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EXAMINER	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ARUNKUMAR JAYARAMAN, PETER GELBMAN, MICHAEL JOHN HART, and RAJKUMAR SAMUEL

Appeal 2019-000742
Application 14/929,991
Technology Center 2400

Before JOHN A. EVANS, MATTHEW J. McNEILL, and SCOTT E. BAIN, *Administrative Patent Judges*.

McNEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–20, which are all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Google LLC. Appeal Br. 2.

STATEMENT OF THE CASE

Introduction

Appellant's application relates to a cloud-managed point-to-multipoint mesh network that centrally handles routing and scheduling changes during link loss. Spec. ¶¶ 1–4. Claim 1 illustrates the appealed subject matter and reads as follows:

> 1. A system for managing a network, comprising:
>
> a plurality of network nodes interconnected via a plurality of primary links;
>
> a controller in communication with the plurality of network nodes, the controller including one or more processors configured to:
>
> provide an event profile to the plurality of network nodes, the event profile indicating possible link loss scenarios, including potential combinations of failed links, and routing changes to be implemented by each of the plurality of nodes in the possible link loss scenarios; and
>
> wherein each of the plurality of nodes is configured to:
>
> store the event profile;
>
> determine that a particular link loss event occurred;
>
> determine, based on the event profile, routing changes for the particular link loss event; and
>
> implement the determined routing changes; and
>
> broadcast the particular link loss event on all available links.

The Examiner's Rejections

Claims 1, 2, 8, 9, 12–15, 18, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jardetzky (US 6,392,989 B1; May 21,

2002), Iovanna (US 2014/0078895 A1; Mar. 20, 2014), and Nason (US 2007/0206583 A1; Sept. 6, 2007). Final Act. 2–10.

Claims 3, 10, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jardetzky, Iovanna, Nason, and Matsubara (US 2015/0026507 A1; Jan. 22, 2015). Final Act. 10–12.

Claims 4–7, 16, 17, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jardetzky, Iovanna, Nason, and Surasinghe (US 2007/0067663 A1; Mar. 22, 2007). Final Act. 12–16.

ANALYSIS

The Examiner finds the combination of Jardetzky, Iovanna, and Nason teaches or suggests a controller including one or more processors configured to "provide an event profile to the plurality of network nodes . . . wherein each of the plurality of nodes is configured to: store the event profile," as recited in claim 1. *See* Final Act. 3–4; Ans. 4–8.

In particular, the Examiner finds Iovanna teaches a combination of templates, recovery schemes, and corresponding parameters, which the Examiner finds teaches or suggests the "event profile" recited in claim 1. *See* Ans. 6. The Examiner finds Iovanna teaches a path computation engine that feeds outputs such as working paths, recovery paths, or other recovery information to nodes. *Id.* (citing Iovanna ¶ 69). The Examiner finds "it is implied that other recovery information encompasses templates, descriptions of recovery schemes, and corresponding parameters as these recovery related data are used by the PCE for routine and recovery selection." *Id.*

The Examiner further finds Iovanna teaches a distributed control plane coupled to a plurality of switching nodes, where path computation occurs in the distributed control plane. *Id.* (citing Iovanna ¶¶ 96–97). The

Examiner finds this implies that "each of the switching nodes operating in a distributed control plane may undertake path selection." *Id.*

Appellant argues the Examiner erred because the combination of references does not teach or suggest these limitations. Appeal Br. 5–8; Reply Br. 1–2. In particular, Appellant argues that even if the combination of templates, descriptions of recovery schemes, and corresponding parameters are considered "event profiles," nothing in Iovanna teaches or suggests that this information is provided to the nodes and stored by the nodes, as claimed. *See* Reply Br. 2.

Appellant has persuaded us of Examiner error. Iovanna teaches path computation may be carried out using the combination of templates, descriptions of recovery schemes, and corresponding parameters in one of two locations. Iovanna ¶¶ 96–97. First, path computation may be carried out dynamically by a path computation element in control plane 12. *Id.* ¶ 97. Second, path computation may be carried out offline by an off line path computation program 5 running on PC 15, which is outside of the network. *Id.* In other words, the information the Examiner finds corresponds to the claimed "event profile" is provided to either the path computation element in control plane 12 or the offline path computation program 5.

The Examiner has failed to adequately establish that Iovanna provides this information to the claimed switching nodes. First, the Examiner's finding that "it is implied that other recovery information encompasses templates, descriptions of recovery schemes, and corresponding parameters as these recovery related data are used by the PCE for routine and recovery selection" (Ans. 6) is unsupported by Iovanna. Iovanna teaches path computation engine outputs working paths, recovery paths, or other recovery

information to nodes. Iovanna ¶ 69. Nothing in Iovanna suggests that the "other recovery information" includes the inputs path computation engine uses to perform its computations. The Examiner's findings to this effect are speculative and unsupported by the reference.

Second, the Examiner's finding that it is implied that "each of the switching nodes operating in a distributed control plane may undertake path selection" (Ans. 6) is unsupported by Iovanna. To the contrary, Iovanna teaches the switching nodes are located in packet layer 31 and optical layer 41. Iovanna ¶ 96. Thus, switching nodes do not "operat[e] in a distributed control plane" as the Examiner finds. The Examiner also has not adequately supported the finding that the switching nodes "undertake path selection," which is a process Iovanna teaches is performed by path computation engine 12. *See* Iovanna ¶ 69.

For these reasons, the Examiner has failed to sufficiently establish that Jardetzky, Iovanna, and Nason, alone or in combination, teach or suggest a controller including one or more processors configured to "provide an event profile to the plurality of network nodes . . . wherein each of the plurality of nodes is configured to: store the event profile," as recited in claim 1. Accordingly, we do not sustain the Examiner's obviousness rejection of independent claim 1.[2] We also do not sustain the obviousness rejection of independent claims 8 and 18 as unpatentable over Jardetzky, Iovanna, and Nason.

Claims 2–7, 9–17, 19, and 20 stand rejected as unpatentable over Jardetzky, Iovanna, and Nason, either alone or in combination with one of

[2] Because we agree with at least one of the dispositive arguments advanced by Appellant, we need not reach the merits of Appellant's other arguments.

Matsubara and Surasinghe. *See* Final Act. 2–16. The Examiner does not find these additional references teach or suggest the disputed limitations. *See id.* Accordingly, we also do not sustain the obviousness rejection of dependent claims 2–7, 9–17, 19, and 20.

DECISION SUMMARY

In summary:

Claims Rejected	**35 U.S.C. §**	**Reference(s)/Basis**	**Affirmed**	**Reversed**
1, 2, 8, 9, 12–15, 18, 19	103(a)	Jardetzky, Iovanna, Nason		1, 2, 8, 9, 12–15, 18, 19
13, 10, 11	103(a)	Jardetzky, Iovanna, Nason, Matsubara		13, 10, 11
4–7, 16, 17, 20	103(a)	Jardetzky, Iovanna, Nason, Surasinghe		4–7, 16, 17, 20
Overall Outcome				1–20

REVERSED