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(54) Title: APPARATUS AND METHOD FOR PROCESSING A SUBLIMED MATERIAL

(57) Abstract

Apparatus for the solidification by desublimation of a sublimed gaseous substance and the subsequent trapping and liquidation of said desublimed substance is described, the apparatus comprising: means for the supply of a coolant fluid to a process vessel means; means for the supply of said sublimed substance to said vessel; means for enabling the direct contact and mixing of said coolant fluid with said sublimed substance so as to reduce the temperature of said sublimed substance to below a dewpoint thereof; said vessel means including a lower tank portion into which solid desublimed substance falls; said vessel means further including heating means at least about said tank portion; valve means to enable said vessel means to be sealed to allow a raised pressure to be established in said vessel; conduit means having a first end at the position adjacent a lower end of said tank portion such as to be immersed in liquid resulting from the liquefaction of said desublimed substance, and a second end remote from said first end outside said vessel and connected to means to receive said liquefied substance; and said conduit means having means to permit the controlled expulsion of said liquefied substance.

