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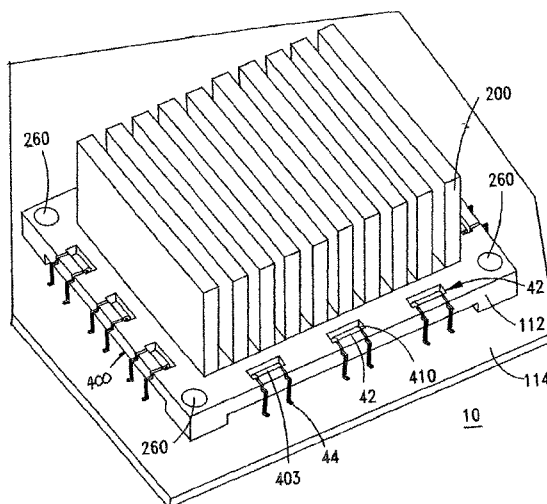
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(54) Title: POWER DELIVERY CONNECTOR FOR INTEGRATED CIRCUITS WITH CAPACITOR



(57) **Abstract:** A system for delivering power to an integrated circuit includes a decoupling capacitance located in a connector that is formed as a socket, or frame for the IC. The power delivery system takes the form of a power reservoir that is integrated into a connector, thereby eliminating the need for complex and expensive power traces to be formed in or discrete capacitors mounted on a circuit board to which the IC is connected. The system includes a connector that takes the form of a cover member that fits over the IC and which contains a recess that accommodates a portion of the IC therein. The cover member includes at least a pair of spaced-apart capacitor plates that are disposed therewithin. Electricity is supplied to the plates so that they will become charged as a capacitor and the plates are formed with a plurality of terminals that extend into contact with the IC so that the plates may selectively discharge to the IC and thereby provide it with operating and surge currents.



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