

Title (en)  
REFRIGERATOR

Title (de)  
KÜHLSCHRANK

Title (fr)  
RÉFRIGÉRATEUR

Publication  
**EP 2682694 A4 20141008 (EN)**

Application  
**EP 12752642 A 20120229**

Priority

- JP 2011044631 A 20110302
- JP 2011147011 A 20110701
- JP 2011222481 A 20111007
- JP 2012001375 W 20120229

Abstract (en)

[origin: EP2682694A1] A refrigerator includes a storage room that is divided into sections by a heat insulation wall and a heat insulation door, and stores storage items, a light source that is disposed inside the storage room, a light sensor (21) that detects the illumination light illuminated from the light source, and a calculation control unit (1) that performs a calculation process based on a detection result of the light sensor (21). The calculation control unit(1) includes an attenuation rate calculation unit (81) that calculates an attenuation rate from a reference storage room illuminance in a state that the storage items are stored, based on the reference storage room illuminance in a state that the storage items are not stored in the storage room and a detected illuminance by the light sensor (21), and a storage state estimation unit (82) that estimates a storage amount of the storage items, based on a calculation result of the attenuation rate calculation unit (81).

IPC 8 full level

**F25D 11/00** (2006.01); **F25D 23/00** (2006.01); **F25D 27/00** (2006.01); **F25D 29/00** (2006.01)

CPC (source: EP)  
**F25D 27/005** (2013.01); **F25D 2700/06** (2013.01)

Citation (search report)

- [XY] WO 2011004569 A1 20110113 - PANASONIC CORP [JP], et al
- [Y] EP 1933094 A2 20080618 - OSRAM OPTO SEMICONDUCTORS GMBH [DE]
- [XY] JP 2009115371 A 20090528 - PANASONIC CORP
- [A] JP H11264642 A 19990928 - SANYO ELECTRIC CO
- See references of WO 2012117724A1

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

DOCDB simple family (publication)

**EP 2682694 A1 20140108; EP 2682694 A4 20141008; EP 2682694 B1 20200115;** BR 112013022140 A2 20161206;  
BR 112013022140 B1 20210119; CN 103443566 A 20131211; JP 2013092343 A 20130516; JP 2013092344 A 20130516;  
JP 2013092345 A 20130516; JP 2013092346 A 20130516; JP 2013092347 A 20130516; JP 2013092348 A 20130516;  
JP 2013092349 A 20130516; JP 2013092350 A 20130516; JP 2013092363 A 20130516; JP 2013092364 A 20130516;  
JP 2013152079 A 20130808; JP 2013152080 A 20130808; JP 2013152081 A 20130808; JP 2013152082 A 20130808;  
JP 2013152083 A 20130808; JP 2013178088 A 20130909; JP 2013178089 A 20130909; JP 2013178090 A 20130909; JP 5348344 B2 20131120;  
JP 5348345 B2 20131120; JP 5348346 B2 20131120; JP 5348347 B2 20131120; JP 5348348 B2 20131120; JP 5348349 B2 20131120;  
JP 5348350 B2 20131120; JP 5360325 B2 20131204; JP 5903586 B2 20160413; JP 5903587 B2 20160413; WO 2012117724 A1 20120907

DOCDB simple family (application)

**EP 12752642 A 20120229;** BR 112013022140 A 20120229; CN 201280011278 A 20120229; JP 2012001375 W 20120229;  
JP 2012042945 A 20120229; JP 2012042946 A 20120229; JP 2012042947 A 20120229; JP 2012042948 A 20120229;  
JP 2012042949 A 20120229; JP 2012042950 A 20120229; JP 2012042951 A 20120229; JP 2012042952 A 20120229;  
JP 2013000825 A 20130108; JP 2013000826 A 20130108; JP 2013101809 A 20130514; JP 2013101810 A 20130514;  
JP 2013101811 A 20130514; JP 2013101812 A 20130514; JP 2013101813 A 20130514; JP 2013101814 A 20130514;  
JP 2013101815 A 20130514; JP 2013101816 A 20130514