

Title (en)

New canejuice displacement process

Title (de)

Neues Verfahren zur Verdrängung des Rohrsaftes

Title (fr)

Nouveau procédé de déplacement de jus de cane

Publication

**EP 0707078 A1 19960417 (EN)**

Application

**EP 94402832 A 19941209**

Priority

AU 7419594 A 19940926

Abstract (en)

1 - Industry concerned : Cane Sugar Manufacture 2 - Part of the process to which the invention pertains : Extraction of the sugar cane juice. 3 - In the prepared raw material (shredded cane) up to 94 % of the juice containing cells are open. If has a low bulk density and high void volume (filled with air) The gist of the invention is to take advantage of this specific structure to improve the efficiency of the extraction process by : Avoiding compaction to maintain high percolation rate Filling the voids with recirculated juice thus turning the solid mass of shredded cane into a free flowing mixture of cane and juice. Replacing,in three stages,the thick juice of cane by thinner juices and finally by water,in a true plug flow displacement process. Improving the efficiency the solid/liquid separation between stages by increasing hydrostatic head between the liquid mass in the extractor and the discharge tank. <IMAGE>

IPC 1-7

**C13D 1/02; C13D 1/04**

IPC 8 full level

**C13B 10/02** (2011.01); **C13B 10/04** (2011.01)

CPC (source: EP)

**C13B 10/02** (2013.01); **C13B 10/04** (2013.01)

Citation (search report)

- [A] GB 1095787 A 19671220 - BRAUNSCHWEIGISCHE MASCHINEN- UND APPARATE-FABRIK
- [A] GB 1143640 A
- [A] FR 2310409 A2 19761203 - FIVES CAIL BABCOCK [FR]
- [A] FR 2507621 A1 19821217 - RECH GEOLOG MINIERE [FR]
- [A] FR 2477177 A2 19810904 - FIVES CAIL BABCOCK [FR]
- [A] FR 2050660 A5 19710402 - FIVES LILLE CAIL
- [A] G.P.MEADE ET AL.: "Cane Sugar Handbook", JOHN WILEY & SONS, NEW YORK ,N.Y.

Cited by

CN1089809C; EP0769561A1; US5772775A

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DOCDB simple family (publication)

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DOCDB simple family (application)

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