

REMARKS/ARGUMENTS

Status of Claims

Claims 1-16 stand rejected.

Claims 1-16 are currently amended.

Claims 17-20 are new.

Thus, claims 1-20 are pending in this patent application.

Applicant hereby requests further examination and reconsideration of the presently claimed application.

Double Patenting Rejections

Claims 1-16 stand rejected for non-statutory, obviousness-type double patenting in view of claims 2-9, 11-18, and 20-21 of U.S. Patent No. 10,181,989. Applicant respectfully defers filing a terminal disclaimer until prosecution of the present claims is concluded.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 4, 8-9, 12, and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent App. Pub. No. 2015/0227404 (“Rajagopal”) in view of U.S. Patent App. Pub. No. 2016/0254998 (“Jokela”). Claims 4 and 8 depend from independent claim 1, and claims 12 and 16 depend from independent claim 9. Thus, claims 1, 4, 8-9, 12, and 16 will be allowable if independent claims 1 and 9 are allowable over Rajagopal and Jokela. The United States Supreme Court in *Graham v. John Deere Co. of Kansas City* noted that an obviousness determination begins with a finding that “the prior art as a whole in one form or another contains all” of the elements of the claimed invention. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 22 (1966). The combination of Rajagopal and Jokela fails to disclose each element of claims 1 and 9, and thus fails to render obvious claims 1, 4, 8-9, 12, and 16.

The combination of Rajagopal and Jokela fails to render obvious claims 1, 4, 8-9, 12, and 16 because the combination of Rajagopal and Jokela fails to disclose: 1) that the first fault tracing detection request packet comprises a path identifier (ID) and that the path ID identifies a path of the service chain, and 2) sending a first fault tracing detection response packet to a device for initiating fault detection, wherein the first fault tracing detection response packet comprises the path ID and the ID of the first SF node. Claim 1 reads:

1. A service chain fault detection method implemented by a service forwarding entity (SFE), the service chain fault detection method comprising:
 - obtaining a first fault tracing detection request packet on a service chain,
wherein the first fault tracing detection request packet comprises a path identifier (ID), and wherein the path ID identifies a path of the service chain;
 - determining to communicate with a first service function (SF) node on the service chain;
 - obtaining an ID of the first SF node; and
 - sending a first fault tracing detection response packet to a device for initiating fault detection,**
 - wherein the first fault tracing detection response packet comprises the path ID and the ID of the first SF node.**

(Emphasis added). First, claim 1 requires that the first fault tracing detection request packet comprises a path ID and that the path ID identifies a path of the service chain. Claim 9 requires a similar limitation. The Office Action asserts that paragraph 52 of Rajagopal discloses those limitations. Office Action, at 10. However, Rajagopal uses service chain information to identify nodes, not a path of a service chain:

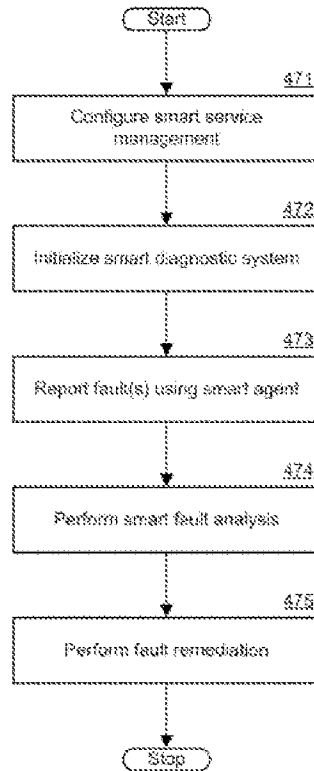


FIG. 4B

At step 474, SDS 400 may perform smart fault analysis. When SDS 400 receives a central fault report from SA 4SS, SDS 400 may perform service fault segregation to identify one or more fault nodes where a fault may have occurred, and rules to be executed by RE 404 to identify remediation measures. **SDS 400 may use service chain information and other received service faults to identify the nodes.** In particular, SDS 400 may be able to identify dependencies between central fault records submitted by different SAs. For example, a fault in one node (e.g., a device, application, etc.) may cause several SAs linked to nodes with which the faulty node communicates to generate and send central fault records. SDS 400 may use the segregation procedure to identify the faulty node based on the multiple central fault records from the multiple linked SAs.

Rajagopal, FIG. 4B and ¶ 52 (emphasis added). As shown, Rajagopal uses service chain information to identify nodes. Rajagopal does not use the service chain information to identify a path of a service chain. Nowhere does Rajagopal even disclose the word “path.” In addition, nowhere does Rajagopal disclose a first fault tracing detection request packet comprising a path ID that could identify such a path. Thus, Rajagopal fails to disclose that the first fault tracing

detection request packet comprises a path ID and that the path ID identifies a path of the service chain. Jokela fails to remedy that deficiency.

Second, claim 1 requires sending a first fault tracing detection response packet to a device for initiating fault detection, wherein the first fault tracing detection response packet comprises the path ID and the ID of the first SF node. Claim 9 requires a similar limitation. As shown above, Rajagopal fails to disclose the claimed path ID. For at least that reason, Rajagopal fails to disclose sending a first fault tracing detection response packet to a device for initiating fault detection, wherein the first fault tracing detection response packet comprises the path ID and the ID of the first SF node. Jokela fails to remedy that deficiency. Consequently, the combination of Rajagopal and Jokela fails to disclose each element of claims 1 and 9, and thus fails to render obvious claims 1, 4, 8-9, 12, and 16.

New Claims

New claims 17-20 recite novel and non-obvious aspects. Support for the new claims is found in the specification of the application, and thus no new matter is contained in the new claims.

CONCLUSION

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by Applicant. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Office Action dated August 8, 2019 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account Number 50-1515 of Conley Rose, P.C., Texas. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefor.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, then Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,
CONLEY ROSE, P.C.

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/Jonathan K. Polk/

Jonathan K. Polk
Reg. No. 66,334

5601 Granite Parkway, Suite 500
Plano, TX 75024
(972) 731-2288
(972) 731-2289 (Facsimile)

ATTORNEY FOR APPLICANT