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G06F 13/16 (2006.01)
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- (81) **Designated States** (unless otherwise indicated, for every  
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(54) **Title:** COMMAND SELECTION POLICY

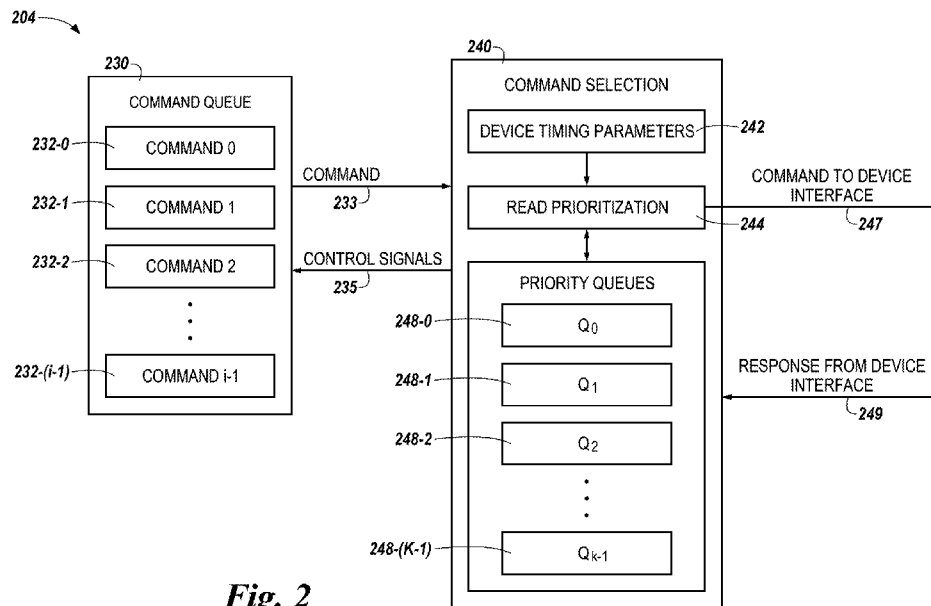


Fig. 2

(57) **Abstract:** Apparatuses and methods related to command selection policy for electronic memory or storage are described. Commands to a memory controller may be prioritized based on a type of command, a timing of when one command was received relative to another command, a timing of when one command is ready to be issued to a memory device, or some combination of such factors. For instance, a memory controller may employ a first-ready, first-come, first-served (FRFCFS) policy in which certain types of commands (e.g., read commands) are prioritized over other types of commands (e.g., write commands). The policy may employ exceptions to such an FRFCFS policy based on dependencies or relationships among or between commands. An example can include inserting a command into a priority queue based on a category corresponding to respective commands, and iterating through a plurality of priority queues in order of priority to select a command to issue.



SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,  
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**A. CLASSIFICATION OF SUBJECT MATTER****G06F 3/06(2006.01)i, G06F 13/16(2006.01)i, G06F 13/18(2006.01)i**

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)  
G06F 3/06; G06F 12/00; G06F 12/02; G06F 13/00; G06F 13/18; G06F 9/46; G06F 13/16Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean utility models and applications for utility models  
Japanese utility models and applications for utility modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
eKOMPASS(KIPO internal) & keywords: memory controller, command, priority queue, category**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2011-0179240 A1 (VITALY SUKONIK et al.) 21 July 2011 paragraphs [0066], [0080]-[0092], [0111]-[0113]; and figure 1	1-5, 9-11, 14-15
Y		6-8, 12, 16
A		13, 17-21
Y	US 2011-0276974 A1 (JAEWOONG CHUNG et al.) 10 November 2011 paragraph [0025]	6-8, 12, 16
A	US 2006-0112240 A1 (ROBERT MICHAEL WALKER et al.) 25 May 2006 paragraphs [0026]-[0026]; and figure 4	1-21
A	US 2016-0011966 A1 (SEAGATE TECHNOLOGY LLC) 14 January 2016 claims 4-9	1-21
A	WO 00-29959 A1 (INFINEON AG) 25 May 2000 claims 1-9	1-21

 Further documents are listed in the continuation of Box C. See patent family annex.

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