

Title (en)

PROCESS AND APPARATUS FOR SEPARATING LIQUIDS AND SOLIDS, IN PARTICULAR FRUIT JUICES

Publication

EP 0211706 B1 19900829 (FR)

Application

EP 86401388 A 19860624

Priority

- FR 8509689 A 19850626
- FR 8515712 A 19851023
- FR 8517905 A 19851202

Abstract (en)

[origin: EP0211706A2] 1. A method of separating, by pressing intimately combined liquid and solid fractions in the form of a heterogeneous mixture, such as for example, juices, pulps, kernels, pips stalks and vegetable elements of fruit such as harvested grapes, of the type in which a vessel (14) comprising sidewalls traversed by narrow passages (15) is charged in a so-called "upstream-downstream" direction via a so-called input end with heterogeneous mixture, then the infeed of mixture is interrupted, then a pressing action is induced by effecting a relative linear displacement between the vessel (14) and a non-rotary element (10-13, 103) forming a piston situated before the input end so that this element (10-13, 103) penetrates into the volume (14) from upstream to downstream, characterised in that an opposing retaining force, that is to say directed from downstream to upstream co-axially with the vessel (14), is engendered at its so-called outlet end opposite the preceding end and acting on the fractions of heterogeneous mixture fed in, which are thus agglomerated progressively into a cake of solid fractions, whilst forming an annular outlet space, also coaxial, whereupon after the pressing of the heterogeneous mixture simultaneously causing the emergence of at least a part of the liquid fractions through the walls of the vessel (14) and the discharge of a part of the cake of solid fractions through the outlet space, the relative linear displacement is then stopped, after which a renewed input of mixture is effected and its pressing in the vessel (14) is effected at a pressure matched to the value of the outlet retaining force and so on in successive cycles.

IPC 1-7

A23L 2/04; **B30B 9/02**; **B30B 9/06**; **B30B 9/18**

IPC 8 full level

B30B 9/02 (2006.01); **B30B 9/06** (2006.01)

CPC (source: EP)

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Cited by

ITRM20080361A1; FR2677921A1; CN116570958A; US5390592A; US5406883A; EP0565823A1; EP0565824A1; WO2010001429A1

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