

Title (en)  
APPARATUS TO SWITCH A LED

Title (de)  
VORRICHTUNG ZUR UMSCHALTUNG EINER LED

Title (fr)  
APPAREIL POUR COMMUTER UNE DEL

Publication  
**EP 3594980 A1 20200115 (EN)**

Application  
**EP 19182615 A 20190626**

Priority  
EP 18182431 A 20180709

Abstract (en)  
An apparatus (1, 1a-c, 1a'-c') to switch a light-emitting diode (2) or another load, comprising a mechanical switch (3), which comprises a moving electrode (4), wherein the moving electrode (4) is a contact, which electrically gets in connection with a further contact or electrode to enable a current flow while a closing phase and while an operation time and which moving electrode (4) can be separated from the further contact or electrode to interrupt current flow while a breaking phase of the mechanical switch (3), characterized in that the apparatus (1, 1a-c, 1a'-c') comprises a solid-state-device (5), which is arranged in such a manner that current at least partially flows through the solid-state-device (5) while a closing or breaking phase and that current at least partially flows through the mechanical switch (3) in closed position while the operation time, achieves the object to drastically limit the arcing duration during the inrush current phase or switching on phase as well as during the breaking current phase or even to avoid any arcing.

IPC 8 full level  
**H01H 9/54** (2006.01)

CPC (source: EP)  
**H01H 9/542** (2013.01); **H01H 2009/546** (2013.01)

Citation (search report)  
• [X] US 3588605 A 19710628 - CASSON CHARLES F  
• [X] US 4772809 A 19880920 - KOGA HIROFUMI [JP], et al  
• [X] CN 206432170 U 20170822 - GUANGZHOU JINSHI ELECTRONIC CO LTD  
• [X] US 2014091059 A1 20140403 - HENKE REINHOLD [US]  
• [X] US 5633540 A 19970527 - MOAN JAMES M [US]  
• [X] US 2017098931 A1 20170406 - GERDINAND FRANK [DE], et al

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)  
**EP 3594980 A1 20200115**; **EP 3594980 B1 20231227**; EP 3594979 A1 20200115

DOCDB simple family (application)  
**EP 19182615 A 20190626**; EP 18182431 A 20180709