

Title (en)  
Air conditioning

Title (de)  
Klimatisierung

Title (fr)  
Unité de climatisation d'air

Publication  
**EP 2940394 A1 20151104 (EN)**

Application  
**EP 14166794 A 20140501**

Priority  
EP 14166794 A 20140501

Abstract (en)  
The invention relates to a method and system for air conditioning, and to a liquid desiccant composition, a use thereof and a process using such composition. In a preferred aspect, the invention relates to an air conditioning method comprising treatment of the air by dehumidification with a liquid hygroscopic desiccant. An conditioning method, comprising a step of a) dehumidifying an air stream comprising water vapour by contacting said it with a liquid desiccant composition comprising a hygroscopic compound and plasmonic particles; b) regenerating some liquid desiccant composition; c) using some regenerated liquid desiccant composition in said step (a), and d) cooling at least part of a dehumidified air stream.

IPC 8 full level  
**F24F 3/14** (2006.01)

CPC (source: EP)  
**F24F 3/1417** (2013.01); **F24F 2003/1458** (2013.01); **F24F 2005/0064** (2013.01)

Citation (applicant)  
• US 2012153621 A1 20120621 - HALAS NANCY J [US], et al  
• US 2011138832 A1 20110616 - AL-HADHRAMI LUAI M [SA], et al  
• US 2010011794 A1 20100121 - DE LIMA DANIEL D [US]  
• NEUMANN ET AL., ACS NANO, vol. 7, 2013, pages 42 - 49  
• NEUMANN ET AL., PNAS, vol. 110, no. 29, 2013, pages 11677 - 11681

Citation (search report)  
• [Y] WO 2012042553 A1 20120405 - UNIV DEGLI STUDI GENOVA [IT], et al  
• [Y] US 5182921 A 19930202 - YAN WEN-JYH [TW]  
• [Y] US 6247323 B1 20010619 - MAEDA KENSAKU [JP]

Cited by  
CN109874333A; CN110066979A; US10500540B2; US10493400B2; WO2019068315A1; TWI683076B; US10512881B2; US10512883B2

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 2940394 A1 20151104**; WO 2015166101 A1 20151105

DOCDB simple family (application)  
**EP 14166794 A 20140501**; EP 2015059623 W 20150501