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Date
27.11.2024

Reference	Application No./Patent No.
E4122.001(T).EP	24179963.4 - 1203
Applicant/Proprietor Cohesity, Inc.	

Communication

The extended European search report is enclosed.

The extended European search report includes, pursuant to Rule 62 EPC, the European search report (R. 61 EPC) or the partial European search report/ declaration of no search (R. 63 EPC) and the European search opinion.

The EPO no longer sends paper copies of the patent literature cited in search reports. You can access them via (https://worldwide.espacenet.com).

☒ 0 additional set(s) of copies of such documents is (are) enclosed as well.

The following have been approved:

☒ Abstract ☒ Title

☐ The Abstract was modified and the definitive text is attached to this communication.

The following figure(s) will be published together with the abstract: 4

Refund of search fee
If applicable under Article 9 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.

Should you wish to further prosecute this application in the examination phase, your attention is drawn to the provisions of Rule 70a EPC. An invitation to respond to the extended European search report will be issued once the date of publication of the European search report has been mentioned in the European Patent Bulletin (R. 69(1), R. 70(2) EPC).

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The examination is being carried out on the **following application documents**

Description, Pages

1-50 as originally filed

Claims, Numbers

1-15 as originally filed

Drawings, Sheets

1/5-5/5 as originally filed

1 The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1 Anonymous: "Cohesity Solution Guide: VMware", 1 January 2017 (2017-01-01), XP093223696, Retrieved from the Internet: URL:https://manualzz.com/doc/37216157/cohesity-dataplatform--dataprotect-solution-guide?p=3#google_vignette

D2 Anonymous: "Contrail Insights User Guide - first 400 pages", 29 July 2021 (2021-07-29), XP093224039, Retrieved from the Internet: URL:https://manualzz.com/download/60189696

D3 Anonymous: "Amazon CloudWatch User Guide - first 400 pages", 28 September 2022 (2022-09-28), XP093224045, Retrieved from the Internet: URL:https://web.archive.org/web/20220928184443if_/https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/acw-ug.pdf

D4 Anonymous: "Alert priority", 3 August 2023 (2023-08-03), XP093224049, Retrieved from the Internet:

URL:https://www.servicenow.com/docs/bundle/vancouver-it-operations-management/page/product/event-management/concept/alert-priority.html

D5 Anonymous: "AWS Backup Developer Guide - first 400 pages", 14 January 2023 (2023-01-14), XP093223686, Retrieved from the Internet: URL:https://web.archive.org/web/20230114204427if_/https://docs.aws.amazon.com/pdfs/aws-backup/latest/devguide/AWSBackup-dg.pdf

D6 US 10 706 014 B1 (GUPTA ANUBHAV [US] ET AL) 7 July 2020 (2020-07-07)

2 The present application does not meet the requirements of Article 52(1) EPC, because the subject-matter of claims 1-15 does not involve an inventive step in the sense of Article 56 EPC.

2.1 Document D1 discloses the following subject-matter of claim 1:

A method comprising:
obtaining, by processing means of a data platform, a generic backlog indicator for a plurality of workloads to execute via the data platform, wherein each of the plurality of workloads specify one or more storage system maintenance operations for one or more storage systems managed by the data platform;
page 3: "*As can be seen in Figure 1 above, the Cohesity DataPlatform can easily be integrated into a new or existing VMware infrastructure in minutes by simply adding the nodes, connecting the network, configuring a cluster partition with VIPs and creating the appropriate protection policies, jobs and replication schedules*".
page 4: "*This dashboard reflects the overall health and state of the cluster including the number of jobs that have run, any SLA violations, errors or alerts as well as a brief data reduction and performance summary. Each of these items can be clicked on to review further detail.*".
As can be seen from page 6, SLA violations may relate to violations of time limits, which is considered to correspond to the "backlog" issue featured in the claim.

obtaining, by the processing means, a custom backlog indicator for at least a subset of the plurality of workloads to execute via the data platform;
page 4: "*This dashboard reflects the overall health and state of the cluster including the number of jobs that have run, any SLA violations, errors or alerts as well as a brief data reduction and performance summary. Each of these items can be clicked on to review further detail.*".
page 5: "*When throttling is enabled, the Cohesity cluster enables Storage IO Control (SIOC) statistics on the datastores and monitors latencies that throttle Cohesity jobs and tasks to ensure optimal performance.*". The monitored latency are considered to correspond to the "backlog" feature of the claim.
Figure 3 indicates that there is a latency/backlog indicator for new tasks, and one for currently running tasks.

As can be seen from page 6, SLA violations may relate to violations of time limits, which is also considered to possibly correspond to the "backlog" issue featured in the claim, but then for individual jobs instead of a global latency.
It is remarked that no technical difference is considered between a "generic" indicator and a "custom" indicator", and both are interpreted as being the same. If the term "custom" were to mean that an indicator is not present by default in the system but has been configured by a user, that still would not qualify as a meaningful difference in the context of the claim, in which it plays no part at what point or by whom an indicator has been configured, and once configured, there is no technical distinction between an indicator that the system designer has configured and one that the end user has configured.

~~**calculating, by the processing means, a single weighted backlog indicator value for each of the plurality of workloads to execute via the data platform, by applying configurable weights to each of the generic backlog indicator and the custom backlog indicator for a respective workload from the plurality of workloads;**~~

scheduling, by the processing means, the plurality of workloads for execution on the data platform based on the ~~single weighted~~ backlog indicator value calculated for each of the plurality of workloads; and processing, by the processing means, the plurality of workloads according to the scheduling.
page 5: "*Cohesity protection sources can be throttled to avoid overwhelming the primary datastores during protection jobs. This is configured by enabling*

throttling and setting latency thresholds for new and currently running tasks. When throttling is enabled, the Cohesity cluster enables Storage IO Control (SIOC) statistics on the datastores and monitors latencies that throttle Cohesity jobs and tasks to ensure optimal performance.".
From these passages and figure 3, it can be seen that when a certain latency/ backlog is detected, the jobs are throttled, or in other words, the scheduling is adapted based on the backlog indicator.

