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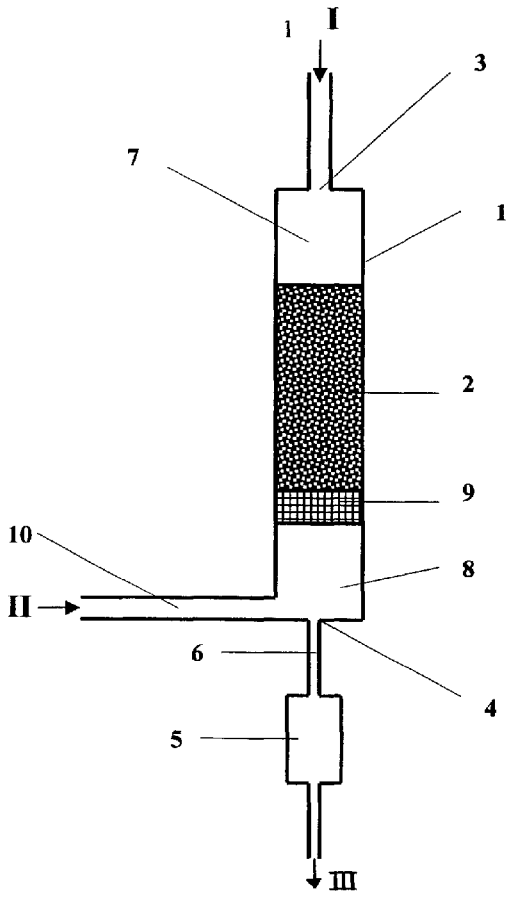
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(54) Title: REACTOR ASSEMBLY



(57) Abstract: Described is a Reactor assembly for analysing the effluent stream from at least one flow-through reactor, comprising: -at least one flow-through reactor for performing at least one chemical reaction, the reactor comprising -a reaction chamber (1), comprising a reaction zone (2), the reaction chamber being connected to -at least one reactor inlet (3) for at least one reactant, 10 upstream of the reaction zone, -at least one reactor outlet (4) for the effluent stream from the reaction zone, downstream of the reaction zone, -at least one analyser (5) for subjecting the effluent stream to an analysing procedure, each reactor outlet being 15 connected to at least one analyser by an effluent conduit (6), wherein the reactor assembly further comprises -at least one dilution fluid supply means (10), for adding at least one dilution fluid to the effluent stream, downstream of the reaction zone, and a process for analysing a fluid effluent stream from a flow- through reactor comprising a reaction chamber having a reaction zone, comprising the steps of: A) diluting at least 30 w/w% and/or at least 30 *v/v%*effluent stream downstream of the reaction zone with at least one 25 dilution fluid, B) transferring at least a portion of the diluted effluent stream obtained in step A) to at least one analyser, C) subjecting the transferred effluent stream to an analysis procedure.

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