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**Declarations under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: HOST-MANAGED NON-VOLATILE MEMORY

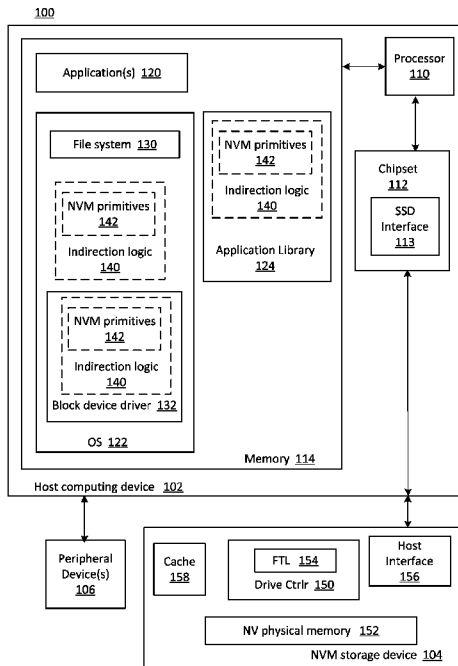


FIG. 1

(57) Abstract: One embodiment provides a computing device. The computing device includes a processor; a chipset; a memory; and indirection logic. The indirection logic is to receive a host logical block address (LBA) associated with a first sector of data, map the host LBA from a host address space to a first device LBA in a device address space, the device address space related to a non-volatile memory (NVM) storage device physical memory address space, and provide the first sector of data and the first device LBA to the NVM storage device.



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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2015/051008****A. CLASSIFICATION OF SUBJECT MATTER****G06F 12/02(2006.01)i, G06F 12/10(2006.01)j**

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 12/02; G06F 17/30; G06F 12/00; G06F 11/20; G06F 12/10Documentation 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: host, LBA, map, metadata, log, search, free, space, SSD, query, leaf, node, traverse, update**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 8806115 B1 (NETAPP, INC.) 12 August 2014 See column 2, line 52; column 3, lines 31-33 and 49-52; column 5, lines 26-31; column 6, lines 18-26 and 53-57; column 9, lines 19-22; column 12, lines 5-8; column 16, lines 30-35; claim 1; and figure 4.	1-24
Y	US 2012-0096216 A1 (JAESOO LEE et al.) 19 April 2012 See paragraphs [0003], [0011]-[0012], [0120]; and figure 11.	1-24
Y	US 2012-0271813 A1 (HUI SHEN et al.) 25 October 2012 See paragraphs [0004], [0020]; claim 3; and figure 2.	6, 13, 20
A	US 2011-0302172 A1 (RAMAN CHANDRASEKAR et al.) 08 December 2011 See paragraphs [0004], [0018]; and figure 1.	1-24
A	EP 1653358 A2 (HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.) 03 May 2006 See paragraphs [0006], [0089]; and figure 15.	1-24

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

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"&amp;" document member of the same patent family

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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