

Title (en)
ELECTRICAL CIRCUIT ARRANGEMENT

Title (de)
ELEKTRISCHE SCHALTUNGSANORDNUNG

Title (fr)
AGENCEMENT DE COMMUTATION ÉLECTRIQUE

Publication
EP 2318756 A1 20110511 (DE)

Application
EP 09777475 A 20090728

Priority
• EP 2009005442 W 20090728
• DE 202008010175 U 20080730

Abstract (en)
[origin: US8740419B2] The present invention relates to an electrical circuit arrangement, in particular an electrical signal circuit arrangement and preferably a signal lamp which is used in hazardous areas. The circuit arrangement is equipped with at least one electrical component (1) which is arranged on a printed circuit board (2) produced from a heat-conducting material. The electrical component (1) is, in particular, a luminous means (1). A cooling device (6, 7) which is in thermal contact with the printed circuit board (2) is also realized. According to the invention, the cooling device (6, 7) is in at least two parts, with a heat sink (7) and at least one heat pipe (6). In this case, the heat pipe (6) thermally connects the printed circuit board (2) to the heat sink (7).

IPC 8 full level
F21V 25/12 (2006.01); **F21S 8/00** (2006.01); **F21V 29/00** (2006.01); **F21W 131/403** (2006.01)

CPC (source: EP US)
F21V 25/12 (2013.01 - EP US); **F21V 29/51** (2015.01 - EP US); **F21V 29/74** (2015.01 - EP US); **F21V 23/06** (2013.01 - EP US); **F21W 2111/00** (2013.01 - EP US); **F21Y 2107/30** (2016.08 - EP US); **F21Y 2115/10** (2016.08 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
US 2011176317 A1 20110721; US 8740419 B2 20140603; AT E538345 T1 20120115; CN 102112808 A 20110629;
DE 202008010175 U1 20081106; EP 2318756 A1 20110511; EP 2318756 B1 20111221; WO 2010012443 A1 20100204

DOCDB simple family (application)
US 200913054148 A 20090728; AT 09777475 T 20090728; CN 200980130004 A 20090728; DE 202008010175 U 20080730;
EP 09777475 A 20090728; EP 2009005442 W 20090728