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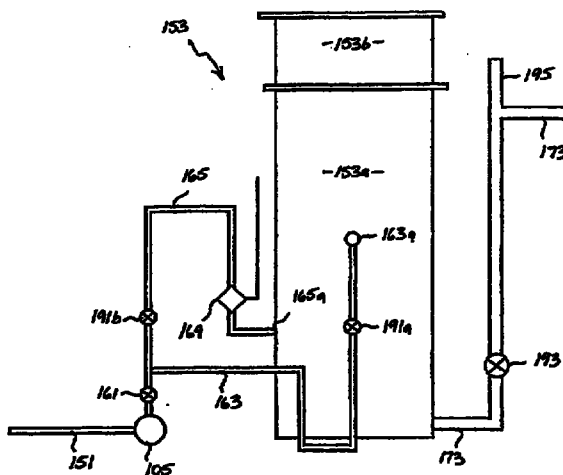


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- (54) Title: IMPROVEMENTS IN FLOTATION/FRACTIONATION SYSTEMS FOR TREATING LIQUIDS AND IN SEPARATION OF LIQUIDS TO BE TREATED THEREBY
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WO 01/32562 A1

(57) Abstract: An improvement in a fractionation/flotation system for separating liquid containing particles of varying mass or specific gravity. A reactor vessel comprises a fractionation column and a foam aggregation chamber surmounting the column. Liquid containing the waste is pumped into the fractionation column via a first inlet and a second inlet at intermediate locations where the first inlet entry is higher than the second inlet. A waste reducing gas is injected into the second inlet immediately prior to the liquid entering the fractionation column. The separating apparatus comprises an elongated passageway, a primary lip for liquid containing particles to flow over, a secondary lip lower than the primary lip for liquid to flow over. Flow is diverted within the passageway by a suction pipe. Liquid in the pipe contains particles of relatively lower mass or specific. Liquid containing particles of higher mass or specific gravity flows out over the secondary lip.