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(54) Title: HORIZONTAL TRAY AND COLUMN FOR CONTACTING GAS AND LIQUID

(57) Abstract

Horizontal tray (3) for use in a normally vertical column (1) for counter-currently contacting gas and liquid, which horizontal tray (3) comprises an upper horizontal plate (6), a lower horizontal plate (7), a liquid supply space (8), a liquid feed pipe (10) opening into the liquid supply space (8), and a vertical tubular contact and separation device (13), which comprises an open-ended tube (15) extending through the horizontal plates (6, 7), a liquid delivery device (22) comprising an upwardly directed liquid delivery opening (24, 39) which is in fluid communication with the liquid supply space (8), swirl imparting means (30) arranged in the open-ended tube (15) above the liquid delivery opening (24), and guide means (31) to direct liquid from the upper end of the open-ended tube (15) onto the upper horizontal plate (6), which horizontal tray further comprises an open-ended downcomer (35) having an inlet arranged above the upper horizontal plate (6) and an outlet arranged below the lower horizontal plate (7).

