Title (en)

METHOD OF FABRICATING LIGHT GUIDE PLATE, LIGHT GUIDE PLATE FABRICATED THEREBY, AND ILLUMINATION DEVICE HAVING THE SAME

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER LICHTLEITERPLATTE, DAMIT HERGESTELLTE LICHTLEITERPLATTE UND BELEUCHTUNGSVORRICHTUNG DAMIT

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE PLAQUE DE GUIDAGE DE LUMIÈRE, PLAQUE DE GUIDAGE DE LUMIÈRE AINSI FABRIQUÉE, ET DISPOSITIF D'ÉCLAIRAGE DOTÉ DE LA PLAQUE DE GUIDAGE DE LUMIÈRE

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Abstract (en)

[origin: KR20200037718A] The present invention relates to a light guide plate manufacturing method, a light guide plate thereof, and a light emitting diode for lighting including the same and, more specifically, to a light guide plate manufacturing method capable of preventing a light point, from which light is extracted, from being seen by a front observer, simplifying a process, and acquiring a light distribution close to a Lambertian surface, a light guide plate thereof, and a light emitting diode for lighting including the same. To this end, according to the present invention, a method for manufacturing a light guide plate used for a side light emitting type lighting device comprises: a light guide plate preparation step of preparing a light guide plate including a first surface emitting light to a surface facing the front observer, a second surface facing the first surface, and a third surface continued from an edge of the first and second surfaces to face a light emitting diode disposed while connecting the first and second surfaces; and a scattering layer forming step of printing a printing solution on the entire area of the second surface to form a continuous scattering layer. The scattering layer forming step uses at least one from a first method of controlling a printing process to gradually increase the density of scattering particles apart from the light emitting diode disposed to face at least one surface of the third surface and a second method of controlling the printing process to gradually increase the thickness of the scattering layer.

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