

Title (en)

Readable display structure.

Title (de)

Lesbare Anzeigevorrichtung.

Title (fr)

Dispositif d'affichage lisible.

Publication

EP 0495616 A2 19920722 (EN)

Application

EP 92300290 A 19920114

Priority

US 64118491 A 19910115

Abstract (en)

A display structure which is readable even in direct sunlight includes a layered structure formed of a reflective element (42), an LED light source (18), a coloured filter (16), a legend plate (14), and a liquid crystal shutter (12). The reflective element (42) is positioned behind the LED light source (18). The light source is formed of an LED array (26) having a diffusion medium (28) disposed in front of the LED array (26) for scattering light when energized. The liquid crystal shutter (12) permits displayable information on the legend plate (14) to be viewed only when the LED array (26) and the liquid crystal shutter (12) are energized. The reflective element (42) and the diffusion medium (28) reflect and scatter incident sunlight which has passed through the liquid crystal shutter (12), legend plate (14) and coloured filter (16). This light is then reflected back through the coloured filter (16) and legend plate (14) and out the liquid crystal shutter (12). The coloured filter (16) is preferably selected to have certain spectral transmission characteristics. As a result, the contrast of the displayable information on the legend plate is enhanced and is unaffected by washout when viewed in an area of incident sunlight. <IMAGE>

IPC 1-7

B60Q 3/04; G01D 11/28; G09F 9/35; G09F 13/04

IPC 8 full level

G09F 9/33 (2006.01); **G09F 9/00** (2006.01); **G09F 13/04** (2006.01); **G09F 13/00** (2006.01)

CPC (source: EP KR)

G09F 9/33 (2013.01 - KR); **G09F 13/04** (2013.01 - EP); **G09F 13/0472** (2021.05 - EP); **G09F 13/00** (2013.01 - EP); **G09F 2013/05** (2021.05 - EP)

Cited by

FR2711827A1

Designated contracting state (EPC)

CH DE ES FR GB IT LI

DOCDB simple family (publication)

EP 0495616 A2 19920722; **EP 0495616 A3 19930203**; CA 2059157 A1 19920716; JP H07302053 A 19951114; KR 920015148 A 19920826; KR 950004717 B1 19950504

DOCDB simple family (application)

EP 92300290 A 19920114; CA 2059157 A 19920110; JP 2330492 A 19920114; KR 920000367 A 19920114