



G00002

16



162162

ABSTRACT

GROUND IMPROVING METHOD AND APPARATUS USED IN THE METHOD

Water pollution at the time of a ground improving work under the water is prevented, so that ambient environment is not deteriorated. Granular materials such as slag and coal ash are enabled to be used in ground improvement, so that protection of high-quality sand which is in demand and effective use of industrial waste are attempted. A peripheral wall of a tip of a casing pipe 1 is duplicated, and a cavity 1c is provided therein. Ultrasonic radiators 2 are provided in the cavity 1c so as to apply vibration to the granular materials Sa put together with water into the casing pipe 1. As a result, the granular materials Sa are compacted, and frictional resistance between the granular materials Sa and an inner periphery of the casing pipe 1 is eliminated, so that the granular materials Sa can be easily discharged from the casing pipe 1. As a result, the granular materials Sa such as slag and coal ash which easily fly and are difficultly compacted can be utilized.

(Figure 1)