Title (en)

ILLUMINATION DEVICE FOR SIMULATING NEON OR SIMILAR LIGHTING USING PHOSPHORESCENT DYE

Title (de)

BELEUCHTUNGSVORRICHTUNG ZUR SIMULATION VON NEON- ODER ÄHNLICHEM LICHT UNTER VERWENDUNG VON PHOSPHORESZIERENDEN FARBSTOFFEN

Title (fr)

DISPOSITIF D'ECLAIRAGE PERMETTANT DE SIMULER UN ECLAIRAGE AU NEON OU SIMILAIRE A L'AIDE D'UN COLORANT PHOSPHORESCENT

Abstract (en)

[origin: WO2005065356A2] An illumination device simulates neon lighting using a light source for emitting light of a predetermined first hue and a light-transmitting medium having a predetermined density of phosphorescent dye positioned adjacent to the light source. The phosphorescent dye will absorb light emitted by the light source and emit light of a second hue. An observer of the device perceives light that is of a hue that is different from the predetermined first hue. A means for varying the intensity of the light emitted by the light source creates color changing effects in the illumination device. Light-emitting diodes (LEDs) are a suitable light source. A waveguide having both optical waveguide and light scattering properties is used to diffuse the combined light and simulate the uniform appearance of a neon tube. Alternatively, the waveguide itself can be doped with phosphorescent dye to emit light having the perceived hue.

IPC 8 full level

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