

Separator

Abstract

The invention relates to a separator (1) for separating a flowable suspension (S) in a centrifugal field into at least two flowable phases (HP, LP) of different densities, said separator comprising the following: a) a housing (10) which is stationary during operation and is designed in the manner of a tank which has at least two openings; b) a drum (20) which is located inside the housing (10) and can be rotated about an axis of rotation, said drum having an axis of rotation (D) and at least one opening; c) wherein a gap is formed at least in sections or continuously between the drum (20) and the housing (10); d) a support and drive device (30) which has at least two support and/or drive units, by means of which the drum (20) can be kept suspended inside the housing (10), supported, and/or set in rotation; e) wherein one of the support and/or drive units is designed as a first magnetic bearing which is designed at least to axially support the drum (20) and to keep same suspended; f) wherein at least one other of the support and/or drive units is designed to axially support the drum (20).

Figure 2