

Title (en)

ELECTRONIC COMPONENT AND METHOD FOR COOLING

Title (de)

ELEKTRONISCHES BAUTEIL UND VERFAHREN ZUR KÜHLUNG

Title (fr)

COMPOSANT ÉLECTRONIQUE ET PROCÉDÉ DE REFROIDISSEMENT

Publication

EP 3549416 A1 20191009 (DE)

Application

EP 17807880 A 20171201

Priority

- DE 102016224064 A 20161202
- EP 2017081219 W 20171201

Abstract (en)

[origin: WO2018100175A1] The invention relates to electrical/electronic equipment, such as a high powered lamp, switching device, control device, transformer, signaling device, display device, or the like, having a housing (2) and at least one cooling fluid supply apparatus (3) arranged in the housing or allocated thereto. Said cooling fluid supply apparatus has a cooling fluid inlet apparatus and a cooling fluid discharge apparatus on the housing and a cooling fluid guide apparatus within the housing. In order to improve such equipment such that safe actuating of the equipment is possible, together with a compact and competitive design, with simultaneously more efficient cooling, in particular also in potentially explosive areas, at least the cooling fluid inlet apparatus has a safety switching apparatus for interrupting the cooling fluid supply, in particular in the case of pressure drop in the cooling fluid. The invention further relates to a corresponding method.

IPC 8 full level

H05K 7/20 (2006.01); **F21V 29/51** (2015.01); **F21V 29/52** (2015.01); **F21V 29/56** (2015.01); **H01L 23/427** (2006.01); **H01L 23/473** (2006.01); **H01L 33/64** (2010.01)

CPC (source: EP US)

F21V 25/12 (2013.01 - EP US); **F21V 29/56** (2015.01 - US); **F21V 29/58** (2013.01 - EP); **F21V 29/83** (2013.01 - EP); **H01L 33/648** (2013.01 - EP); **H05K 5/0213** (2013.01 - US); **H05K 7/20209** (2013.01 - US); **H05K 7/20272** (2013.01 - EP); **H05K 7/20327** (2013.01 - US); **F21V 29/52** (2015.01 - EP); **F21Y 2115/10** (2016.08 - EP); **H01L 23/473** (2013.01 - EP)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2018100175 A1 20180607; CN 109997424 A 20190709; CN 109997424 B 20211221; DE 102016224064 A1 20180607; EP 3549416 A1 20191009; US 12016141 B2 20240618; US 2019387636 A1 20191219

DOCDB simple family (application)

EP 2017081219 W 20171201; CN 201780072043 A 20171201; DE 102016224064 A 20161202; EP 17807880 A 20171201; US 201716465884 A 20171201