Cavitating Water Jet Hard Rock Dredge Mining System

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Summary: A way to incorporate high-pressure cavitating waterjets within a rotary cutter head

Description: In this invention we describe a way to incorporate high-pressure cavitating waterjets within a rotary cutter head. This will help overcome some of the current deficiencies associated with current rotary cutter heads such as excessive spillage, blockages, and the inability to adjust the speed and torque of the rotating head.

Main Advantages of this Invention
- Reduction in spillage thereby increasing production
- Keeps larger particles away from the suction intake reducing blockage and allowing the pump to be sized to smaller particles
- Allows the dredging of deposits and other materials that previously were not technically or economically viable

Potential Areas of Application
- Construction and Civil Engineering
- Mine excavation
- Cargo and heavy duty machinery

ID number: 13028

Intellectual Property Status: US utility patent pending (application #14/255,098)

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

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