LIQUID COLLECTOR AND REDISTRIBUTOR FOR PACKED COLUMNS

ABSTRACT OF THE DISCLOSURE

An apparatus for collecting/redistributing a flow of liquid descending in an exchange column containing a layer of packing that includes: a plurality of horizontally spaced longitudinal members, each member having an inner side and an upper end adjacent a bottom of the layer of packing; at least one plate vertically spaced from the bottom of the layer of packing, each plate adapted to collect a portion of the flow of the descending liquid and having opposing ends connected to the inner sides of a pair of the longitudinal members; and at least one vapor riser in fluid communication with the plate and adapted to receive and transmit at least a portion of a stream of a vapor ascending in the exchange column from below to above the plate, each vapor riser having a cap vertically spaced apart from the bottom of the layer of packing.

Figure 1