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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR MANUFACTURING PROTEIN BEVERAGES

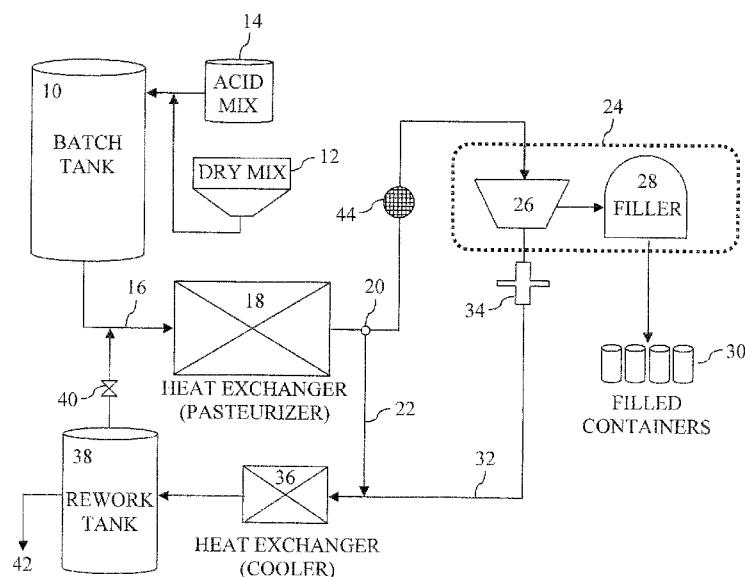


FIG. 4

(57) Abstract: An apparatus for hot filling containers with protein beverage may comprise a batch tank adapted for receiving a protein beverage, a first heat exchanger adapted for heating the protein beverage to a pasteurizing temperature, a reservoir adapted for receiving the protein beverage and having an overflow stream of the protein beverage, a filler adapted for at least partially filling containers with the protein beverage, a second heat exchanger adapted for cooling the overflow stream, a rework tank adapted for receiving the overflow stream, and a control valve adapted for controlling a percentage of the overflow stream recycled to the first heat exchanger from the rework tank such that the protein beverage remains substantially free of floe. A method for making a protein beverage substantially free of floe is also described.

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A. CLASSIFICATION OF SUBJECT MATTER

INV. A23L1/305

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A23L A47J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 3 515 180 A (FRIENDSHIP KENNETH F) 2 June 1970 (1970-06-02) page 2, column 4, line 6 - line 14; claims 1, 8, 9	1-24
A	US 3 443 608 A (COPPING BRUCE G ET AL) 13 May 1969 (1969-05-13) the whole document	1-24
A	EP 1 530 939 A1 (BRAUN GMBH [DE]) 18 May 2005 (2005-05-18) the whole document	1-24
A	JP 2006 055043 A (KE CORP KK) 2 March 2006 (2006-03-02) the whole document	1-24
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Further documents are listed in the continuation of Box C.



See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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