

Title (en)  
PANEL LIGHT APPARATUS

Title (de)  
PLATTENLICHTVORRICHTUNG

Title (fr)  
APPAREIL D'ÉCLAIRAGE DE PANNEAU

Publication  
**EP 3623696 A1 20200318 (EN)**

Application  
**EP 19188350 A 20190725**

Priority  
CN 201821501945 U 20180913

Abstract (en)  
A panel light apparatus includes a heat sink frame (11; 41; 972; 9831; 672; 752; 759; 995), a first LED light bar (31; 32), an optical guiding module (13; 71) and a back cover (28; 831; 911; 975; 781; 653) (28; 831; 911; 975; 781; 653). The first LED light bar (31; 32) has a first plugging structure (312; 313; 314; 315) to be plugged to a second plugging structure of the heat sink frame (11; 41; 972; 9831; 672; 752; 759; 995). Heat of the LED light bar (511; 512) is transmitted to the heat sink frame (11; 41; 972; 9831; 672; 752; 759; 995). The optical guiding module (13; 71) includes a light diffusion layer (231; 714; 632; 864; 872; 902; 881; 917; 892; 891; 944; 9742; 774) and a light guiding layer (232; 713; 63; 863; 871; 901; 916; 891; 943; 9741; 773). A lateral side of the light guiding layer (232; 713; 63; 863; 871; 901; 916; 891; 943; 9741; 773) faces to LED modules (945; 9511; 9512; 996) of the first LED light bar (31; 32) for guiding light of the LED modules (945; 9511; 9512; 996) to the diffusion layer. The light guiding layer (232; 713; 63; 863; 871; 901; 916; 891; 943; 9741; 773) and the light diffusion layer (231; 714; 632; 864; 872; 902; 881; 917; 892; 891; 944; 9742; 774) are fixed together as an assembly module before being placed in the surrounding border.

IPC 8 full level  
**F21V 21/04** (2006.01); **F21S 8/02** (2006.01); **F21S 8/04** (2006.01); **F21Y 115/10** (2016.01)

CPC (source: EP)  
**F21S 8/026** (2013.01); **F21S 8/04** (2013.01); **F21V 21/049** (2013.01); **F21Y 2115/10** (2016.07)

Citation (search report)  
• [XII] US 2015267905 A1 20150924 - LEE DOO YONG [KR], et al  
• [AP] CN 208997878 U 20190618 - SICHUAN LIANKAI LIGHTING CO LTD

Cited by  
CN112413469A

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
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**EP 3623696 A1 20200318**; **EP 3623696 B1 20220223**; CN 208997878 U 20190618

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