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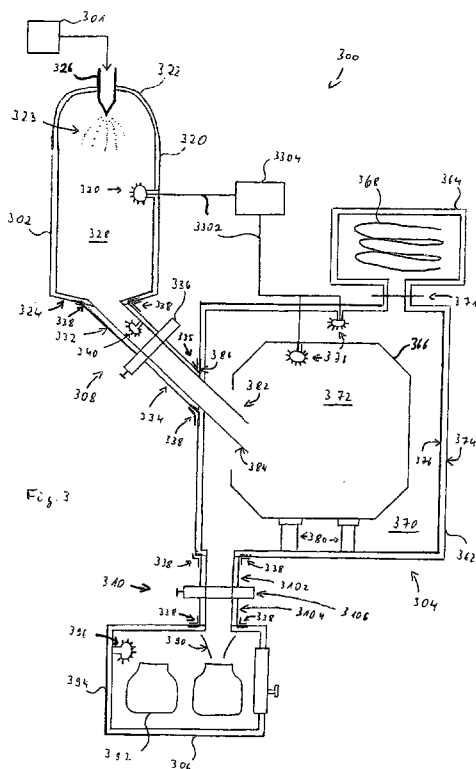
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(54) Title: PROCESS LINE FOR THE PRODUCTION OF FREEZE-DRIED PARTICLES



(57) Abstract: A process line (300) for the production of freeze-dried particles under closed conditions comprising at least a spray chamber (302) for droplet generation and freeze congealing of the liquid droplets to form particles and a bulk freeze-dryer (304) for freeze drying the particles, the freeze-dryer (304) comprising a rotary drum for receiving the particles. Further, a transfer section (308) is provided for a product transfer from the spray chamber (302) to the freeze-dryer (304). For the production of the particles under end-to-end closed conditions each of the devices (302, 304) and of the transfer section (308) is separately adapted for operation preserving sterility of the product to be freeze-dried and/or containment.



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