

Title (en)
Process and apparatus for the preparation of anhydrous crystalline dextrose.

Title (de)
Verfahren und Vorrichtung zur Herstellung von kristalliner wasserfreier Dextrose.

Title (fr)
Procédé et installation de préparation de dextrose cristallisé anhydre.

Publication
EP 0202999 A1 19861126 (FR)

Application
EP 86401015 A 19860513

Priority
FR 8507429 A 19850515

Abstract (en)
[origin: EP0202999B1] 1. Process for the continuous preparation of anhydrous crystalline dextrose characterized by the fact that a mass constituted by glucose syrup and anhydrous dextrose crystals is brought to pass through, from top to bottom and with malaxation, a crystallization zone of axis preferably substantially vertical in which said mass is subjected to a temperature gradient decreasing globally from 0.2 to 2 degrees C/hour from top to bottom possibly modulated, in which process the crystallization zone is supplied in the vicinity of its upper end, - on the one hand, with glucose syrup having a richness in glucose higher than 92 % by weight, a proportion of dry matter higher than 80 % and a temperature above 60 degrees C and, - on the other hand, with mass subject to crystallization which is taken up and recycled from an intermediate level of the crystallization zone, distant from the ends of the latter by at least 1/4 of the total length, the recycled amount of mass subjected to crystallization representing by volume from 40 to 110 % of the amount of glucose syrup introduced into the zone, at the level of the lower end of which there is continuously collected a crystalline mass rich in anhydrous dextrose crystals which are recovered.

Abstract (fr)
Une masse constituée de sirop de glucose et de cristaux de dextrose anhydre est amenée à parcourir de haut en bas et sous malaxage une zone de cristallisation 1 d'axe de préférence sensiblement vertical dans laquelle ladite masse est soumise à un gradient de température globalement décroissant de 0,2 à 2°C/heure de haut en bas éventuellement modulé, ladite zone étant alimentée par la canalisation 2 en sirop de glucose et par la canalisation 7 en masse soumise à cristallisation M prélevée en 8 et recyclée en 9.

IPC 1-7
C13K 1/10

IPC 8 full level
C07H 1/00 (2006.01); **C07H 3/02** (2006.01); **C13K 1/10** (2006.01)

CPC (source: EP US)
C13K 1/10 (2013.01 - EP US)

Citation (search report)
• [Y] FR 2398802 A1 19790223 - STALEY MFG CO A E [US]
• [E] EP 0147269 A2 19850703 - ROQUETTE FRERES [FR]
• [A] DE 3246494 A1 19840620 - BAYER AG [DE]
• [A] BE 877839 A 19800123 - ZURITA HILDA G
• [Y] CHEMICAL ABSTRACTS, vol. 97, 1982, page 86, résumé no. 111551c, Columbus, Ohio, US; & CS - A - 209 130 (S. KUCERA) 30-11-1981

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EP1652938A1; FR2877186A1; US7731991B2

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EP 86401015 A 19860513; AT 86401015 T 19860513; DE 3663035 T 19860513; FI 862024 A 19860514; FR 8507429 A 19850515; JP 10972686 A 19860515; US 26204888 A 19881024; US 53140990 A 19900604