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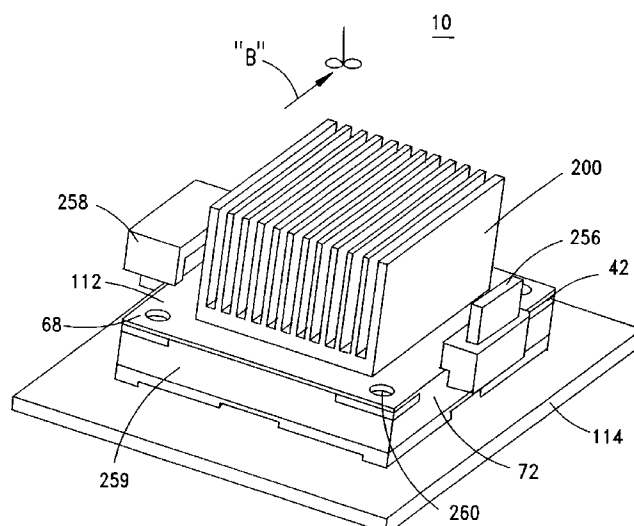
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(54) Title: THERMAL MANAGEMENT OF POWER DELIVERY SYSTEMS FOR INTEGRATED CIRCUITS



(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 power reservoir is integrated into 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 one opening that opens up to a operational surface of the integrated circuit. A heat -dissapating device, such as a finned heat sink or the like is supported by the cover member and extends through its opening into contact with a heat- generating surface of the integrated circuit to cool it during operation.



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