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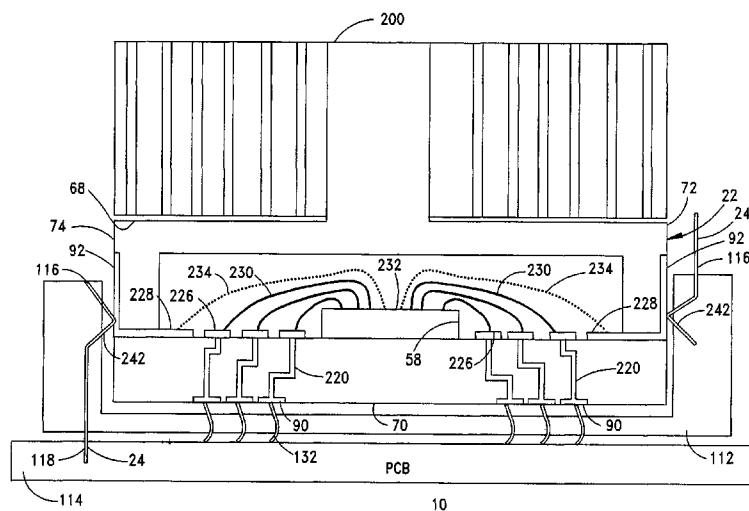
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(54) Title: POWER DELIVERY SYSTEM FOR INTEGRATED CIRCUITS UTILIZING DISCRETE CAPACITORS



(57) Abstract: Systems for power delivery to an integrated circuit include a decoupling capacitance located in a connector that is formed as a socket, or frame for the IC. The power delivery system delivers power to the IC along various surfaces thereof by way of a plurality of discrete capacitors that are supported by a socket-style connector. The socket-style connector has an insulative body portion that is mounted to a circuit board and has a recess defined thereon that receives the IC therein. A plurality of capacitors are integrated with the body portion and each of the capacitors supplies a desired amount of power to the IC. The capacitors are charged by way of leads on the circuit board that bring power to current to the capacitors and then are discharged as the IC draws power from the socket such that the capacitors form a power reservoir integrated with the socket, thereby eliminating the need for mounting such capacitors on the circuit board near the IC and freeing up space on the circuit board.



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