

ABSTRACT

**TRAY FOR DISPENSING A GAS AND A LIQUID, REACTOR PROVIDED
WITH SUCH A TRAY, AND USE OF SAID TRAY**

A distributor tray (1) for a gas and a liquid circulating as a co-current, said tray comprising a plate (10) perforated by orifices (12) and supporting hollow chimneys (20) extending perpendicularly to said plate (10), each orifice (12) of the plate being surmounted by a chimney (20) of identical cross section to said orifice (12), characterized in that the plate (10) is equipped with a plurality of openings (30) arranged on the periphery of each chimney (20) inside a circumscribed circle, the centre of which coincides with the centre of the chimney (20), and the radius of which is less than or equal to $\frac{1}{3}$ of the shortest distance separating two adjacent chimneys (20), and in that a single deflector element (40, 100) is arranged beneath each chimney (20), the openings (30) and the deflector element (40,100) associated with each of the chimneys (20) being so arranged as to impart a rotating movement to the gas/liquid mixture under each chimney.

Fig. 4