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(54) **SYSTEMS AND METHODS FOR
CONTROLLED BATTERY HEATING**

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(57)

ABSTRACT

Systems and methods for heating a battery, which may be
performed alone or in combination with charging or dis-
charging a battery. In some implementations, heating
involves applying an alternating current waveform, which
may be sinusoidal, to a battery. In some implementations,
the heating signal is applied at a frequency and/or current
with little or no net charge to the battery.

