

Title (en)

OPTIMIZATION OF NUCLEATION AND CRYSTALLIZATION FOR LYOPHILIZATION USING GAP FREEZING

Title (de)

OPTIMIERUNG VON NUKLEIERUNG UND KRISTALLISIERUNG ZUR GEFRIERTROCKNUNG MITTELS LÜCKENGEFRIERUNG

Title (fr)

OPTIMISATION DE NUCLÉATION ET DE CRISTALLISATION POUR LA LYOPHILISATION, PAR CONGÉLATION À ESPACES VIDES

Publication

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Application

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Abstract (en)

[origin: WO2013147759A1] This application discloses devices, articles, and methods useful for producing lyophilized cakes of solutes. The devices and articles provide for a method of freezing liquid solutions of the solute by the top and the bottom of the solution simultaneously and at approximately the same rate. The as frozen solution can then provide a lyophilized cake of the solutes with large and uniform pores.

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