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[Continued on next page]

(54) Title: SECURE PARTITIONING WITH SHARED INPUT/OUTPUT

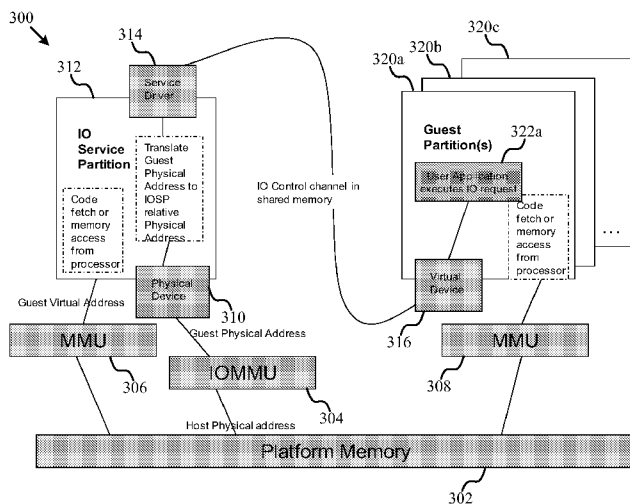


FIG. 3

(57) Abstract: A soft partitioning system for allowing multiple virtual system environments to execute on a single platform may include I/O service partitions (IOSPs). The IOSPs operating in a separate virtual memory space on the platform and service disk and network requests from multiple guests. The IOSPs provide translation from virtual addresses to physical addresses such that from the point of view of the guest the virtual addresses used by the guest appear to be physical addresses. The IOSP may be implemented in a Linux kernel. The address space of the IOSP may be extended to include DMA memory sections such that the Linux kernel does not include all of the guest's memory. The IOSP may operate on hardware that does or does not support virtualization technology for directed I/O.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2011/057976**A. CLASSIFICATION OF SUBJECT MATTER****G06F 12/00(2006.01)i, G06F 12/08(2006.01)i, G06F 13/14(2006.01)i, G06F 9/44(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 12/00; G06F 9/54; G06F 15/173; G06F 12/10; G06F 13/28; G06F 9/50

Documentation 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 models

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

eKOMPASS(KIPO internal) & Keywords: guest partition, input/output service partition(IOSP), memory management unit(MMU), translating address

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0061441 A1 (JOHN LANDIS et al.) 15 March 2007 See abstract; paragraphs [0064], [0338]-[0339]; claims 1-5 and 9; and figure 3.	1-17
A	US 2008-0294808 A1 (MAHALINGAM MALLIK et al.) 27 November 2008 See abstract; and claims 2 and 8-9.	1-17
A	US 2008-0301692 A1 (BILLAU RONALD L. et al.) 04 December 2008 See abstract; claims 1-2 and 4-5; and figures 1 and 2.	1-17
A	US 2010-0095085 A1 (HUMMEL MARK D. et al.) 15 April 2010 See paragraph [0023]; claim 1 and 8; and figure 1.	1-17

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

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"&" document member of the same patent family

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Information on patent family members

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