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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR FACILITATING OPTIMIZATION OF COOLING EFFICIENCY OF A DATA CENTER

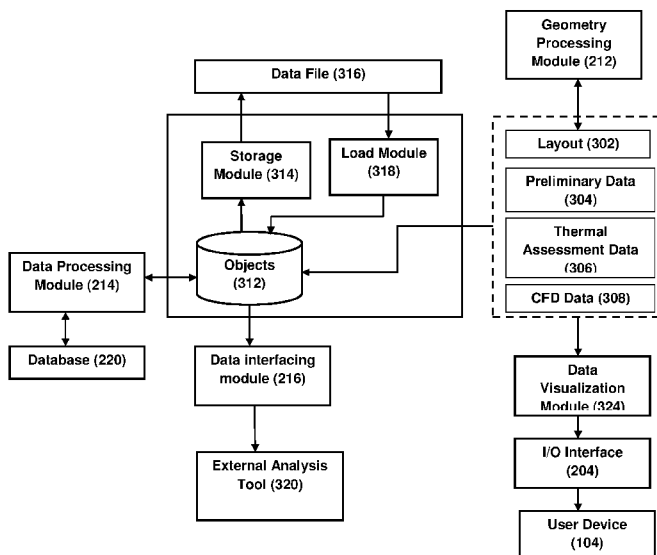


Figure 3

(57) Abstract: Disclosed is a system and method for facilitating optimizing cooling efficiency of a data center. The method may comprise receiving a layout of the data center. The method may comprise computing co-ordinates of each equipment of a plurality of equipments associated with the data center. Further, the method may comprise segregating the layout into a plurality of cells. The method may comprise capturing preliminary data associated with the data center. Further, the method may comprise determining a state value of the data center based upon the preliminary data. The method may comprise capturing CFD data and, selectively, thermal assessment data. Further, the method may comprise facilitating the optimization of the cooling efficiency of the data center by using an external analysis tool capable of performing Computational Fluid Dynamics (CFD) analysis or thermal assessment followed by the Computational Fluid Dynamics (CFD) analysis using the CFD data and the thermal assessment data.



MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER

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CPC - G06F 2217/80 (2015.01)

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)

IPC(8) - G05D 23/00; G06F 17/10; G06F 17/50; H05K 7/20 (2015.01)

USPC - 165/287; 700/32; 700/300; 702/130; 703/2; 703/21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC - G06F 1/20; G06F 1/206; H05K 7/20745; H05K 7/20854; Y02B 60/1275 (2015.01) (keyword delimited)

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

Orbit, Google Patents, Google Scholar, Google.

Search terms used: receiving, layout, data center, computing, coordinates, equipment; distance, reference, segregating, cells, determining, state value, less, reference value, thermal assessment, identify thermal assessment cells, sub-set, CFD cells

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2011/ 0040532 A1 (HAMANN et al) 17 February 2011 (17.02.2011) entire documents	1 - 18
A	US 2012/0245905 A1 (DALGAS et al) 27 September 2012 (27.09.2012) entire documents	1 - 18
A	US 2008/0288193 A1 (CLAASSEN et al) 20 November 2008 (20.11.2008) entire documents	1 - 18
A	CHEN et al. A High-Fidelity Temperature Distribution Forecasting System for Data Centers. 2012 IEEE 33rd Real-Time Systems Symposium. 2012. [Retrieved on 2015-04-13]. Retrieved from Internet: <URL: http://www.computer.org/csdl/proceedings/rtss/2012/4869/00/4869a215.pdf >. entire documents	1 - 18
A	US 2011/ 0263193 A1 (PATEL et al.) 27 October 2011 (27.10.2011) entire documents	1 - 18
A	US 2003/0158718 A1 (NAKAGAWA et al) 21 August 2003 (21.08.2003) entire documents	1 - 18
A	US 2011/0100618 A1 (CARLSON) 05 May 2011 (05.05.2011) entire documents	1 - 18
A	US 2013/0096905 A1 (IYENGAR et al) 18 April 2013 (18.04.2013) entire documents	1 - 18

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