REMARKS/ARGUMENTS

Status of Claims

Claims 1-20 stand rejected.

Claims 15 and 17-20 are currently amended.

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

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

Allowable Subject Matter

Applicant thanks Examiner for indicating that claims 2, 4, 10, 12, 18, and 20 would be allowable if they overcame the double-patenting and 35 U.S.C. § 101 rejections. However, Applicant believes that claims 1, 9, and 17, which claims 2, 4, 10, 12, 18, and 20 depend from, are allowable for the reasons provided below.

Double Patenting Rejections

Claims 1-20 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. § 101

Claims 17-20 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the Final Office Action asserts that the claims are "directed to non-statutory subject matter as computer program[] per se." Final Office Action, at 2-3. Claim 17 is amended to claim "a computer program product . . . stored on a non-transitory computer-readable medium." In addition, § 101 does not prohibit such computer program products. *See, e.g.,* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed.

Reg. 4 ("Indeed, the Federal Circuit has held that "improvements in computer-related technology" and "claims directed to software" are not "inherently abstract.""). Accordingly, Applicant respectfully requests withdrawal of the rejections.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 8-9, and 16-17[1] 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"). Claim 8 depends from independent claim 1, and claim 16 depends from independent claim 9. Thus, claims 1, 8-9, and 16-17 will be allowable if independent claims 1, 9, and 17 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, 9, and 17, and thus fails to render obvious claims 1, 8-9, and 16-17.

The combination of Rajagopal and Jokela fails to render obvious claims 1, 8-9, and 16-17 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:

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[1] The Final Office Action lists claims 1, 8-9, and 16-20 in the heading of the rejections, but does not include actual rejections of claims 18-20. *See* Final Office Action, at 19. In addition, the Final Office Action indicates that claims 18-20 could make claim 17 allowable. *Id.* at 2.

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. Claims 9 and 17 require the same limitations. The Final Office Action asserts that paragraph 4 of Rajagopal discloses those limitations. Final Office Action, at 11. However, Rajagopal's fault classification rules identify nodes and fault conditions, not a path of a service chain:

> In one embodiment, a smart diagnostic system is disclosed, comprising: a hardware processor; and a memory storing processor-executable instructions comprising instructions for: receiving an agent fault report, including one or more network-wide standardized fault codes, from an agent application executing on a remote device in a media network; aggregating one or more relevant fault reports related to the agent fault report; obtaining one or more fault classification rules; **identifying one or more fault nodes and associated fault conditions in the media network using the one or more fault classification rules,** by analyzing the aggregated relevant fault reports; and providing an agent configuration instruction for one or more agent applications using the identification of the one or more fault nodes and associated fault conditions.

Rajagopal, ¶ 4 (emphasis added). As shown, Rajagopal's fault classification rules identify nodes and fault conditions. Rajagopal's fault classification rules do not identify a path of a service chain. 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. Claims 9 and 17 require the same limitations. 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, 8-9, and 16-17.

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 Final Office Action dated February 21, 2020 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.

Date: May 21, 2020   /Jonathan K. Polk/

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