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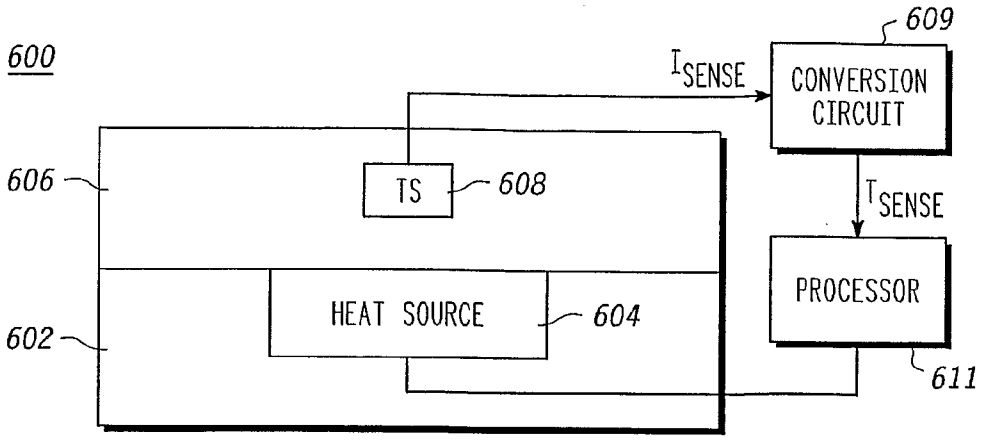
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(54) **Title:** MAGNETIC TUNNEL JUNCTION TEMPERATURE SENSORS AND METHODS




(57) **Abstract:** Techniques of sensing a temperature of a heat source disposed in a substrate of an integrated circuit (600) are provided. According to one exemplary method, a Magnetic Tunnel Junction ("MTJ") temperature sensor (608) is provided over the heat source (604). The MTJ temperature sensor comprises an MTJ core configured to output a current during operation thereof. The value of the current varies based on a resistance value of the particular MTJ core. The resistance value of the MTJ core varies as a function of the temperature of the heat source. A value of the current of the MTJ core can then be associated with a corresponding temperature of the heat source.

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