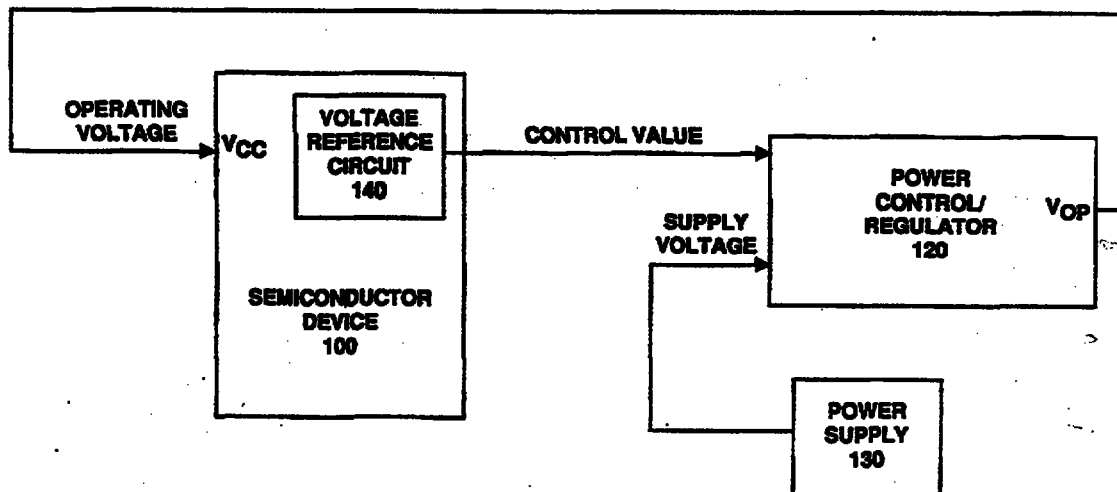




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(54) Title: METHOD AND APPARATUS FOR CONTROLLING THE VOLTAGE SUPPLIED TO A SEMICONDUCTOR DEVICE

**(57) Abstract**

A voltage reference circuit (140) associated with a semiconductor device (100) specifies an operating voltage for the semiconductor device by generating a control voltage. A power supply (330) generates power for the semiconductor device (100) at a supply voltage, and a power control regulator (120) generates the operating voltage from the supply voltage in accordance with the control value. A computer system contains at least one microprocessor (300) that includes the voltage reference circuit (140). The computer system also includes a power control regulator (120) and power supply (330) that generates power for the computer system at a supply voltage. The voltage reference circuit within the microprocessor (300) specifies an operating voltage to power the microprocessor (300) by generating a control value. The power control regulator (120) is coupled to the power supply and the voltage reference circuit (140) and generates the operating voltage for the microprocessor from the supply voltage in accordance with the control value.