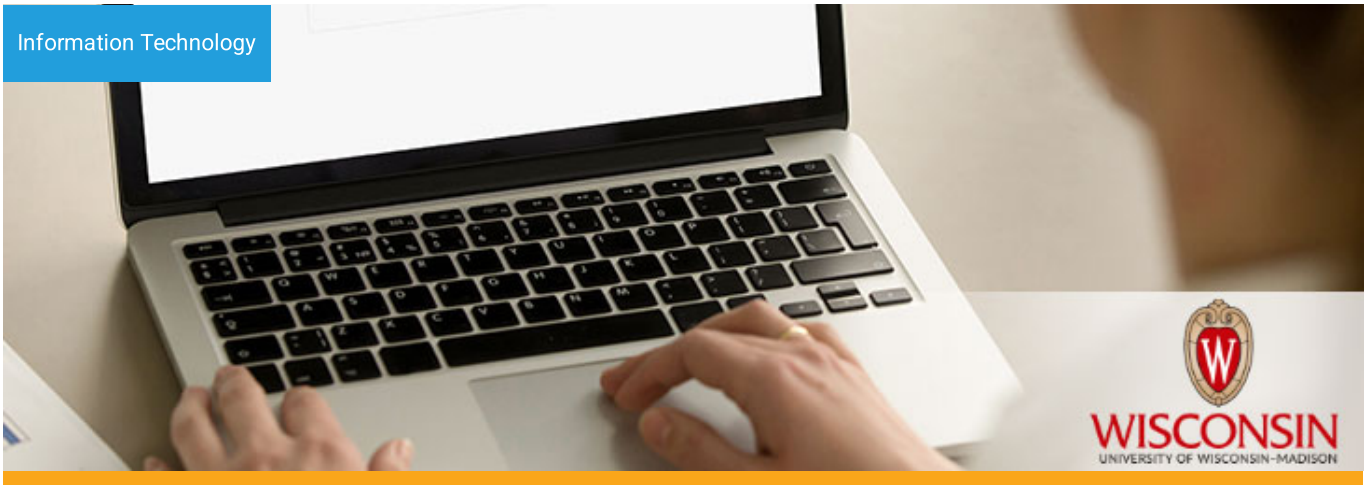
Information Technology



Computer Architecture Allowing Recycling Of Instruction Slack Time

View U.S. Patent No. 10,831,232 in PDF format.

WARF: P190147US01

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The Invention

A computer architecture suitable for out-of-order processors manages the problem of timing slack, in which an instruction completes before its clock cycle, by recycling that slack to allow the next succeeding instruction allowing that instruction to begin execution earlier. This recycling mechanism is enabled through the use of a transparent gating between execution units which allows data transfer before clock cycle boundaries and, in some cases, by aggressively issuing children instructions contemporaneously with their parent instruction after a grandparent instruction is issued.

Tech Fields

- Information Technology : Computing methods, software & machine learning
- Information Technology : Hardware

For current licensing status, please contact Jeanine Burmania at jeanine@warf.org or 608-960-9846