

Title (en)

ILLUMINATED DISPLAY UNIT, IN PARTICULAR A HOUSE NUMBER PLATE, TRAFFIC SIGN OR ADVERTISING PANEL

Publication

EP 0306659 A3 19900620 (DE)

Application

EP 88111105 A 19880712

Priority

DE 3730591 A 19870911

Abstract (en)

[origin: US4903172A] An illuminated display unit such as a house number, traffic sign, advertisement carrier and the like comprises a fluorescing or photoconductive plate adjacent an edge of which is fitted at least one light-emitting element, in particular a light-emitting diode. The edge is provided with a reflecting layer to prevent emergence of light. Display symbols or their negatives are arranged, as viewed by the onlooker, on the rear face of the photoconductive plate. As a result of the total reflection for a photoconductive plate on the front and back and on the reflecting layer at the edges, the light produced by the light-emitting diode can issue only at the contact surface with the display symbols, so that the light is concentrated very strongly there and a great display brightness is produced. This is even more effective when a contrast surface is arranged behind the plate. In this way great display brightness can be produced with very low electric power, permitting continuous operation or operation with a small number of solar cells.

IPC 1-7

G09F 13/18; **G09F 13/20**

IPC 8 full level

G09F 13/18 (2006.01); **G09F 13/20** (2006.01); **G09F 13/04** (2006.01)

CPC (source: EP US)

G09F 13/0472 (2021.05 - EP); **G09F 13/20** (2013.01 - EP US); **G09F 13/0472** (2021.05 - US); **Y10S 136/291** (2013.01 - EP US); **Y10S 362/802** (2013.01 - EP US); **Y10S 362/812** (2013.01 - EP US)

Citation (search report)

- [AD] DE 3322393 A1 19850110 - DATA FAKTOR IND PRODUCTS GMBH [DE]
- [AD] DE 2356947 A1 19750522 - BUTTERWECK DIETER
- [AD] DE 3602819 A1 19860731 - TOSHIBA KAWASAKI KK [JP]
- [AD] WO 8201270 A1 19820415 - OBRIEN P [AU]

Cited by

FR2653925A1; DE19853106A1; KR100354242B1; DE102015011904A1; WO9903086A1; WO0247055A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

US 4903172 A 19900220; AT E98035 T1 19931215; DE 3730591 C1 19880707; DE 3885977 D1 19940113; EP 0306659 A2 19890315; EP 0306659 A3 19900620; EP 0306659 B1 19931201; ES 2049228 T3 19940416

DOCDB simple family (application)

US 24346588 A 19880912; AT 88111105 T 19880712; DE 3730591 A 19870911; DE 3885977 T 19880712; EP 88111105 A 19880712; ES 88111105 T 19880712