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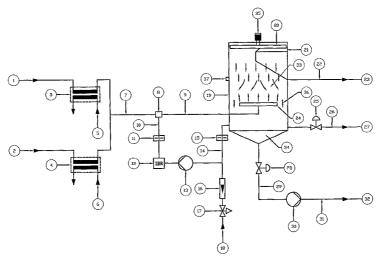
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(54) Title: METHOD AND APPARATUS FOR SEPARATION AND RECOVERY OF FRUIT, NUT OR VEGETABLE OILS FROM WATER, LIQUIDS AND WASTEWATER



(57) Abstract: Generally in the edible oils and fats processing industries globally, a small percentage of oil and fat is not recoverable and is lost to water, liquid or wastewater. The value of lost oils and fats is substantial, the oil and fat in the water, liquid and in particular wastewater creates many problems. Especially, the treatment of the wastewater in many cases creates environmental pollution and adds substantially to the cost of treating the wastewater. The process and apparatus described increase yields in the edible oil and fat processing industries, as well as considerably reducing the environmental impact and problems associated with the treatment of wastewater from the edible oil industries. Broadly, the invention resides in reducing the temperature of hot process wastewaters to one at which the oil / fat acquires a semi-solid or crystalline state, that is non-colloidal. The semi-solid particles are then mixed with a liquid that is ultra-saturated with gas so that the oil / fat particles are entrained with the gas and can be floated and mechanically separated.



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