The subject-matter of claim 1 differs from D1 via the features indicated as strikken-through above.

From these differing features, no clear or concrete technical problem solved or technical effect achieved can be deduced.

As already mentioned, no difference is considered between the "generic" backlog and the "custom" backlog, and as a consequence, it is not apparent what is the meaning of effect would be from combining them.

The combination of multiple indicators as such for monitoring purposes in systems such as D1 is trivial and does not address any particular technical problem, but instead is a design choice which depends on what is deemed important to monitor and react upon by the system designer or user.

To illustrate this point, the following examples are mentioned:
- D2, page 64 discloses "composite alarms", which is obtained by combining individual alarms, possibly in a weighted combination.
- D3, page 187 discloses "composite alarms" obtained by combining multiple rule expressions, which may be freely created by the user using boolean logic.
- D4, page 1 discloses using a weighted combination of factors to obtain a single score for an alert.

As a consequence, claim 1 is not allowable under Articles 52(1) and 56 EPC for lack of inventive step of its subject-matter.

For the same reasons, corresponding independent claim 11 is not allowable under Articles 52(1) and 56 EPC for lack of inventive step of its subject-matter.

2.2 The subject-matter of dependent claims 2-10 does not involve an inventive step, since their features comprise only minor variations and straightforward implementation details.

In particular, it is pointed out that the Cohesity monitoring and scheduling system, which is integrated with a VMWare cloud system in D1, has also been integrated with other cloud systems such as AWS and Azure.
As a consequence, it is obvious that the monitoring and scheduling system of D1 can be applied to any kind of jobs that is performed or expected to be performed in such cloud systems, which include backup and recovery, data cleanup/garbage collection, replication and the like.

For information, D5 is mentioned here, which is reference documentation on the AWS backup system, and D6, which is a document from Cohesity on garbage collection.

3 It is not at present apparent which part of the application could serve as a basis for a new, allowable claim. Should the applicant nevertheless regard some particular matter as patentable, a new set of claims should be filed taking account of Rule 43(1) EPC. The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof.

4 If the applicant files a new set of claims, he is requested to take also into consideration the following remarks:

4.1 The features of the claims should be provided with reference signs placed in parentheses to increase the intelligibility of the claims (Rule 43(7) EPC). This applies to both the preamble and characterising portion (see the Guidelines, F-IV, 4.19).

4.2 To meet the requirements of Rule 42(1)(b) EPC, the document D1 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.

4.3 In order to facilitate the examination of the conformity of the amended application with the requirements of Article 123(2) EPC, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based.

4.4 Independent claims should be drafted in the two-part form in accordance with Rule 43(1) EPC, with those features known in combination from the prior art being placed in the preamble (Rule 43(1)(a) EPC) and with the remaining features being included in the characterising part (Rule 43(1)(b) EPC).

If, however, the applicant is of the opinion that the two-part form would be inappropriate, then reasons therefore should be provided in the letter of reply. In addition, the applicant should ensure that it is clear from the description which features of the subject-matter of the claims are already known in combination from the prior art.

DEWYN Torkild
Examiner

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EUROPEAN SEARCH REPORT

Application Number
EP 24 17 9963

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	Anonymous: "Cohesity Solution Guide: VMware", , 1 January 2017 (2017-01-01), XP093223696, Retrieved from the Internet: URL:https://manualzz.com/doc/37216157/cohesity-dataplatform--dataprotect-solution-guide?p=3#google_vignette * page 3 - page 5 *	1-15	INV. G06F11/14
A	Anonymous: "Contrail Insights User Guide - first 400 pages", , 29 July 2021 (2021-07-29), XP093224039, Retrieved from the Internet: URL:https://manualzz.com/download/60189696 * page 64 *	1-15	
A	Anonymous: "Amazon CloudWatch User Guide - first 400 pages", , 28 September 2022 (2022-09-28), XP093224045, Retrieved from the Internet: URL:https://web.archive.org/web/20220928184443if_/https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/acw-ug.pdf * page 187 *	1-15	TECHNICAL FIELDS SEARCHED (IPC) G06F
A	Anonymous: "Alert priority", , 3 August 2023 (2023-08-03), XP093224049, Retrieved from the Internet: URL:https://www.servicenow.com/docs/bundle/vancouver-it-operations-management/page/product/event-management/concept/alert-priority.html * the whole document *	1-15	

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	19 November 2024	Dewyn, Torkild

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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EUROPEAN SEARCH REPORT

Application Number
EP 24 17 9963

DOCUMENTS CONSIDERED TO BE RELEVANT

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A	Anonymous: "AWS Backup Developer Guide - first 400 pages", , 14 January 2023 (2023-01-14), XP093223686, Retrieved from the Internet: URL:https://web.archive.org/web/20230114204427if_/https://docs.aws.amazon.com/pdfs/aws-backup/latest/devguide/AWSBackup-dg.pdf * the whole document * -----	1-15	
A	US 10 706 014 B1 (GUPTA ANUBHAV [US] ET AL) 7 July 2020 (2020-07-07) * the whole document * -----	1-15	
			TECHNICAL FIELDS SEARCHED (IPC)

The present search report has been drawn up for all claims

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The Hague	19 November 2024	Dewyn, Torkild

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& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 24 17 9963

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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19-11-2024

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 10706014 B1	07-07-2020	US 10706014 B1	07-07-2020
		US 2020265020 A1	20-08-2020
		US 2022179828 A1	09-06-2022