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(71) Applicant: **BOLDER TECHNOLOGIES CORPORATION** [US/US]; 4403 Table Mountain Drive, Golden, CO 80403 (US).

(71) Applicants and
(72) Inventors: **McDERMOTT, Joseph, K.** [US/US]; 8140 San Juan range Road, Littleton, CO 80127-4013 (US). **WAGNER, James, W.** [US/US]; 9416 West 74th Way, Arvada, CO 80005 (US). **JOHNSON, Richard, T.** [US/US]; 13403 W. 62nd Place, Arvada, CO 80004 (US). **SPENCER, James, W.** [US/US]; 12407 W. 2nd Pl., #14-304, Lakewood, CO 80228 (US). **SCHWOB, Daniel, A.** [US/US]; 7333 Old Post Rd., Boulder, CO 80301 (US). **BRANTNER, Paul, C.** [US/US]; 29259 Thunderbolt Circle, Conifer, CO 80433 (US).

(74) Agents: **BEATON, Glenn, K.** et al.; Gibson, Dunn & Crutcher, Suite 4100, 1801 California Street, Denver, CO 80202 (US).

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(54) Title: MULTIPLE BATTERY SYSTEM AND METHOD

(57) Abstract: A multiple battery system and method for starting internal combustion engines, such as on a boat or vehicle, and for powering auxiliary functions that operate primarily when the engine is not running is disclosed. A first battery is used for starting the engine. A second battery is used to power the auxiliary features associated with the boat or vehicle primarily when the engine is not running. The first battery, referred to as the starter battery, is a high output battery that produces high bursts of energy for limited amounts of time. The second battery, referred to as the auxiliary battery, has a low power output over a fairly long period of time, is capable of being completely drained without harming the battery, and is capable of being fully recharged. The starter battery and the auxiliary battery are connected by a circuit that has an on/off switch controlled by an electronics control module. The auxiliary battery is always on line in the circuit. The electronics control module monitors the circuit to detect certain parameters, such as a start engine event. When a start engine event is detected, the electronics control module connects the starter battery to the circuit with the switch. When the start event is over, the electronics control module disconnects the starter battery from the circuit with the switch. Thus, the electronics control module prevents the starter battery from being drained when power is being drawn from the auxiliary battery during non-start events.

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