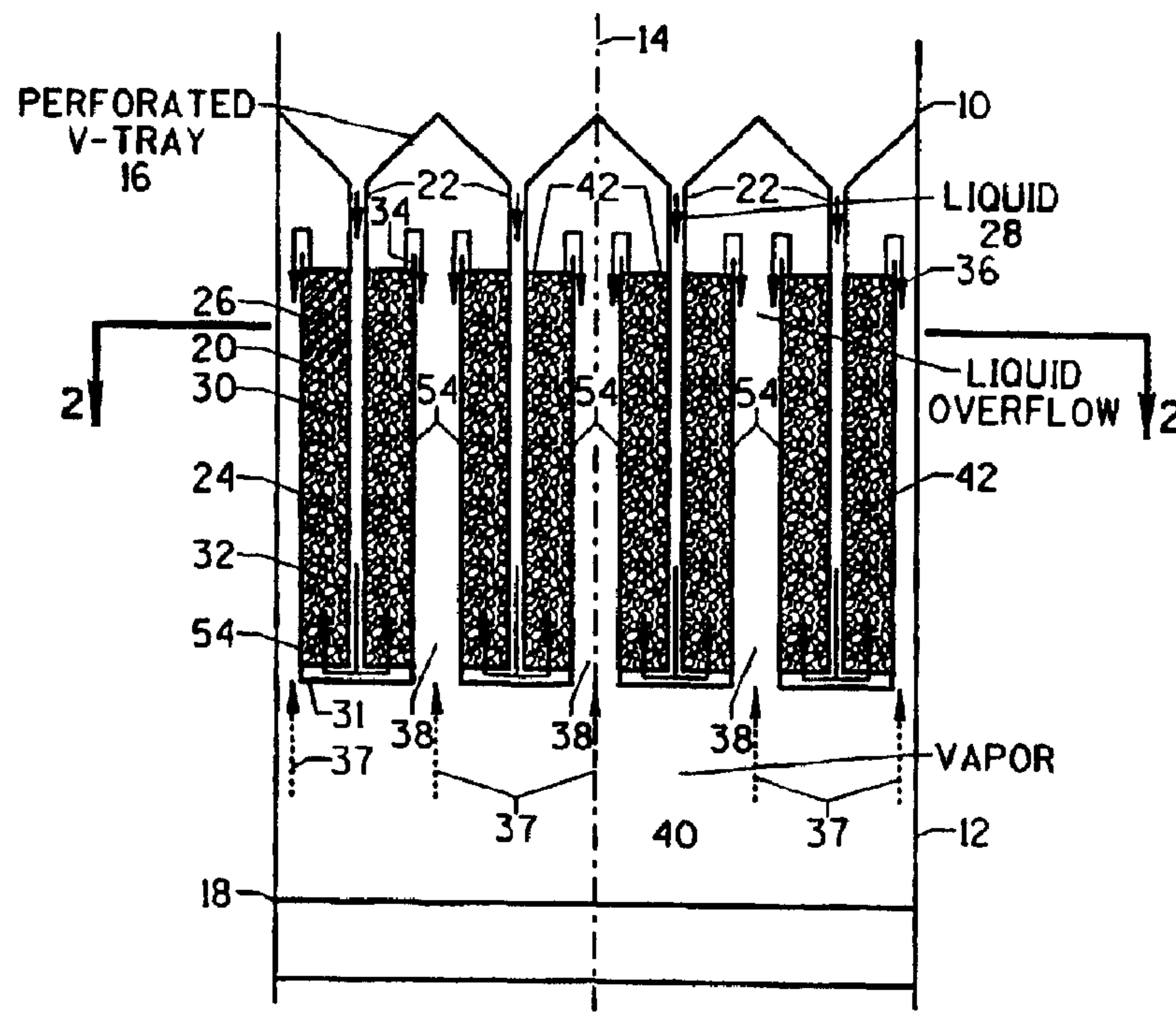




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(54) Titre : APPAREIL DE DISTILLATION CATALYTIQUE
(54) Title: AN APPARATUS FOR CATALYTIC DISTILLATION



(57) Abrégé/Abstract:

An apparatus for catalytic distillation consists of alternatively a catalyst unit and an active liquid distributor tray. The catalyst unit is formed by series of troughs (24) containing catalysts with spaces between adjacent troughs for vapor flow. The active liquid distributor tray (18) is preferably a V-shaped tray formed with collectors that function as both a liquid distributor to deliver liquid at the appropriate locations to the underneath catalyst unit and a mass transfer device. Liquid flows down to the catalyst troughs from bottom of the sump of each collector and vapor flows up through the upper diverging walls of the collector. Packing materials may be placed on the tray (18) or in the spaces between the troughs or both to enhance mass transfer. The catalyst troughs preferably are partitioned to cause the liquid to flow through the catalyst and to overflow the upper rim (34) of the troughs (24) to escape therefrom whereby the catalyst is maintained submerged.



