

Title (en)
LED signal emitter comprising a plurality of LED zones

Title (de)
LED-Signalgeber mit Zonenanordnung

Title (fr)
Emetteur de signaux à diodes électroluminescentes avec plusieurs zones de diodes

Publication
EP 1107210 A3 20060419 (DE)

Application
EP 00890368 A 20001207

Priority
AT 206799 A 19991209

Abstract (en)
[origin: EP1107210A2] The signal source has a central arrangement of LEDs on a replaceable circuit board with good thermal conductivity, a condenser lens and a front panel with diffusing elements. The LEDs are arranged in three horizontal rows at equal intervals. A low horizontal zone with highest packing density and LED intensity starts from the lowest row. There is at least one higher zone with significantly lower packing density and/or light intensity. The signal source has a central arrangement of LEDs (3) on a replaceable circuit board (2) with good thermal conductivity whose light is acquired as completely as possible by a Fresnel type condenser lens (4) at the focal point distance and focused onto a front panel (5) with one or more groups of diffusing elements. The LEDs are arranged in three horizontal rows at equal intervals (A). A low horizontal zone (X) with highest packing density and LED intensity starts from the lowest row with a half height converted into a halved separation angle smaller than the sun state angle by various correction factors. There is at least one higher zone (Y1,Y2) with significantly lower packing density and/or light intensity.

IPC 8 full level
F21S 8/00 (2006.01); **G08G 1/095** (2006.01); **H01L 25/075** (2006.01)

CPC (source: EP)
G08G 1/095 (2013.01); **F21W 2111/02** (2013.01)

Citation (search report)
• [DA] WO 9816777 A1 19980423 - PHILIPS ELECTRONICS NV [NL], et al
• [A] EP 0860805 A1 19980826 - SWARCO FUTURIT VERKEHRSSIGNALS [AT]
• [A] WO 9950596 A2 19991007 - OTKRYTOE AKTSIONERNOE OBSHEST [RU], et al

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EP 1107210 A2 20010613; EP 1107210 A3 20060419; AT 409805 B 20021125; AT A206799 A 20020315

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EP 00890368 A 20001207; AT 206799 A 19991209