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Cooper et al.

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[54] **A/D CONVERTER WITH ZERO POWER MODE**

[75] Inventors: **Russ Cooper**, Chandler; **Sumit Mitra**, Tempe, both of Ariz.

[73] Assignee: **Microchip Technology Incorporated**, Chandler, Ariz.

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[52] **U.S. Cl.** **341/142**; 307/296.3

[58] **Field of Search** 307/272.3, 296.3; 341/142, 155

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Primary Examiner—Marc S. Hoff

Attorney, Agent, or Firm—O'Connor, Cavanagh, Anderson, Westover, Killingsworth & Beshears

[57] **ABSTRACT**

A semiconductor microcontroller includes the capability to perform analog to digital conversions of an analog signal representative of a variable parameter indicative of the need to exercise a control function. While the analog to digital conversions are being performed, the microcontroller processor can be placed in a sleep mode which eliminates noise arising from switching activities of the processor as a source of inaccuracy in the conversion process. At the end of the conversion, the analog to digital converter can either shut itself down or wake up the processor. Alternatively, the converter may shut itself down in response to a different user selected control signal.

14 Claims, 3 Drawing Sheets

