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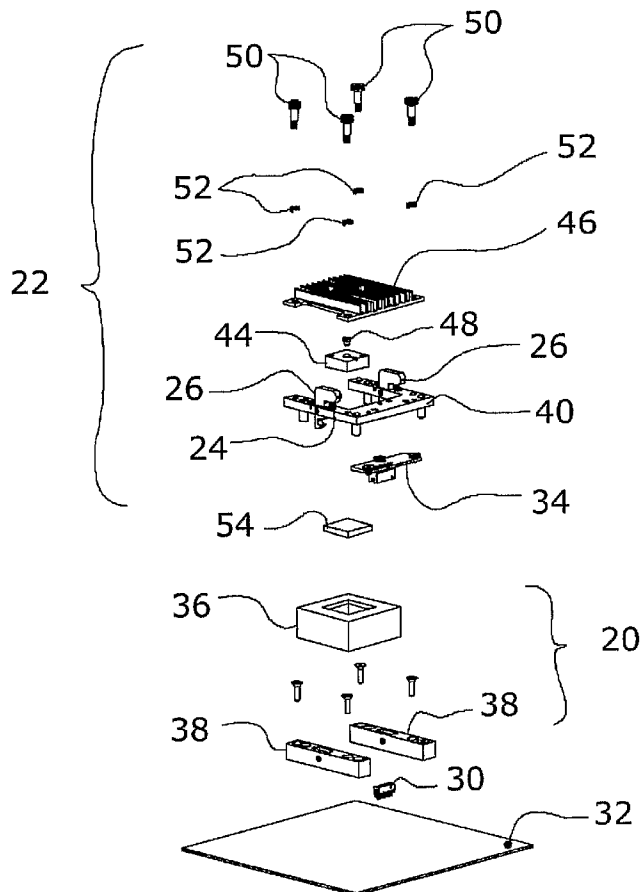
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(54) Title: BURN-IN TESTING APPARATUS AND METHOD



(57) Abstract: An integrated circuit (IC) package testing apparatus integrates a temperature sensor (48), heater (or cooler) (44), and controller (42) within a single modular unit (22, 72). The controller (42) is a microprocessor embedded within the modular unit (22, 72) and in communication with the sensor (48) and heater (44). The controller (42) allows a selected testing temperature to be input by a user via a communications link (71) to the controller (42). Each IC package (54) has its testing temperature individually controlled by a controller (42). The module (22) is easily attached and removed from an open-top socket (20) through the use of latches (26) on the testing socket. Many IC packages (54) can be quickly placed and removed from testing sockets (20) when a matrix of sensors (48), heaters (or coolers) (44) and controllers (42) are located on a single top attach plate (72) with the sensors (48) and heaters (or coolers) (44) individually spring-loaded on the top attach plate (72). A temperature sensor (48) includes a sensor (130) positioned within a conductive housing (134) and an insulating material (138) surrounding the housing (134).



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