

Title (en)

ILLUMINATION DEVICE HAVING A FLAT LIGHT GUIDE PLATE

Title (de)

BELEUCHTUNGSVORRICHTUNG MIT EINER EBENEN LICHTLEITERPLATTE

Title (fr)

DISPOSITIF D'ÉCLAIRAGE AVEC UNE PLAQUE GUIDE D'ONDE PLANE

Publication

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Application

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Abstract (en)

[origin: WO2017041894A1] The invention relates to an illumination device (1) comprising a flat light guide plate (2) into which at least one electric lamp element, preferably formed as a light-emitting diode (3), couples light on at least one side surface (4), and the limiting side surfaces (5, 6; 11) of which are provided with a reflective layer, and comprising a limiting structure (8) formed on the light guide plate (2) and provided for light emission, and neighbouring a receiving means (7) in the light guide plate (2) for integrating a display or actuation element, wherein the light guide plate (2) has a light guide plate shaped section which forms a light-coupling part (9) with a light-coupling section neighbouring the light-coupling side surface (4), and which has at least one inner optical imperfection (10) that widens the coupleable light and scatters same by forming a light curtain overhanging the limiting structure (8), which can be reflectively decoupled by the limiting side surfaces (5, 6; 11) on the limiting structure (8) of the light guide plate (2) by forming an illumination surface, wherein the limiting structure (8) is arranged as a limiting contour around the receiving means (7) for the display or actuation element, and a rear limiting side surface (11) arranged facing away from the light-coupling part (9) follows the limiting contour in a shape-adapted manner.

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