

**FEATURED TECHNOLOGY:**

**Shallow Water Dredge System**

**INVENTOR (S):**

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**STATUS:**

Patent No. 6,467,200 | 5,960,570 | 5,903,989 | 6,518,913 | 6,357,149 | 5,907,915 | 6,357,150 | 6,289,613

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**TECHNOLOGY DESCRIPTION:**

The technology is designed to remove sediment down to a depth approximately 10 feet below water level. The dredge itself is a component within the system required to move sediment to a final resting place on land, at the shore, or elsewhere in the body of water. The system will vary depending upon the specific project. At times the sediment will be used to build islands in the body of water, requiring minimal supports for the SWEEP (Shallow Water Environmental Excavation Project).

This system includes the following:

- Ground penetrating radar to scan and record obstacles setting on the sediment to a depth of 4 feet below the sediment surface.
- GPS system needed to mark the obstacles, and track/monitor/record SWEEP dredge progress and completion.
- Barge mounted excavation equipment to remove obstacles in the sediment prior to the SWEEP operation.
- Conveyers to move sediment up to 3 miles from the SWEEP (project specific).
- Equipment to unload the barges.

The Wheel dredge technology is expected to remove 1,600 cubic yards of sediment per hour under normal operating conditions. This production rate compares to 250-1000 cubic yards per hour for mechanical dredges and 400-800 cubic yards per hour for hydraulic dredges.

**END USE/APPLICATIONS:**

Water Sediment Removal



**MISSION:**

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