

Title (en)  
REFRIGERATOR

Title (de)  
KÜHLSCHRANK

Title (fr)  
RÉFRIGÉRATEUR

Publication  
**EP 3293473 B1 20210519 (EN)**

Application  
**EP 17190011 A 20100322**

Priority  
• KR 20090129256 A 20091222  
• EP 10157228 A 20100322

Abstract (en)  
[origin: EP2339273A2] Provided is a refrigerator including a slim refrigerator door (12). The refrigerator includes a storage compartment; a refrigerator door opening and closing the storage compartment; an ice maker (200) configured to generate ice cubes; an ice bin (300) provided at the refrigerator door to receive the ice cubes generated in the ice maker and having a discharge opening (510) through which the ice cubes are discharged; a motor (280) provided at the refrigerator door; and at least one blade (410) within the ice bin, the at least one blade being operably connected to the motor, wherein at least one ice cube generated in the ice maker directly drop onto the at least one blade, and the at least one blade moves at least one ice cube stored in the ice bin to the discharge opening to discharge the at least one ice cube from the ice bin by an operation of the motor.

IPC 8 full level  
**F25C 5/00** (2018.01); **F25C 5/04** (2006.01); **F25C 5/20** (2018.01); **F25D 23/04** (2006.01)

CPC (source: EP)  
**F25C 5/046** (2013.01); **F25C 5/06** (2013.01); **F25C 5/22** (2017.12); **F25D 23/04** (2013.01); **F25C 5/24** (2017.12)

Citation (opposition)  
Opponent : Hisense Gorenje Germany GmbH  
• EP 2339273 A2 20110629 - LG ELECTRONICS INC [KR]  
• WO 2008050991 A2 20080502 - LG ELECTRONICS INC [KR], et al  
• EP 1701118 A2 20060913 - LG ELECTRONICS INC [KR]  
• KR 20070079735 A 20070808 - LG ELECTRONICS INC [KR]  
• US 2005132739 A1 20050623 - SANNASI ASHOK K [US], et al  
• US 2009145157 A1 20090611 - JEONG KYUNG-HAN [KR], et al  
• KR 20060041512 A 20060512 - LG ELECTRONICS INC [KR]  
• WO 2008082078 A1 20080710 - LG ELECTRONICS INC [KR], et al  
• US 2008236187 A1 20081002 - KIM JONG GON [KR]  
• US 7631513 B2 20091215 - CHUNG SUNG HOON [KR], et al  
• WO 2009078620 A2 20090625 - LG ELECTRONICS INC [KR], et al  
• WO 2008035913 A1 20080327 - LG ELECTRONICS INC [KR], et al  
• KR 20050041757 A 20050504 - LG ELECTRONICS INC [KR]  
• KR 20060099337 A 20060919 - LG ELECTRONICS INC [KR]  
• KR 20050032412 A 20050407 - SAMSUNG ELECTRONICS CO LTD [KR]  
• KR 20080052503 A 20080611 - SAMSUNG ELECTRONICS CO LTD [KR]  
• KR 20080020126 A 20080305 - SAMSUNG ELECTRONICS CO LTD [KR]  
• US 7437885 B2 20081021 - WU GUOLIAN [US], et al  
• WO 2008032986 A1 20080320 - LG ELECTRONICS INC [KR], et al  
• KR 20000028309 A 20000525 - DAEWOO ELECTRONICS CO LTD  
• US 5056688 A 19911015 - GOETZ GLENN E [US], et al  
• US 2008134710 A1 20080612 - AN JAE-KOOG [KR], et al  
• US 2009293529 A1 20091203 - SHINOHARA KATSUTOSHI [JP], et al  
• KR 20080014403 A 20080214 - LG ELECTRONICS INC [KR]  
• US 2008156826 A1 20080703 - KIM SEONG JAE [KR], et al  
• WO 2008054161 A2 20080508 - LG ELECTRONICS INC [KR], et al  
• KR 20040067646 A 20040730 - SAMSUNG ELECTRONICS CO LTD

Designated contracting state (EPC)  
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 SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2339273 A2 20110629; EP 2339273 A3 20131218; EP 2339273 B1 20190116;** CN 102102930 A 20110622; CN 102102930 B 20140528; DE 202010018205 U1 20140912; EP 2792975 A1 20141022; EP 2792975 B1 20151209; EP 3293473 A1 20180314; EP 3293473 B1 20210519; EP 3293474 A1 20180314; EP 3293474 B1 20210526; EP 3296671 A1 20180321; EP 3296671 B1 20190306; EP 3913304 A1 20211124; EP 4043815 A1 20220817; EP 4177548 A1 20230510; ES 2881507 T3 20211129; HU E054974 T2 20211028; KR 101631322 B1 20160624; KR 20110072367 A 20110629; PL 3293474 T3 20211115; PT 3293474 T 20210714; SI 3293474 T1 20210930; TR 201903481 T4 20190422

DOCDB simple family (application)  
**EP 10157228 A 20100322;** CN 201010140606 A 20100323; DE 202010018205 U 20100322; EP 14173402 A 20100322; EP 17190010 A 20100322; EP 17190011 A 20100322; EP 17190012 A 20100322; EP 21175149 A 20100322; EP 22162857 A 20100322; EP 22210524 A 20100322; ES 17190012 T 20100322; HU E17190012 A 20100322; KR 20090129256 A 20091222; PL 17190012 T 20100322; PT 17190012 T 20100322; SI 201032085 T 20100322; TR 201903481 T 20100322