

Abstract

Separator

The invention relates to a separator comprising a frame (I) which comprises receiving areas (I-4, I-5) for rotatably supporting the separator insert (II, III), each receiving area having a stator device (4a, 4b) as a sub-element of a magnet bearing device (4 or 5), and a separator insert (II, III) as a pre-assembled replaceable unit for inserting into stator units (4a, 4b) on a frame (I) or in a housing (68) of the separator. The separator insert (II, III) has at least the following: i) a rotor (2, 65) which can be rotated about a rotational axis (D) and which comprises a drum (3, 66) and a drum wall, and ii) at least two rotor units (4b, 5b) as sub-elements of the magnet bearing devices (4, 5) at two axially spaced positions of the rotor (2) with the drum, said rotor units being used to hold, rotatably support, and rotate the rotor (2) together with the drum (3) in a suspended manner within the housing during a separation mode, wherein the separator has at least one linear drive (50) for linearly moving at least one of the two receiving areas (I-4 and I-5) relative to the separation insert (II, III).

Fig. 1