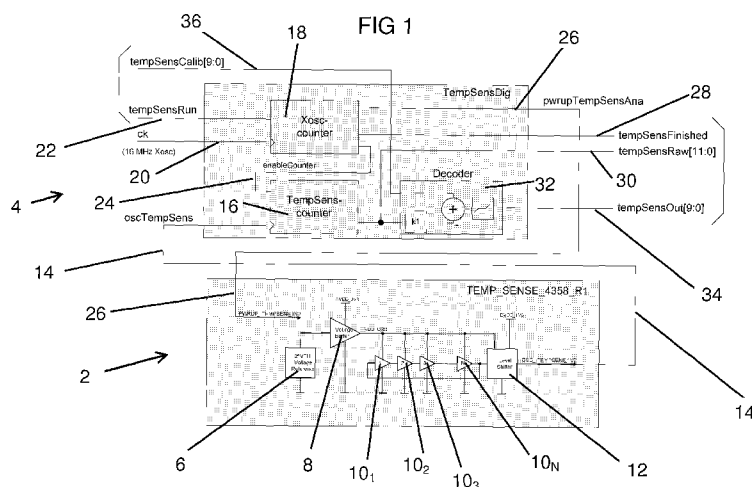




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(57) **Abstract:** A temperature sensing device for an integrated circuit comprises an oscillator (2) having a characteristic frequency dependent on the temperature and a digital counter (16) arranged to count a number of pulses generated by the oscillator (2) in a given time interval, or the time taken for the oscillator to generate a given number of pulses. Either of these gives a measured value. The device is configured to use a difference between the measured value and a stored reference value in a linearisation algorithm to estimate a temperature.