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(54) Title: LIQUID DISTRIBUTION SYSTEM

(57) Abstract

The present invention provides a liquid distribution system, which is useful in a number of contexts, including in accomplishing various synthetic, diagnostic and drug screening reactions. The distribution system can comprise an alpha reservoir (200A) and a beta reservoir (200B), a first set of parallel and adjacent first and second feeder channels (211A-211B) and a second set of parallel and adjacent third and fourth feeder channels (211C-211D) which are offset from the first and second feed channels (211A-211B), wherein (a) the first (211A) and third (211C) feeder channels are connected to the alpha reservoir (200A) via a first connector channel (211A) that is situated above or below the second (211B) and fourth feeder channels (211D) and are independent of the beta reservoir and (b) the second (211B) and fourth feeder channels (211D) are connected to the beta reservoir via a second connector channel (211B) that is situated above or below the first and third feeder channels (211A and 211C) and are independent of the alpha reservoir (200A). The distribution system is preferably a microscale distribution system. Various particular mechanisms for controlling flow into a liquid distribution system are described.

