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(71) Applicant: **US INTERCORP LLC** [US/US]; 1150 Raritan Road, Suite 205, Cranford, NJ 07016 (US).

(72) Inventors: **HRINDA, Radovan**; 213 Lexington Boulevard #10, Clark, NJ 07066 (US). **HIRSH, Douglas, S.**; 870 W. Genesee Street, Skaneateles, NY 13152 (US).

(74) Agent: **BRODY, Christopher, W.**; Clark & Brody, 1700 Diagonal Road Suite 510, Alexandria, VA 22314 (US).

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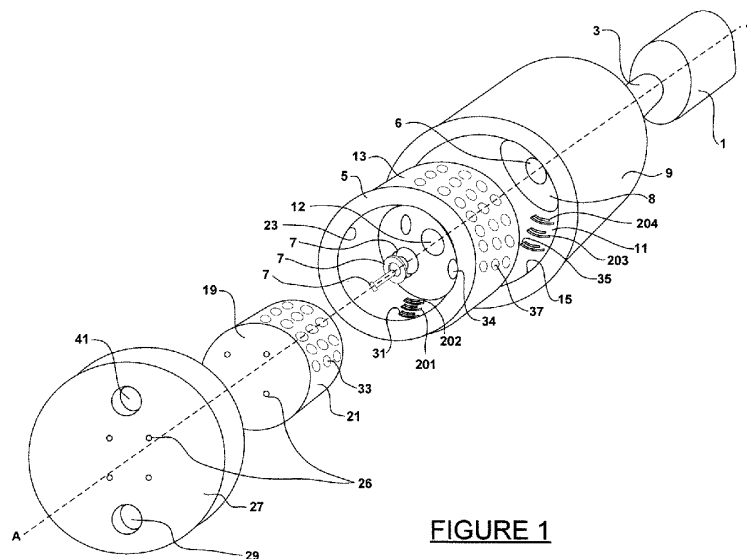


FIGURE 1

(57) Abstract: A fluid cavitation apparatus includes a housing, an external rotor with cavitation bores in an outer surface thereof, and a motor for rotating the external rotor. An inner surface of the housing is spaced from the outer surface of the external rotor to create a fluid cavitation zone. The inner surface of the housing is configured with a spiral shape and tunnel zone to enhance the thermal transfer characteristics of the fluid for heating, cooling, and purification. A control system to facilitate proper motor speed, and fluid behavior to enhance the cavitation process.

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