

Title (en)  
REFRIGERATOR LIGHT-SENSING SYSTEM CAPABLE OF SAVING ENERGY AND REDUCING NOISE

Title (de)  
LICHTERFASSUNGSSYSTEM FÜR KÜHLSCHRÄNKE, DAS ENERGIE SPAREN UND LÄRM REDUZIEREN KANN

Title (fr)  
SYSTÈME DE DÉTECTION DE LUMIÈRE DU RÉFRIGÉRATEUR CAPABLE D'ÉCONOMISER DE L'ÉNERGIE ET DE RÉDUIRE LE BRUIT

Publication  
**EP 3842718 A1 20210630 (EN)**

Application  
**EP 20166966 A 20200331**

Priority  
CN 201911371394 A 20191227

Abstract (en)  
A refrigerator light-sensing system capable of saving energy and reducing noise comprising a control main body-refrigerator, a lower door hinge cover arranged at the lower end of the refrigerator, and a light-sensing device installed in the lower door hinge cover, wherein the light-sensing device is electrically connected to the refrigerator through a wireless transmission or a wire connection mode; the light-sensing device is internally provided with a light-sensing element, a power supply module, a controller, a refrigerator refrigeration system and a light intensity storage module; the light-sensing element is connected to the controller through a wireless transmission or a wire; the present invention adopts a light-sensing element to convert the detected light signal into an electrical signal; the electrical signal is transmitted to the controller, and the controller judges the operation mode of the refrigeration system according to the intensity of the converted electrical signal; as the refrigerator isn't used when the user rests, the power consumption can be reduced and the noise can be reduced, achieving a better user experience.

IPC 8 full level  
**F25D 29/00** (2006.01); **F25D 27/00** (2006.01)

CPC (source: CN EP KR US)  
**F25D 27/00** (2013.01 - EP); **F25D 27/005** (2013.01 - CN US); **F25D 29/005** (2013.01 - CN KR US); **F25D 27/00** (2013.01 - US); **F25D 29/005** (2013.01 - EP); **F25D 2323/024** (2013.01 - EP US); **F25D 2327/001** (2013.01 - US); **F25D 2600/04** (2013.01 - KR US); **F25D 2600/06** (2013.01 - CN KR); **F25D 2700/00** (2013.01 - EP KR)

Citation (search report)

- [X] CN 107395954 A 20171124 - HISENSE SHANDONG REFRIGERATOR CO LTD
- [X] CN 101922844 A 20101222 - TAIZHOU LG ELECT REFRIGERATOR
- [X] WO 03010474 A1 20030206 - BSH BOSCH SIEMENS HAUSGERÄTE [DE]
- [X] WO 2012095937 A1 20120719 - PANASONIC CORP [JP], et al
- [X] US 2014111118 A1 20140424 - KENDALL JAMES W [US], et al
- [X] JP 2008070000 A 20080327 - MATSUSHITA ELECTRIC IND CO LTD
- [X] WO 2015041900 A1 20150326 - UNIV CALIFORNIA [US]
- [X] CN 108759287 A 20181106 - WUXI HODGEN TECH CO LTD

Cited by  
CN113915912A

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 3842718 A1 20210630**; CN 111023686 A 20200417; JP 2021107759 A 20210729; JP 6989978 B2 20220112; KR 20210086389 A 20210708; US 2021199374 A1 20210701

DOCDB simple family (application)  
**EP 20166966 A 20200331**; CN 201911371394 A 20191227; JP 2020059459 A 20200330; KR 20200034270 A 20200320; US 202016832438 A 20200327