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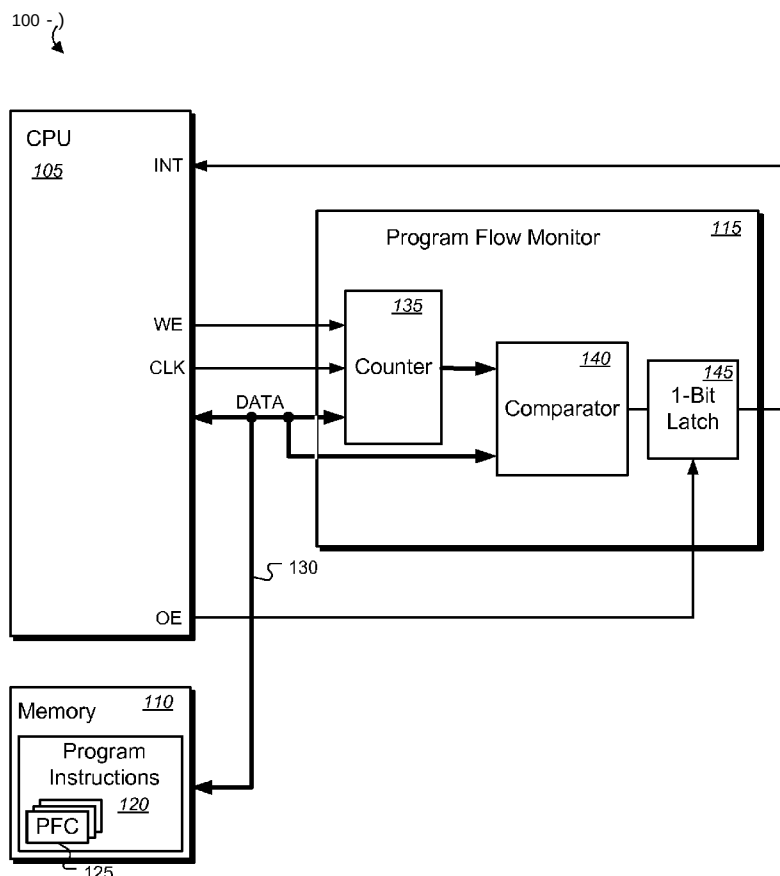
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[Continued on next page]

(54) **Title:** **HARDWARE FLOW CONTROL MONITOR**



(57) **Abstract:** Systems for detecting unexpected program flow may include a hardware program flow monitor to generate an interrupt signal if a software program flow value does not match an incrementally updated hardware value when a processor executes a program flow check instruction. In some examples, a program of instructions may include a number of program flow check instructions. When a program flow check instruction is executed, the processor may send the software value to be compared to the hardware register value. In an illustrative example, program execution causes the hardware value to be incremented in a hardware register. Upon execution of a program flow check instruction, the hardware value is compared to a software value associated with the program flow check instruction to determine if the program instructions have been executed in an expected sequence (e.g., according to an expected program flow).

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B. FIELDS SEARCHED

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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)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 790 844 A (GEMPLUS CARD INT [FR]) 15 September 2000 (2000-09-15) abstract page 9, line 13 - line 25 page 11, line 7 - line 15 page 12, line 16 - line 21 page 12, line 30 - page 13, line 4 page 13, line 17 - line 31 page 14, line 3 - page 15, line 10 page 15, line 19 - line 26 page 20, line 25 - line 27 page 21, line 22 - line 28 figures 2, 5, 7 ----- -/-	1-8, 10-20

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT

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