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(12) United States Patent

Cantrell et al.

(54) METHOD OF RECOVERING OIL FROM THIN STILLAGE

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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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- (51) Int. Cl.
- *C11B 1/00* (2006.01)
- (52) U.S. Cl. 554/8

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(45) **Date of Patent:** *Aug. 30, 2011

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Primary Examiner — Deborah D Carr

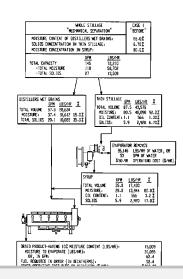
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(57) **ABSTRACT**

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In one aspect of the invention, a method recovers oil from a concentrated byproduct, such as evaporated thin stillage formed during a dry milling process used for producing ethanol. The method includes forming a concentrate from the byproduct and recovering oil from the concentrate. The step of forming the concentrate may comprise evaporating the byproduct. Further, the step of separating the oil from the concentrate may comprise using a centrifuge and, in particular, a disk stack centrifuge. Other aspects of the invention include related methods and subsystems for recovering oil from thin stillage.

2 Claims, 4 Drawing Sheets



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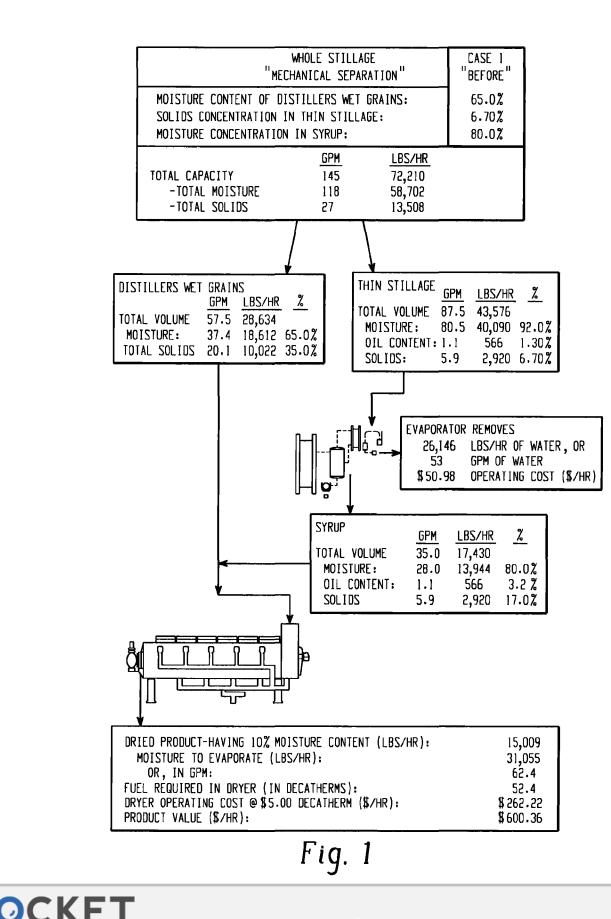
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