

Title (en)

AUXILIARY OPTICS FOR OUTDOOR LED VIDEO PANELS

Title (de)

VORSATZOPTIK FÜR OUTDOOR-LED-VIDEO-PANNEELE

Title (fr)

OPTIQUE AUXILIAIRE POUR PANNEAUX VIDEO A LED DE PLEIN AIR

Publication

EP 1313985 A2 20030528 (DE)

Application

EP 01964714 A 20010824

Priority

- AT 0100275 W 20010824
- AT 14602000 A 20000824

Abstract (en)

[origin: WO0217628A2] A video panel is disclosed, fitted with LEDs of precise SMD construction, comprising an auxiliary optic for open-air display, which improves the visibility and contrast of the display in any incident sunlight conditions, whereby a mirroring and reflection of the sunlight is avoided in the observed region and at the same time a good light distribution is achieved. A light guide rod (3) is arranged directly in front of each LED (2), the cross-sectional direction and orientation of which, relative to the LED (2), is such that the total incident useful light is transmitted by total reflection on the walls (5) and directed into the observed region (B) and incident sunlight (7) cannot reach the LED (2), either due to multiple total reflection in the incident direction or by being returned outside the observed region (B), or by impinging the walls (5) of the light guide rods (3) at a steeper angle than the limiting angle for total reflection, escaping there and being absorbed by a surrounding housing (9). Further, interfering surface reflections are avoided by correspondingly angled light emitting surfaces (6).

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CPC (source: EP)

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Citation (search report)

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