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(54) Title: APPLICATION LEVEL SPECULATIVE PROCESSING

(57) Abstract: One or more embodiments of the invention is a computer-implemented method for speculatively executing application event responses. The method includes the steps of identifying one or more event responses that could be issued for execution by an application being executed by a master process, for each event response, generating a child process to execute the event response, determining that a first event response included in the one or more event responses has been issued for execution by the application, committing the child process associated with the first event response as a new master process, and aborting the master process and all child processes other than the child process associated with the first event response.

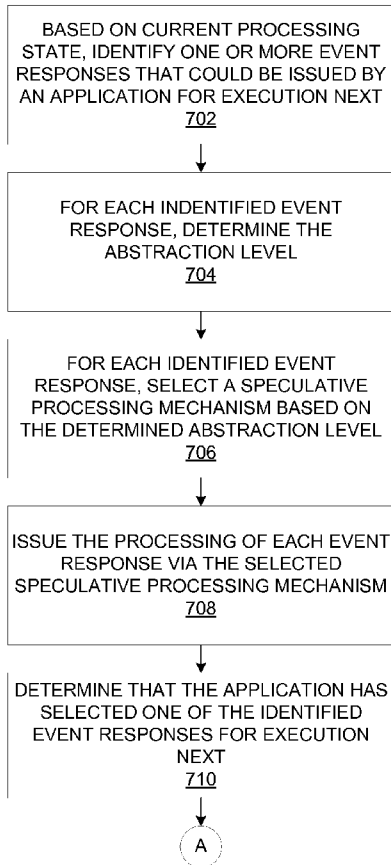


FIGURE 7A



ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 07/38, 09/44, 15/00 (2013.01)

USPC - 712/205, 220, 239

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(8): G06F 07/38, 09/00, 09/44, 09/45, 15/00 (2013.01)

USPC: 712/205, 220, 234, 239; 717/127, 148

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 practicable, search terms used)

MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); DialogPRO; IEEE; Google/Google Scholar; speculative*, process*, application*, event*, responses*, identifying*, computing*, interaction*, memory*, resource*, selecting*, first*, second*, virtual, machine*, clone*, master* transaction*, reverse*

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2011/0197182 A1 (LACHNER, P et al.) August 11, 2011; Figures 1, 4, 5, 6A, 6B, 7, Abstract, Paragraphs [0011], [0012], [0027], [0028], [0029], [0031], [0033], [0034], [0035], [0040], Claim 1	1, 8-10, 17-19 ----- 2-7, 11-16, 20
Y	US 2006/0037003 A1 (LONG, D et al.) February 16, 2006; Abstract and paragraphs [0023], [0024], [0031], [0033], [0035], [0040], Claim 1	2-7, 11-16, 20
Y	US 2011/0179254 A1 (YIP, SH et al.) July 21, 2011; Figures 1C, 4, 5 and paragraphs [0095], [0096]	7, 16
A	US 2008/0127299 A1 (CARTER, SR) May 29, 2008; entire document	1-20
A	US 2011/0307689 A1 (CHUNG, J et al.) December 15, 2011; entire document	1-20

Further documents are listed in the continuation of Box C.

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