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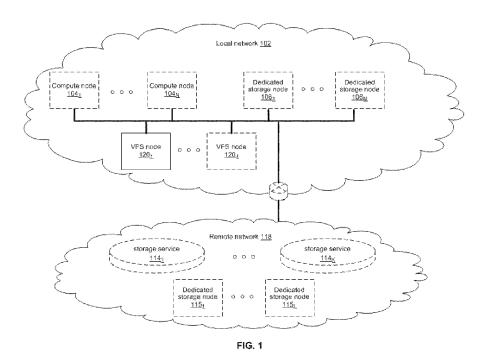
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(54) Title: EXPANDING A DISTRIBUTED STORAGE SYSTEM



(57) Abstract: A plurality of computing devices are communicatively coupled to each other via a network, and each of the plurality of computing devices is operably coupled to one or more of a plurality of storage devices. A plurality of failure resilient stripes is distributed across the plurality of storage devices such that each of the plurality of failure resilient stripes spans a plurality of the storage devices. The plurality of computing devices maintains each failure resilient stripe using a bucket. These buckets are operably split and transferred between the computing devices to balance available computing power and storage access.

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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)

See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 707/999.204; 711/170; 711/202 (keyword delimited)

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

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Further documents are listed in the continuation of Box C.

Category*	Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim	
Υ	US 2007/0294565 A1 (JOHNSTON et al) 20 December 2007 (20.12.2007) entire document	1-20
Y	US 2017/0238176 A1 (PHILIPS LIGHTING HOLDING B.V.) 17 August 2017 (17.08.2017) entire document	1-5, 7, 11-15, 17
Υ	US 2018/0046581 A1 (VMWARE, INC.) 15 February 2018 (15.02.2018) entire document	2-4, 8-10, 12-14, 18-20
Υ	US 2013/0311706 A1 (OKADA et al) 21 November 2013 (21.11.2013) entire document	3, 9, 13, 19
Y	US 2015/0355971 A1 (INTERNATIONAL BUSINESS MACHINES CORPORATION) 10 December 2015 (10.12.2015) entire document	5-10, 15-20
A -	APPLEYARD et al. "First Experiences with CEPH on the WLCG Grid." In: International Symposium on Grids and Clouds (ISGC). 22 March 2013 (22.03.2013) Retrieved on 04 March 2020 (04.03.2020) from <a href="https://pos.sissa.it/210/037/pdf">https://pos.sissa.it/210/037/pdf</a> entire document	1-20
A	US 7,373,366 B1 (CHATTERJEE et al) 13 May 2008 (13.05.2008) entire document	1-20
A	US 2007/0260842 A1 (FAIBISH et al) 08 November 2007 (08.11.2007) entire document	1-20
A	US 2017/0206136 A1 (PURE STORAGE, INC.) 20 July 2017 (20.07.2017) entire document	1-20

* "A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
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"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family	
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See patent family annex.

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