Claims

1. A sieving device comprising:

a drive device;

a sieve including a sieve frame and at least one sieve lining, the sieve lining being held by the sieve frame, and the sieve frame being connected to the drive device;

a support device, which holds the sieve;

a plurality of first swivel joints; and

a plurality of second swivel joints, wherein

the drive device, which is controllable by a control device by means of a control program, comprises at least three actuators, one end of each actuator being connected to the support device via a first swivel joint of the plurality of first swivel joints, and another end of each actuator being connected to the sieve frame via a second swivel joint of the plurality of second swivel joints, so that the sieve is held solely by the actuators and is displaceable within an operating volume and is optionally rotatable,

the first swivel joints and the second swivel joints include at least one of a ball joint, a hinge joint, a fork joint, or an angle joint, and

the actuators are controllable to perform oscillating movements to generate vibrations of the sieve lining.

2. The sieving device according to claim 1, wherein the sieve is spatially displaceable back and forth and is

rotatable at least about its longitudinal axis and/or transverse axis.

3. The sieving device according to claim 1, wherein the sieve comprises a plurality of sieve components, each having a sieve lining.

4. The sieving device according to claim 1, wherein at least one of the sieve linings or at least one of the sieve frames is connected to a generator, which is designed to emit mechanical undulations or microwaves.

5. The sieving device according to claim 1, wherein four, five or six actuators are pivotally connected to sieve and can act from different directions onto the sieve.

6. The sieving device according to claim 1, wherein at least some of the actuators comprise a controllable electric drive and/or that at least some of the actuators are pneumatically driven.

7. The sieving device according to claim 1, wherein at least one sensor is provided, which records measurement signals for the sieved product lying on the sieve lining, and/or that at least one sensor is provided, which records measurement signals for the state of the sieve lining and which transmit the recorded measurement signals to the control device.

8. The sieving device according to claim 8, wherein measurement signals for the sieved product lying on the sieve linings are recordable by at least one optical sensor and/or that measurement signals for the state of the sieve linings are recordable by means of a capacitive or acoustic sensor.

9. The sieving device according to claim 8, wherein the at least one capacitive sensor comprises a measurement capacitor, whose first electrode is the sieve lining and whose second electrode is a metal element, which is held in a constant distance from the sieve lining.

10. The sieving device according to claim 8, wherein the control program is designed for the analysis of the measurement signals and for forming control signals, with which

a) the position, inclination and/or movement of the sieve can be changed in such a way that the distribution and topography of the sieved product can be changed; and/or

b) the sieve can be subjected to the action of forces; and/or

c) the sieve is guidable into a maintenance position; and/or

d) a maintenance element which is supported guidable along the sieve lining, can be activated.

11. An operating method for controlling the sieving device according to claim 1.

12. The operating method according to claim 11, wherein measurement signals provided by sensors, which monitor the sieved product lying on the sieve lining and/or the state are forwarded to the control device, which forms control signals, with which

a) the position, inclination and/or movement of the sieve are changed in such a way, that the

distribution and topography of the sieved product is changeable; and/or

b) the sieve is subjected to the action of forces; and/or

c) the sieve is guidable into a maintenance position; and/or

d) a maintenance element which is supported guidable along the sieve lining is activated.