (21) of each source is wider than the emissive hemisphere on to which the reflector and facets (51) of the Fresnel lens are focused. The hemisphere emits into a cone with a semi-vertical angle (θ) of about 50 degrees, while the reflector restricts the angle of emission (ϕ) to 30-40 degrees.

IPC 1-7

F21S 8/10

IPC 8 full level

B60Q 1/44 (2006.01); **F21S 8/10** (2006.01); **F21V 13/04** (2006.01); **G02B 3/08** (2006.01); **H01L 33/00** (2010.01); **H01L 33/58** (2010.01); **H01L 33/60** (2010.01); **F21V 5/04** (2006.01)

CPC (source: EP US)

F21S 43/14 (2017.12 - EP US); **F21S 43/15** (2017.12 - EP US); **F21S 43/40** (2017.12 - EP US); **F21V 5/008** (2013.01 - EP US); **F21V 5/045** (2013.01 - EP US); **Y10S 362/80** (2013.01 - EP US)

Cited by

ES2396298A1; EP2669117A3; CN109307202A; DE19938734A1; EP1087175A3; EP0947761A1; FR2776595A1; FR3074117A1; RU2767217C2; US6170971B1; DE102007013082A1; EP1077344A2; US11858237B2; WO9806975A1; WO2019106290A1

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

EP 0762049 A1 19970312; **EP 0762049 B1 20030625**; DE 69628792 D1 20030731; DE 69628792 T2 20040519; ES 2201160 T3 20040316; FR 2738621 A1 19970314; FR 2738621 B1 19971128; JP H09180517 A 19970711; US 5762414 A 19980609

DOCDB simple family (application)

EP 96401938 A 19960911; DE 69628792 T 19960911; ES 96401938 T 19960911; FR 9510599 A 19950911; JP 24025696 A 19960911; US 71154996 A 19960910