

Title (en)
CONTINUOUS PROCESS FOR DRY FRACTIONATION OF GLYCERIDE OILS

Title (de)
KONTINUIERLICHES VERFAHREN ZUR TROCKENFRAKTIONIERUNG VON GLYCERIDÖLEN

Title (fr)
PROCÉDÉ CONTINU DE FRACTIONNEMENT À SEC D'HUILES GLYCÉRIDIQUES

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Application
EP 15766668 A 20150716

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Abstract (en)
[origin: WO2016089196A1] The present invention provide a continuous dry fractionation process comprising the successive step of: (a) providing a liquid glyceride oil having a temperature that is at least 5 °C higher than the solidification onset point (SOP) of the glyceride oil, the SOP of the glyceride oil being the minimum temperature at which the glyceride oil has a N-value of 0%; (b) precooling the liquid glyceride oil at a cooling rate of at least 1 °C/min by passing the glyceride oil through a heat exchanger to reduce the temperature of the liquid glyceride oil with at least 5 °C to a temperature that is not lower than 10 °C below the SOP and not higher than 5 °C above the SOP; (c) homogenizing the precooled glyceride oil to produce a prenucleated glyceride oil by passing the precooled glyceride oil through a homogenizer in which the temperature of the glyceride oil is kept a temperature within 1 °C of the prenucleation temperature Tp for at least 0.5 hour, said Tp being 0.5-10 °C below the SOP; (d) crystallizing the prenucleated glyceride oil to produce a crystallized glyceride oil containing separable fat crystals by passing the prenucleated glyceride oil through one or more crystallizers to reduce the temperature of the prenucleated glyceride oil with at least 10 °C to a crystallization temperature Tc and keeping the glyceride oil at a temperature within 1 °C of Tc for at least 1 hour; and (e) removing separable fat crystals from the crystallized glyceride oil and recovering an olein fraction of the glyceride oil. This continuous fractionation process enables the manufacture of a high quality olein fraction in high yield and in a relatively short period of time.

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See references of WO 2016089196A1

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