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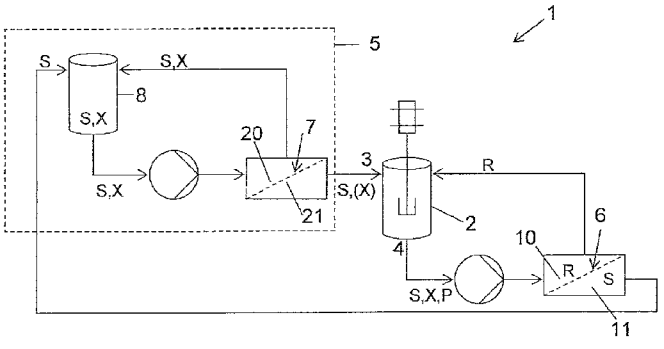
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(54) Title: IMPROVED DILUTE CHEMICAL REACTION PROCESS WITH MEMBRANE SEPARATION STEP

Fig. 2



(57) Abstract: Disclosed is a process for carrying out a cyclisation reaction, a polymerization reaction, an enzymatic reaction showing substrate inhibition, an enzymatic reaction showing product inhibition, a reaction showing precipitation of the substrate or of a reactant, the process comprising the steps of • a) diluting a fresh substrate (X) with solvent (S) to form a diluted substrate- solvent mixture, and supplying this mixture to a reactor (2), • b) causing the reaction medium in the reactor to react, • c) discharging reaction mixture comprising reaction product, solvent, and substrate that has not reacted, to a first filtration membrane (6) which is permeable to the solvent and impermeable to the substrate and to the catalyst or at least one of the reactants, • d) returning solvent from the permeate side (11) of the first membrane to dilute the fresh substrate, and • e) returning retentate (10) comprising substrate which has not reacted, from the first filtration membrane to the reactor.

WO 2013/156600 A1