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### (54) MODULAR COLD PLATE FOR ELECTRONIC CONTROL MODULE

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#### (57)ABSTRACT

Disclosed herein are embodiments for a control module cooling system. For example, the control module is provided with a chassis and a circuit board assembly that is mounted to the chassis and includes electronics that generate heat during operation. A cold plate is mounted to the chassis and adjacent to the circuit board assembly and defines an opening. A cold block is coupled to the cold plate and comprises: a base disposed within the opening and coupled to the electronics; a plurality of fins extending from the base and spaced apart from each other to form channels; and a plate that is spaced apart from the base to form a cavity. The plate defines an inlet that is arranged over a central portion of the plurality of fins to receive a liquid therethrough to facilitate impinging flow of the liquid through the channels to transfer heat from the electronics.

