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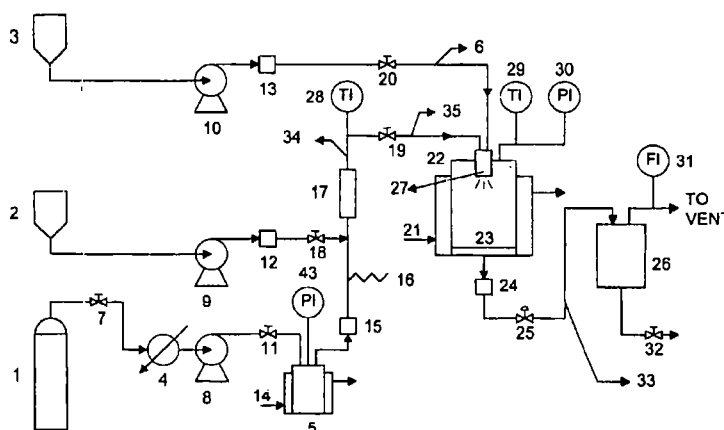
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(54) Title: SUPERCRITICAL FLUIDS PROCESSING: PREPARATION OF PROTEIN MICROPARTICLES AND THEIR STABILISATION



(57) Abstract: A process for the co-precipitation of a substance with a stabiliser therefor, by a gas anti solvent process comprising introducing into a particle formation vessel a supercritical fluid pure or mixed with a modifier; and a solution comprising said substance and said stabiliser dissolved in a solvent; so as said solvent is extracted from the solution by said supercritical fluid and co-precipitation of the substance and stabiliser occurs. The process may be carried out using an apparatus comprising a particle formation vessel (22) and a nozzle (27) having a central orifice (39) serving to introduce a solution of the substance and a plurality of outer orifices (41) serving to carry a flow of supercritical fluid into the particle formation vessel (22), such that the solvent is extracted from the solution by the supercritical fluid and precipitation of micron sized particles of the substance/stabilizer occurs. The substance is preferably a protein of pharmaceutical interest, which is highly stabilized for storage by this process.

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