CLAIM(S)

1. A storage device of a granular material comprising:

a loading port provided at an upper part of the storage device;

a discharge port provided at a lower part of the storage device;

a flow path that diagonally downwardly delivers the granular material loaded through the loading port, the flow path restraining a breakage on the granular material; and

a deceleration unit provided to the flow path, the deceleration unit reversing a direction for the granular material to be delivered to reduce a flow speed of the granular material.

2. The storage device of the granular material according to claim 1, wherein

the flow path comprises a groove-structure defining member for delivering the granular material diagonally downward.

3. The storage device of the granular material according to claim 2, wherein

the groove-structure defining member includes a plurality of groove-structure defining members that are vertically disposed,

vertically adjacent ones of the groove-structure defining members on which the granular material flows are inclined in opposite directions, and

the deceleration unit is provided in a course provided by the vertically adjacent groove-structure defining members.

4. The storage device of the granular material according to claim 3, wherein

the deceleration unit is a plate member with which the granular material dropped down from a lower part of each of the groove-structure defining members is brought into contact.

5. The storage device of the granular material according to claim 4, wherein

a groove width of each of the groove-structure defining members for delivering the granular material is wider at an upper part of each of the groove-structure defining members than the lower part of each of the groove-structure defining members.

6. The storage device of the granular material according to claim 3, wherein

the deceleration unit is a hopper-shaped member that receives the granular

material dropped down from a lower part of the groove-structure defining members.

7. The storage device of the granular material according to any one of claims 1 to 6, wherein

the granular material is a hydrogenated petroleum resin pellet.

5

CLAIM(S)

1. A storage device that stores a hydrogenated petroleum resin pellet that is adapted to be loaded from an upper part of the storage device and to be discharged from a lower part of the storage device, the storage device comprising:

a flow path adapted to diagonally downwardly deliver the hydrogenated petroleum resin pellet loaded through the upper part; and

a plurality of groove members each coupled to the flow path and defining a groove-structure for restraining a breakage on the hydrogenated petroleum resin pellet, the plurality of groove members arranged vertically relative to one another along the flow path such that vertically adjacent ones of the groove members are inclined in mutually opposite directions wherein each of the groove members comprises a plate member adapted to contact with the hydrogenated petroleum resin pellet flowing down from a lower part of an upper one of the adjacent ones of the groove members and reverse a direction of the hydrogenated petroleum resin pellet in the flow path, to reduce a flow speed of the hydrogenated petroleum resin pellet,

wherein an inclination angle of each of the groove members is in a range from 37 to 45 degrees and a distance between the plate member of the upper one of the adjacent ones of the groove members and the plate member of a lower one of the adjacent one of the groove members is in a range from 405 mm to 500 mm.

2. The storage device of claim 1, wherein

the plate member is a deceleration unit disposed in a course provided by the vertically adjacent ones of the groove members.

3. The storage device of claim 2, wherein

the deceleration unit is a plate member adapted to contact the granular material dropped down from a lower part of the upper one of the adjacent ones of the groove members.

4. The storage device of claim 3, wherein

a groove width of each of the groove members is wider at an upper part of each of

the groove members than at the lower part of each of the groove members.

5. The storage device of claim 2, wherein

the deceleration unit is a plate member comprising an upper part and a lower part, the upper part having a width greater than the lower part and is adapted to receive the hydrogenated petroleum resin pellet dropped down from a lower part of the upper one of the adjacent ones of the groove members.

6. A process for storing a hydrogenated petroleum resin pellet, the process comprising:

loading the hydrogenated petroleum resin pellet in the upper part of the storage device of claim 1;

making the hydrogenated petroleum resin pellet flow along the flow path; and

reversing a direction of the hydrogenated petroleum resin pellet in the flow path with the plate member, to reduce the flow speed of the hydrogenated petroleum resin pellet.