

Title (en)

ELECTRO-OPTICAL PLANAR DISPLAY, IN PARTICULAR AN LCD DISPLAY PANEL

Publication

EP 0374085 B1 19930915 (DE)

Application

EP 89730208 A 19891014

Priority

DE 3842900 A 19881216

Abstract (en)

[origin: CA2005792A1] A LCD area includes a flat-design housing having at least one line of display elements forming the front of the housing and a backlighting device disposed inside the housing and assigned to the line of display elements. The heat load of the LCD display elements is reduced and the construction of the housing is simplified by providing the backlighting device with a light-guide tube disposed inside the housing and a light source disposed at a light entrance opening of the light-guide tube made from transparent material and surrounded by a reflector material, which comprise cutouts assigned to the individual display elements and serve as light-exit openings.

IPC 1-7

G02F 1/133; **G09F 9/30**; **G09F 9/35**

IPC 8 full level

G02F 1/1335 (2006.01); **G02F 1/133** (2006.01); **G02F 1/13357** (2006.01); **G09F 9/00** (2006.01); **G09F 9/30** (2006.01); **G09F 9/302** (2006.01); **G09F 9/35** (2006.01); **G09F 9/40** (2006.01); **G09F 13/00** (2006.01); **G09F 13/04** (2006.01)

CPC (source: EP US)

G09F 9/302 (2013.01 - EP US); **G09F 9/35** (2013.01 - EP US); **G09F 13/00** (2013.01 - EP US); **G09F 2013/05** (2021.05 - EP US)

Cited by

EP0481327A1; EP0644451A1; FR2710439A1; US5486983A; WO9202006A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 0374085 A2 19900620; **EP 0374085 A3 19901205**; **EP 0374085 B1 19930915**; AT E94674 T1 19931015; AU 4553989 A 19900621; AU 628427 B2 19920917; BR 8906533 A 19900828; CA 2005792 A1 19900616; DE 3842900 C1 19900510; DE 58905624 D1 19931021; DK 638589 A 19900617; DK 638589 D0 19891215; FI 896040 A0 19891215; JP H02238486 A 19900920; NO 894627 D0 19891121; NO 894627 L 19900618; NZ 231200 A 19911223; PT 92593 A 19900629; PT 92593 B 19950912; TR 24389 A 19910924; US 5044734 A 19910903; ZA 899605 B 19900926

DOCDB simple family (application)

EP 89730208 A 19891014; AT 89730208 T 19891014; AU 4553989 A 19891124; BR 8906533 A 19891218; CA 2005792 A 19891218; DE 3842900 A 19881216; DE 58905624 T 19891014; DK 638589 A 19891215; FI 896040 A 19891215; JP 32409589 A 19891215; NO 894627 A 19891121; NZ 23120089 A 19891030; PT 9259389 A 19891215; TR 102189 A 19891211; US 44755089 A 19891207; ZA 899605 A 19891215