Title (en)

METHOD FOR TREATING A STARCHY FOOD

Title (de)

VERFAHREN ZUM BEHANDELN EINES STÄRKEHALTIGEN LEBENSMITTELS

Title (fr)

PROCÉDÉ POUR TRAITER UN PRODUIT ALIMENTAIRE AMYLACÉ

Publication

EP 2696702 A1 20140219 (DE)

Application

EP 12715961 A 20120416

Priority

- EP 11162741 A 20110415
- EP 2012056937 W 20120416
- EP 12715961 A 20120416

Abstract (en)

[origin: EP2510810A1] Treating a starch-containing food, preferably cereals and/or pseudocereals, comprises (a) providing starch-containing food having an initial moisture content of 20-35 wb%, preferably 22-25 wb%, (b) tempering the starch-containing food so that a gelatinization degree of at least 75%, preferably 85-99% is achieved, (c) cooling at least a portion, preferably total surface of the tempered, starch-containing food for 1-4 minutes, preferably 1-2 minutes, and (d) drying the cooled, starch-containing food to a final moisture of 10-14 wb%, preferably 10-12 wb%. Treating a starch-containing food, preferably cereals and/or pseudocereals, where the starch-containing food passes on the surface during the process conditions exhibiting various value pairs of temperature (T) and humidity (U) of the surface, comprises (a) providing starch-containing food having an initial moisture content of 20-35 wb%, preferably 22-25 wb%, (b) tempering the starch-containing food so that a gelatinization degree of at least 75%, preferably 85-99% is achieved, preferably based on a temperature higher than the temperature (final) of the glass transition curve, based on the humidity of the starch-containing food, (c) cooling at least a portion, preferably total surface of the tempered, starch-containing food to a temperature that is below the temperature (medium) of the glass transition curve based on the humidity of the starch-containing food for 1-4 minutes, preferably 1-2 minutes, and (d) drying the cooled, starch-containing food to a temperature that is above the temperature (onset), preferably between the temperature (onset) and the temperature (final) of the glass transition curve based on the humidity of the starch-containing food to a final moisture of 10-14 wb%, preferably 10-12 wb%. Independent claims are also included for: (1) fast cooking starch-containing food produced by the above method; and (2) the food exhibiting a final viscosity of greater than 3200 cPoise, preferably greater than 8000 cPoise.

IPC 8 full level

A23L 7/10 (2016.01); **A23L 7/196** (2016.01); **A23L 19/00** (2016.01)

CPC (source: CN EP US)

A23L 7/10 (2016.07 - CN EP US); **A23L 7/196** (2016.07 - CN EP US); **A23L 19/01** (2016.07 - EP US)

Citation (search report)

See references of WO 2012140268A1

Citation (examination)

- WO 0008945 A1 20000224 - WENGER MFG [US]
- US 4590088 A 19860520 - KARWOWSKI JAN [US]
- GUNTHER FAULHABER: "Vorgekochte Maismehle fuer die menschliche Ernaehrung in Venezuela", MUEHLE + MISCHFUTTER,, vol. 140, 1 January 2003 (2003-01-01), pages 433 - 437, XP009194909

Citation (third parties)

Third party :

- WO 0008945 A1 20000224 - WENGER MFG [US]
- US 4590088 A 19860520 - KARWOWSKI JAN [US]
- EP 0214044 A2 19870311 - NABISCO BRANDS INC [US]
- US 4551347 A 19851105 - KARWOWSKI JAN [US]
- US 6326045 B1 20011204 - RUBIO MANUEL J [US], et al
- LIM S-T ET AL: "THERMAL TRANSITION CHARACTERISTICS OF HEAT-MOISTURE TREATED CORN AND POTATO STARCHES", CARBOHYDRATE POLYMERS, vol. 46, no. 2, October 2001 (2001-10-01), pages 107 - 115, XP004250445, DOI: :10.1016/S0144-8617(00)00287-3
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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)

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DOCDB simple family (application)

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