

Title (en)
SUGAR BEET JUICE PRODUCTION AND PROCESSING

Title (de)
ZUCKERRÜBENSAFHERSTELLUNG UND -VERARBEITUNG

Title (fr)
PRODUCTION DE JUS DE BETTERAVE À SUCRE ET TRAITEMENT

Publication
EP 3783115 A1 20210224 (EN)

Application
EP 20192029 A 20200820

Priority
EP 19193393 A 20190823

Abstract (en)
The present invention relates to an improved method for the preparation of filtered sugar beet juice, clarified sugar beet juice, sugar beet syrup, crystalline sugar and sugar beet molasses from raw sugar beet material and to the filtered sugar beet juice, clarified sugar beet juice, sugar beet syrup, crystalline sugar and sugar beet molasses obtainable by such improved method. The improved methods do not employ alkalization agents, and the temperature of the sugar beet material during the process is only moderate. The filtered sugar beet juice, clarified sugar beet juice, sugar beet syrup, crystalline sugar and sugar beet molasses are characterized by low concentrations of impurities such as pyrazines and pyrrolidone carbonic acid and increased concentrations of for example phosphate.

IPC 8 full level
C13B 10/08 (2011.01)

CPC (source: EP)
C13B 10/083 (2013.01)

Citation (applicant)

- WO 9964634 A1 19991216 - BEGHIN SAY ERIDANIA [FR], et al
- US 2013202751 A1 20130808 - VIDAL OLIVIER PIERRE [FR], et al
- A.B. JEMAI ET AL., J. FOOD ENG., vol. 59, 2003, pages 405 - 412
- H. MHEMDI ET AL., J. FOOD ENG., vol. 168, 2016, pages 166 - 172
- K.G. LOGINOVA ET AL., J. FOOD ENG., vol. 106, 2011, pages 144 - 151
- SCHLUMBACH ET AL., SUGAR INDUSTRY, vol. 140, no. 8, 2015, pages 500 - 507

Citation (search report)

- [X1] WO 9964634 A1 19991216 - BEGHIN SAY ERIDANIA [FR], et al
- [X1] A.B. JEMAI, E. VOROBIEV: "Enhanced leaching from sugar beet cossettes by pulsed electric field - ScienceDirect", JOURNAL OF FOOD ENGINEERING, vol. 59, 2003, pages 405 - 412, XP055654517, Retrieved from the Internet <URL:https://www.sciencedirect.com/science/article/pii/S0260877402004995> [retrieved on 20191220]
- [X1] LOGINOVA K V ET AL: "Pilot study of countercurrent cold and mild heat extraction of sugar from sugar beets, assisted by pulsed electric fields", JOURNAL OF FOOD ENGINEERING, BARKING, ESSEX, GB, vol. 102, no. 4, 1 February 2011 (2011-02-01), pages 340 - 347, XP027449443, ISSN: 0260-8774, [retrieved on 20100925], DOI: 10.1016/J.JFOODENG.2010.09.010
- [XA] LOGINOVA K ET AL: "Quality and filtration characteristics of sugar beet juice obtained by cold extraction assisted by pulsed electric field", JOURNAL OF FOOD ENGINEERING, BARKING, ESSEX, GB, vol. 106, no. 2, 18 April 2011 (2011-04-18), pages 144 - 151, XP028222287, ISSN: 0260-8774, [retrieved on 20110427], DOI: 10.1016/J.JFOODENG.2011.04.017

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 3783115 A1 20210224

DOCDB simple family (application)
EP 20192029 A 20200820