Title (en)

Process and apparatus for the preparation of crystalline anhydrous fructose.

Title (de)

Verfahren und Vorrichtung zur Herstellung von wasserfreier kristalliner Fruktose.

Title (fr)

Procédé et installation de production de fructose cristallisé anhydre.

Publication

EP 0203844 A1 19861203 (FR)

Application

EP 86401006 A 19860512

Priority

FR 8507430 A 19850515

Abstract (en)

[origin: EP0203844B1] 1. Method for the production of anhydrous crystalline fructose characterized by the fact - that the mass subject to crystallization traverses from top to bottom, continuously and with malaxation, a crystallization zone of vertical or inclined direction in which there is established a temperature gradient decreasing globally downwards possibly modulated, - that the crystallization zone is supplied in the vicinity of its upper end, on the one hand, with fructose syrup having a richness in fructose higher than 90% and preferably higher than 93%, and a proportion of dry matter higher than 70% and preferably comprised between 75 and 95% by weight and, on the other hand, with mass subject to crystallization which is taken up and recycled from an intermediate level of the crystallization zone, spaced from its ends by at least one sixth of the total length of said zone, the amount of mass subject to crystallization and recycled representing by volume from 40 to 110% of the amount of fructose syrup introduced into the zone, and - that there is extracted, continuously, in the vicinity of the lower end of the crystallization zone, a product highly enriched in anhydrous fructose crystals from which said crystals are recovered.

Abstract (fr)

Procédé de production de fructose cristallisé anhydre dans lequel la masse M soumise à la cristallisation parcourt de haut en bas, en continu et sous malaxage, une enceinte 1 à l'intérieur de laquelle elle est soumise à un gradient de température globalement décroissant de haut en bas, la masse cristallisée étant récupérée en continu en bas de l'enceinte, des moyens étant prévus pour prélever à un niveau intermédiaire 8 une fraction de la masse M et à la recycler à un niveau 9 situé au voisinage de l'extrémité supérieure de l'enceinte.

IPC 1-7

C13K 11/00

IPC 8 full level

C07H 1/06 (2006.01); **C07H 3/02** (2006.01); **C13K 11/00** (2006.01)

CPC (source: EP US)

C13K 11/00 (2013.01 - EP US)

Citation (search report)

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- [E] EP 0147269 A2 19850703 - ROQUETTE FRERES [FR]
- [Y] CHEMICAL ABSTRACTS, vol. 97, no. 14, octobre 1982, page 86, résumé no. 111551c, Columbus, Ohio, US; & CS - A - 209 130 (S. KUCERA) 30-11-1981

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DE4041317B4

Designated contracting state (EPC)

AT BE DE FR IT

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 86401006 A 19860512; AT 86401006 T 19860512; DE 3662915 T 19860512; FI 862025 A 19860514; FR 8507430 A 19850515; JP 10972586 A 19860515; US 50137790 A 19900329