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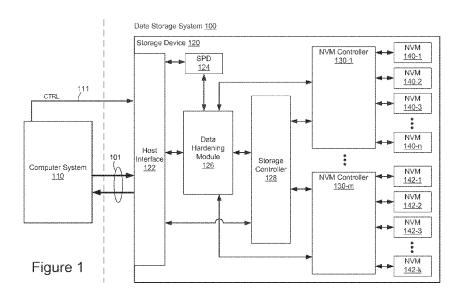
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(57) Abstract: The various implementations described herein include systems, methods and/or devices used to enable power sequencing and data hardening in a storage device. In one aspect, the method includes determining whether a power supply voltage provided to the storage device is higher than an over-voltage threshold. The method further includes, in accordance with a determination that the power supply voltage is higher than the over-voltage threshold, performing a power fail operation, the power fail operation including: (1) signaling a power fail condition to a plurality of controllers on the storage device, (2) transferring data held in volatile memory to non-volatile memory, and (3) removing power from the plurality of controllers on the storage device.



INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. G06F11/14 ADD. According to International Patent Classification (IPC) or to both national classification and IPC 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 Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. EP 1 956 489 A2 (HITACHI LTD [JP]) 13 August 2008 (2008-08-13) Χ 1 - 31paragraphs [0012], [0013], [0037], [0040], [00847], [0106] - [0108], [0013],[0031] -[0075] -[0115] figures 1,2,7 1-31 US 2013/019076 A1 (AMIDI MIKE HOSSEIN [US] Χ ET AL) 17 January 2013 (2013-01-17) paragraphs [0004] - [0006], [0009] -[0012], [0028], [0045] - [0059] figures 2,2a,3,4,6,7 US 2003/126494 A1 (STRASSER AMNON A [IL]) χ 1 - 313 July 2003 (2003-07-03) paragraphs [0010] - [0014]. [0030] -[0041]; figures 2,3,5a,5b Χ Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: "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 "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international "X" document of particular relevance; the claimed invention cannot be filing date considered novel or cannot be considered to involve an inventive "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be special reason (as specified) considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "O" document referring to an oral disclosure, use, exhibition or other "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 11 May 2015 27/05/2015 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Johansson, Ulf Fax: (+31-70) 340-3016

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Information on patent family members

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