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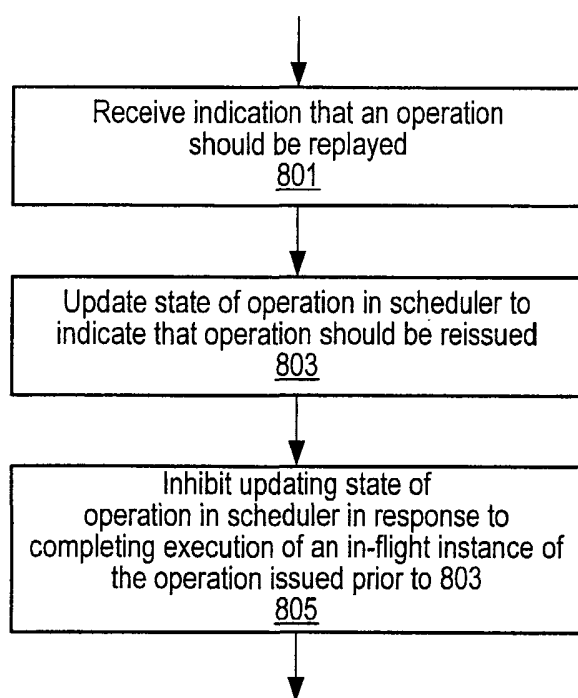
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(54) Title: SYSTEM AND METHOD FOR OPERATION REPLAY WITHIN A DATA-SPECULATIVE MICROPROCESSOR



(57) Abstract: A microprocessor (100) may include one or more functional units (126) configured to execute operations, a scheduler (118) configured to issue operations to the functional units (126) for execution, and at least one replay detection unit. The scheduler (118) may be configured to maintain state information (606) for each operation. Such state information (606) may, among other things, indicate whether an associated operation has completed execution. The replay detection unit may be configured to detect that one of the operations in the scheduler (118) should be replayed. If an instance of that operation is currently being executed by one of the functional units (126) when operation is detected as needing to be replayed, the replay detection unit is configured to inhibit an update to the state information (606) for that operation in response to execution of the in-flight instance of the operation. Various embodiments of computer systems (900) may include such a microprocessor (100).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

Internat. Application No  
PCT/US2004/000482

**A. CLASSIFICATION OF SUBJECT MATTER**  
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According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/42902 A (INTEL CORPORATION; CARMEAN, DOUGLAS, M; BOGGS, DARRELL, D; SAGER, DAVI) 30 May 2002 (2002-05-30) the whole document -----	1-10
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A	US 2002/062426 A1 (GOMEZ CHRISTOPHER A ET AL) 23 May 2002 (2002-05-23) the whole document -----	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern	Application No
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