

Title (en)  
A ROTATING STRUCTURE OF LED TRACK LIGHTS

Title (de)  
ROTIERENDER AUFBAU VON LED-SPURLEUCHTEN

Title (fr)  
STRUCTURE ROTATIVE D'ÉCLAIRAGE À DEL SUR RAILS

Publication  
**EP 3404319 A1 20181121 (EN)**

Application  
**EP 18173014 A 20180517**

Priority  
CN 201710353966 A 20170518

Abstract (en)  
A rotating structure of LED track lights comprises a downlight (10) with a through hole (11), a boom mechanism (30), and a limiting mechanism (40). The boom mechanism comprises a bearing (31), a elastic member, and a nut. The limiting mechanism comprises a rotating gear plate and an elastic abutting member. The rotating gear plate is located between the elastic member and the sidewall of the downlight, the nut drives the elastic member towards the rotating gear plate and presses the elastic member against the rotating gear plate. A plurality of cogs are arranged on a radial side wall of the rotating gear plate, and the elastic abutting member comprises a abutting head which is pressed against a cog of the rotating gear plate and rotates along the cog movement track fixed on the rotating gear plate. The rotating structure of LED track lamps can make the rotation of the downlight around the boom mechanism smoother and at the same time the rotation of the downlight is very rhythmical due to the cooperation of the cog on the rotating gear plate and the elastic abutting member. The application increases the user experience.

IPC 8 full level  
**F21V 21/30** (2006.01); **F21V 21/34** (2006.01)

CPC (source: CN EP)  
**F21S 8/00** (2013.01 - CN); **F21V 14/02** (2013.01 - CN); **F21V 21/14** (2013.01 - CN); **F21V 21/30** (2013.01 - EP); **F21V 21/34** (2013.01 - EP); **F21V 21/36** (2013.01 - CN); **F21Y 2115/10** (2016.08 - EP)

Citation (search report)  
• [A] DE 102012205237 A1 20131002 - HIERZER ANDREAS [AT]  
• [A] CN 102853401 B 20150520 - SELF ELECTRONICS CO LTD

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EP3988839A1

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)  
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DOCDB simple family (publication)  
**EP 3404319 A1 20181121**; **EP 3404319 B1 20200304**; CN 107084341 A 20170822; CN 107084341 B 20240611

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