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(72) Inventors:
and


(54) Title: METHOD OF DELAYING CHECKPOINTS BY INSPECTING NETWORK PACKETS

(57) Abstract: A method of delaying checkpointing in a virtual machine system. In one embodiment, the method includes the steps of examining a network frame to determine if it is a deferrable frame and if the frame is a deferrable frame, delaying a checkpoint associated with the frame. In another embodiment, the deferrable frame is one of a group comprising: an IP packet tagged with the 'more fragments' attribute; TCP data segments that lack the PSH flag and carry no flags other than 'ACK'; and TCP segments that contain no data and carry only the 'ACK' flag; and any frame originating from or destined to a designated network address or port number. In still another embodiment, the method includes the step of concatenating the delays due to deferrable frames. In still yet another embodiment, the method further includes setting an upper limit to the amount of delay that can be generated.

FIG. 1
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**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

INV. G06F11/14 G06F11/2Q

ADD.

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

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)

EPO-Internal, WPI Data, INSPEC, COMPENDEX, IBM-TDB

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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Date of the actual completion of the international search: 11 June 2015

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