

EVIRONMENTALLY FRIENDLY PROCESS AND EVIRONIVIENTALLY FRIENDLY PROCESS AND EQUIPMENT FOR SOLID-FLUID EXTRACTION

An extraction process, especially a continuous supercritical extraction process, in which one or more components of a subdivided solid are extracted using a fluid under pressure.

Technology Overview

This invention relates to a continuous solids/fluid contacting process and to equipment in which appropriate solids are contacted with a fluid that may be either liquid or gaseous, or a combination thereof, under elevated pressure and optionally elevated or reduced temperature.

More particularly, but not exclusively, the invention relates to the contacting of solids and fluids under elevated pressure and optionally elevated or reduced temperature in order to conduct an extraction process, especially a continuous supercritical extraction process, in which one or more components of a subdivided solid are extracted using a fluid under pressure.

Market Opportunity

The invention is particularly useful in the food industry for the extraction of required values in the form of oils from seeds and other agricultural products.

Technology Benefits

- It is a replacement for the hexane extraction process that is more environmentally friendly and "green".
- Supercritical fluids are suitable as a substitute for organic solvents in a range of industrial and laboratory processes that are typically carried out in a batch procedure.

Project status

Patented in South-Africa.

Currently licensees are sought to further develop and commercialize the technology.



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