

Title (en)

RECYCLING OF LIGHT WITH SOLID AND HOLLOW LIGHT PIPES

Title (de)

RECYCLING VON LICHT MIT FESTE UND HOHLEN LICHTRÖHREN

Title (fr)

RECYCLAGE DE LUMIÈRE AVEC CONDUITS DE LUMIÈRE PLEINS ET CREUX

Publication

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Application

EP 16747399 A 20160206

Priority

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- US 2016016907 W 20160206

Abstract (en)

[origin: WO2016127145A1] The present invention is a device for recycling light emitted from an LED light source having one or more LEDs mounted on a heatsink. The device includes a tapered light pipe being rectangular or circular in shape, having an input end smaller than the output end. The LEDs are coupled to the input end. The output end is coupled to a hollow tunnel with a reflective interior surface with the other end of the hollow tunnel covered by a mirror directed toward the interior surface of the hollow tunnel. The mirror having an output aperture about the middle and a reflective interior surface guiding light emitted from the LEDs toward the output aperture. The mirror reflects part of the light emitted from the LEDs that does not exit the output aperture thereby recycling the light and increasing the brightness of light emitted through the output aperture.

IPC 8 full level

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