

Title (en)

Recovery system of the heat dissipated by luminaires, lamps and led devices

Title (de)

Rückgewinnungssystem für die von Leuchtkörpern, Lampen und LED-Vorrichtungen abgeführte Wärme

Title (fr)

Système de récupération de la chaleur dissipée par des luminaires, lampes et dispositifs de diode électroluminescente (DEL)

Publication

EP 2549179 A3 20140430 (EN)

Application

EP 12382294 A 20120721

Priority

ES 201131253 A 20110721

Abstract (en)

[origin: EP2549179A2] Recovery system of the heat dissipated by luminaires, comprising at least one lighting appliance (1), or luminaire, which has a LED lamp (2), or a lamp or bulb, or other light generating means, featuring a thermal transmission means near the source of light, such a thermal transmission means being associated to a heat exchanger through which circulates a fluid (8), where in the case of using LEDs, the thermal transmission means is a transmitter or radiator (4) in contact with the base or supporting plate of the LEDs, and arranged at the bottom of a heat exchanger (5), while if the luminaire has lamps or bulbs, the thermal transmission means is a reflector, upon which in a surrounding manner a casing leaving an interior space defining a heat exchanger is provided.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] US 2007090737 A1 20070426 - HU TSENG-HSIANG [TW], et al
- [X] WO 2005059436 A1 20050630 - AIMLEDS CORP [CA], et al
- [XI] DE 202009007426 U1 20101014 - ZUMTOBEL LIGHTING GMBH [AT]
- [I] CN 201209838 Y 20090318 - YANGHUAI CHEN [CN]
- [X] WO 2006038791 A1 20060413 - VAN TILBORGH JOHANNES [NL]
- [XA] US 3193001 A 19650706 - GERSHON MECKLER
- [XA] US 3372740 A 19680312 - KASTOVICH JOHN C, et al

Cited by

CN106051605A; CN106195878A; CN104296101A; CN104676547A; CN103968291A; CN108758457A; US10408446B2; WO2015173770A3

Designated contracting state (EPC)

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