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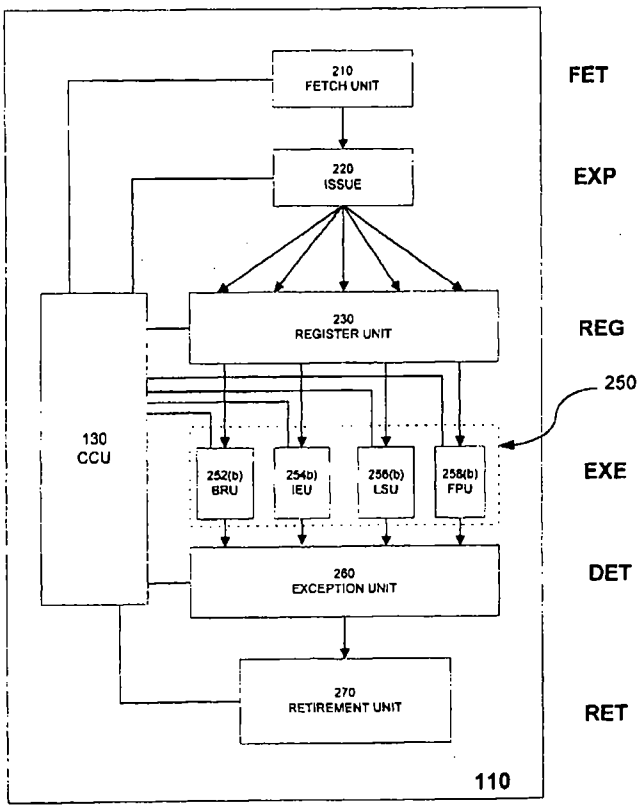
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(54) Title: MECHANISM TO CONTROL di/dt FOR A MICROPROCESSOR



(57) Abstract: The present invention provides a mechanism for adjusting the activity of an integrated digital circuit such as a processor to reduce voltage changes attributable to current changes triggered by clock gating. The processor includes one or more functional units and a current control circuit that monitors activity states of the processor's functional units to estimate the current consumed over n clock cycles. The current control circuit estimates the current change for a given clock cycle from the n activity states and compares the estimated current change with first and second thresholds. The processors activity is decreased if the estimated current change is greater than the first threshold, and the processor activity is decreased if the estimated current change is less than the second threshold.

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