CLAIMS

1. An oscillatory separation device comprising:

a base;

an elastic support, one end of the elastic support being correspondingly disposed on the base;

at least one shell assembly having a first space and a second space communicating with each other, the shell assembly being capable of accommodating a sieved object, a lower part of the shell assembly being correspondingly combined with another end of the elastic support so that the shell assembly being swingably from side to side connected to the base;

a screen mesh correspondingly disposed in the shell assembly to separate the first space and the second space, the screen mesh being detachably assembled with the shell assembly;

a discharge port formed on an outer circumference of the shell assembly and communicating with the first space so that the sieved object being discharged externally through the discharge port; and

an opening element correspondingly disposed on the shell assembly, the opening element communicating with the first and second spaces, and the sieved object being thrown into the shell assembly through the opening element.

2. The oscillatory separation device as claimed in claim 1, wherein the shell assembly further comprises a first shell and a second shell that are detachably correspondingly combined with each other, the first space is formed inside the first shell, the second space is formed inside the second shell, and the screen mesh is disposed between the first and second shells.

3. The oscillatory separation device as claimed in claim 2, wherein an outer peripheral edge of the first shell further protrudes outward to form a first flange, an outer peripheral edge of the second shell further protrudes outward to form a second flange, and a buffer element is correspondingly sandwiched on the first and second flanges.

4. The oscillatory separation device as claimed in claim 3, wherein the buffer element and the screen

mesh are integrally formed or non-integrally formed structurally.

5. The oscillatory separation device as claimed in claim 2, wherein the shell assembly further has a first fixing member, so that the base and the second shell are locked with each other through the first fixing member.

6. The oscillatory separation device as claimed in claim 3, wherein the shell assembly further has a second fixing member, and the buffer element and the first and second shells are locked with one another through the second fixing member.

7. The oscillatory separation device as claimed in claim 1, wherein a feeding assembly is further provided on the opening element, and the feeding assembly extends upward to form an extension for preventing the sieved object from dispersing and accelerating the sieved object to flow into the shell assembly.

8. The oscillatory separation device as claimed in claim 1, wherein a pressure regulating valve is further provided inside the base, and the pressure regulating valve is linked with a pressure regulating device.

9. The oscillatory separation device as claimed in claim 1, wherein a vibrating device is further provided inside the base for vibrating the shell assembly so that the sieved object in the shell assembly can be oscillated and separated.

10. The oscillatory separation device as claimed in claim 1, wherein further comprising a moving component, and the base being mounted on the moving component to be capable of sliding back and forth.