

**SYSTEM FOR COMPACTING A SEDIMENT BED CONTAINING WATER AND
METHOD THEREOF**

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ABSTRACT

There is provided a system for compacting a sediment bed containing water. The system includes a surface member configured to rest on a surface of the sediment bed, a plurality
10 of hollow elongated members affixed to a bottom side of the surface member and configured for penetrating into the sediment bed, one or more vibration devices disposed on the surface member, the vibration device is configured to induce vibration of the surface member and the plurality of hollow elongated members, and one or more
15 extractors coupled to the plurality of hollow elongated members for extracting water from the sediment bed through the plurality of hollow elongated members. There is also provided a method of compacting a sediment bed containing water and a method of producing the system.

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FIG. 1