Title (en)

DISPLAY DEVICE

Title (de)

ANZEIGEVORRICHTUNG

Title (fr)

DISPOSITIF D'AFFICHAGE

Publication

EP 2904361 A1 20150812 (DE)

Application

EP 13767007 A 20130930

Priority

- EP 12186803 A 20121001
- EP 2013070328 W 20130930
- EP 13767007 A 20130930

Abstract (en)

[origin: WO2014053435A1] The present invention relates to devices for displaying the previous history of products, e.g. in relation to the development of temperature. The device according to the invention comprises a surface layer, an indicator layer, an activator layer and an optional delaying layer. Heating releases moisture which migrates in some embodiments first into the delaying layer and then into the activator layer. Here, an activator is mobilized and migrates together with the humidity into the indicator layer. A colour change occurs as a result of the interaction of the indicator with the activator in the presence of moisture, which change indicates that the critical temperature has been exceeded. The present invention further relates to a method for producing the device according to the invention and to applications of said device, e.g. in monitoring the temperature of sensitive products.

IPC 8 full level

G01K 11/06 (2006.01); **G01K 3/04** (2006.01)

CPC (source: EP RU US)

G01K 1/02 (2013.01 - US); **G01K 3/04** (2013.01 - EP RU US); **G01K 11/06** (2013.01 - EP RU US); **G01K 11/12** (2013.01 - RU US)

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)

WO 2014053435 A1 20140410; AR 092754 A1 20150429; AU 2013326675 A1 20150521; AU 2013326675 B2 20180301; BR 112015007263 A2 20170808; BR 112015007263 B1 20210629; CA 2886912 A1 20140410; CU 20150030 A7 20150929; EP 2904361 A1 20150812; JP 2015537192 A 20151224; JP 6318159 B2 20180425; MX 2015004090 A 20151123; MY 174733 A 20200512; PE 20150952 A1 20150620; RU 2015116813 A 20161127; RU 2640093 C2 20171226; SA 515360219 B1 20181118; TN 2015000122 A1 20160629; US 10571341 B2 20200225; US 2015260584 A1 20150917; ZA 201502995 B 20220525

DOCDB simple family (application)

EP 2013070328 W 20130930; AR P130103545 A 20131001; AU 2013326675 A 20130930; BR 112015007263 A 20130930; CA 2886912 A 20130930; CU 20150030 A 20150401; EP 13767007 A 20130930; JP 2015534970 A 20130930; MX 2015004090 A 20130930; MY PI2015701052 A 20130930; PE 2015000432 A 20130930; RU 2015116813 A 20130930; SA 515360219 A 20150401; TN 2015000122 A 20150330; US 201314432975 A 20130930; ZA 201502995 A 20150430