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(54) Title: NOVEL APPARATUS AND PROCESS FOR PREPARING CRYSTALLINE PARTICLES

(57) Abstract: Novel Apparatus and Process for Preparing Crystalline Particles An apparatus for preparing crystalline particles of a substance suitable for inhalation therapy comprises (i) a first reservoir 3 of said substance dissolved in a liquid solvent;(ii) a second reservoir 3 of liquid antisolvent for said substance which is miscible with the liquid solvent; (iii) a cylindrical mixing chamber 2 having first and second tangential inlet ports and an axial outlet port;(iv) means for delivering the contents of the first and second reservoirs to the mixing chamber in a stream via the first and second inlet ports respectively at independent controlled flow rate, the streams of liquid from the inlet and outlet ports being intimately mixed in the cylindrical mixing chamber through formation of a vortex thereby causing precipitation of crystalline particles of the substance; and (vi) means 5 for collecting crystalline particles suspended in the stream of liquid discharged from the outlet port of the mixing chamber.