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## ABSTRACT

A crystallization process comprising introducing a solution or a slurry formed by incomplete crystallization of a solute into a crystallization tank, crystallizing the solute in the crystallization tank, forming a slurry comprising crystals and a solvent and discharging the formed slurry to an outside, the crystallization being conducted, wherein a portion or an entire amount of the formed slurry is taken out of the crystallization tank and introduced into a crystal recycling apparatus, the crystals in the slurry are separated or the slurry is concentrated in the crystal recycling apparatus and the separated crystals or the concentrated slurry is recycled to the crystallization tank.

Since the crystal recycling apparatus is disposed and the crystallization is conducted while the separated crystals or the concentrated slurry is recycled from the crystal recycling apparatus to the crystallization tank, the residence time of the crystals and the concentration of the slurry in the crystallization tank can be increased. By controlling the flow rate of the recycled crystals, the distribution of the particle diameter can be improved and crystals having a desired average particle diameter can be obtained. Sticking of crystals to the liquid surface portions of the crystallization tank and apparatuses connected to the crystallization tank can be prevented.

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