

Title (en)
WAVEGUIDE ILLUMINATOR HAVING SLAB WAVEGUIDE PORTION

Title (de)
WELLENLEITERBELEUCHTUNGSVORRICHTUNG MIT EINEM SCHICHTWELLENLEITERTEIL

Title (fr)
ILLUMINATEUR À GUIDE D'ONDES AYANT UNE PARTIE GUIDE D'ONDES DE DALLE

Publication
EP 4370828 A1 20240522 (EN)

Application
EP 22751946 A 20220715

Priority
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• US 2022037357 W 20220715

Abstract (en)
[origin: WO2023288092A1] A waveguide illuminator includes adjacent linear and slab waveguide areas. An input light beam is guided in a linear waveguide, is split into a plurality of sub-beams to propagate in individual linear waveguides to a slab waveguide area and form an output light beam in the slab waveguide area. An array of out-couplers is disposed in the slab waveguide area. The array of out-couplers out-couples portions of the output light beam forms an array of out-coupled beam portions for illuminating a display panel. Locations of the array of out-couplers are coordinated with locations of individual pixels of the display panel, thereby improving efficiency of light utilization by the display panel.

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