

Title (en)
ICE-MAKING APPARATUS

Title (de)
VORRICHTUNG ZUM HERSTELLEN VON EIS

Title (fr)
APPAREIL DE FABRICATION DE GLACE

Publication
EP 2623902 A4 20161116 (EN)

Application
EP 11829547 A 20110927

Priority
• KR 20100094233 A 20100929
• KR 2011007103 W 20110927

Abstract (en)
[origin: US2013160477A1] An ice slurry generator includes: a heat exchanger configured to absorb heat energy while a refrigerant is evaporated; multiple heat exchange passages aligned horizontally within the heat exchanger and configured for heat exchange between flowing ice slurry and refrigerant; an inlet chamber that is connected to the heat exchange passages, through which the ice slurry is introduced; a discharge chamber that is connected to the heat exchange passages, through which the ice slurry is discharged from the ice slurry generator; scrapers, that each consist of a rod member with a blade wrapped in a spiral fashion around the outside of the rod member, that is inserted into the heat exchange passages and transports ice slurry from the inlet chamber toward the discharge chamber during rotation; and a driving unit that provides a rotational driving force to the scraper.

IPC 8 full level
F25C 1/14 (2006.01); **F28D 7/10** (2006.01)

CPC (source: EP US)
F25C 1/147 (2013.01 - EP US); **F25C 5/142** (2021.08 - EP US); **F28D 7/1638** (2013.01 - EP US); **F28F 9/0265** (2013.01 - EP US); **F28D 7/106** (2013.01 - EP US); **F28F 2250/08** (2013.01 - EP US)

Citation (search report)
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• [Y] US 2002112500 A1 20020822 - TOMIYAMA YASUSHI [JP], et al
• [Y] US 3196628 A 19650727 - REYNOLDS DONALD S
• [A] US 5531079 A 19960702 - TATEMATSU SUSUMU [JP], et al
• [A] JP 2006023063 A 20060126 - KAWANAMI TAKU
• See references of WO 2012044041A2

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

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US 2013160477 A1 20130627; CA 2813188 A1 20120405; CN 103221765 A 20130724; CN 103221765 B 20151125;
EP 2623902 A2 20130807; EP 2623902 A4 20161116; JP 2013542393 A 20131121; JP 2017215138 A 20171207; KR 101350947 B1 20140114;
KR 20120032738 A 20120406; WO 2012044041 A2 20120405; WO 2012044041 A3 20120621

DOCDB simple family (application)
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JP 2013531481 A 20110927; JP 2017154482 A 20170809; KR 20100094233 A 20100929; KR 2011007103 W 20110927