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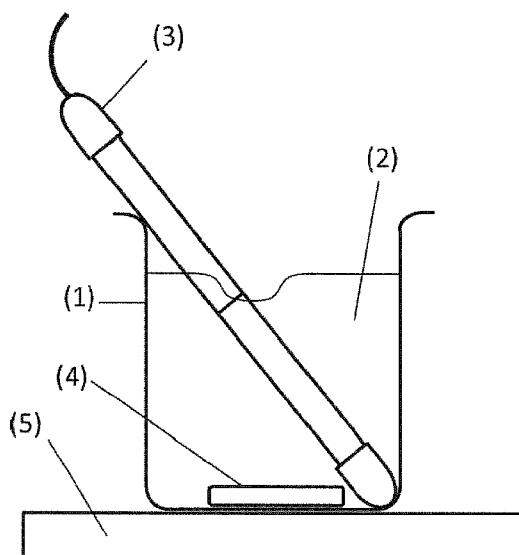


Figure 1

(57) **Abstract:** The present invention relates to a method and apparatus for the inactivation of a biological contaminant in a human milk product by exposing the milk product to UV by imparting a vortical flow to the milk product. The exposure inactivates or reduces the amount of a contaminant in the milk product; and the activity of a bioactive component present in the milk product is not substantially reduced. The contaminant may be selected from a group comprising E. coli, Staphylococcus spp., Streptococcus spp., Bacillus spp., Enterococcus spp. and Enterobacter spp., Cytomegalovirus, Human immunodeficiency virus or Human T- lymphotropic virus. The bioactive component may be a carbohydrate, lipid, protein, fatty acid, enzyme, antibody, growth factor, cytokine, chemokine, hormone, antimicrobial compound or metabolite