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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JULIEN ABEILLE, MARCO LIEBSCH, and
TELEMACO MELIA

Appeal 2018-004019
Application 12/531,221¹
Technology Center 2400

Before ALLEN R. MacDONALD, JASON V. MORGAN, and
PHILLIP A. BENNETT, *Administrative Patent Judges*.

BENNETT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 3–15, and 17, which are all of the pending claims.²

We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ Appellants' Brief ("App. Br.") identifies NEC EUROPE LTD as the real party in interest. App. Br. 1.

² Claims 2, 16, and 18, have been canceled.

CLAIMED SUBJECT MATTER

The claims are directed to a method for performing route optimization between two nodes in network based mobility management. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. Method for performing route optimization between two mobile nodes in a network based mobility management, the method comprising:

including two mobile nodes in a network-based mobility management network, wherein each of the two mobile nodes is registered with a different one of two Mobility Anchors (MA) in the network, and where each of the two Mobility Anchors has a control function for finding, setting up, and maintaining a route optimized path between the two mobile nodes;

associating the two mobile nodes with an access network via attachment to a respective different one of two access routers, each of said access routers being assigned to a respective different one of two Mobility Access Gateways (MAG) that each signals a respective Internal Protocol (IP) address and location of a respective one of the two mobile nodes to the respective one of the two Mobility Anchors;

providing each of said two Mobility Anchors with the control functions for finding and setting up the route optimized path for data packet exchange between said two mobile nodes and for maintaining localized routing states, wherein the route optimized path for data packet exchange is a direct routing that does not traverse said two Mobility Anchors; and

assigning one of said two Mobility Anchors as a dedicated route optimization controller that coordinates finding, setting up, and maintaining communication route optimization between said two mobile nodes and associated signaling with the relevant Mobility Access Gateways.

App. Br. (Claims Appendix 1–2).

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Malki et al.	US 2001/0046223 A1	Nov. 29, 2001
Patel et al.	US 2006/0018291 A1	Jan. 26, 2006
Alfano et al.	US 2008/0117845 A1	May 22, 2008
Taniuchi et al.	US 2008/0207206 A1	Aug. 28, 2008

REJECTIONS

Claims 1, 3–15, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Malki, Taniuchi, Alfano, and Patel. Final Act. 9–23.

ANALYSIS

In rejecting claim 1, the Examiner relies primarily on Malki, finding that it teaches all of the recited limitations except for: (1) gateways that are specifically Mobile Access Gateways (Final Act. 12–13); (2) a route optimized path that does not traverse the mobility anchors (Final Act. 14); and (3) a *dedicated* route optimization controller (Final Act 15). The Examiner relies on Taniuchi for the Mobile Access Gateways, on Alfano for the route optimized path, and on Patel for the dedicated controller.

Relevant here, the Examiner finds Malki teaches “where each of the two mobility Anchors has a control function for finding, setting up, and maintaining a route optimized path between the two mobile nodes.” Final Act. 11–12 (citing Malki ¶¶ 52, 57, 58). The Examiner explains that the cited paragraphs in Malki teach that mobility anchor point tunnels packets to a mobile node’s current address (Malki ¶ 52) and that the anchor point can

utilize existing protocols to “gain information regarding the resources available on different paths to a node” (Malki ¶ 58) and update its binding cache and routing table (Malki ¶ 57). Final Act. 11–12.

Appellants argue the Examiner has erred because Malki does not describe any Mobility Anchors which are used for the purpose of controlling route optimization. App. Br. 4–5. More specifically, Appellants argue the cited portions of Malki describe route optimization that is controlled by a mobile node, and not by a Mobility Anchor. App. Br. 5. Appellants argue Malki’s mobility anchors perform cache updates for *incoming* packets to be tunneled, but they do not “find, set up, and maintain” route optimized paths *between* mobile nodes. *Id.* According to Appellants, Malki is structurally different than the invention recited in the claims because it “relates to hierarchical mobility management where mobile nodes take care of mobility management.” *Id.* at 6.

We are persuaded the Examiner has not sufficiently shown claim 1 to be unpatentable on this record. The cited portions of Malki describe the use of mobility anchors to route incoming packets to a mobile node. *See* Malki ¶ 50. However, we observe no teaching in Malki, nor does the Examiner identify any, that any mobility anchor “has a control function for finding, setting up, and maintaining a route optimized path between the two mobile nodes.” Rather, Malki describes only one side of the communication—the mobile node receiving incoming packets—in the tunneling performed by the mobility anchor to deliver those packets. *See id.* ¶¶ 56–57. Malki does not describe any route optimized path between two different mobile nodes, but instead focuses on how a single mobile node maintains its connectivity to

the network as the mobile node moves from one access router to another. *Id.*
¶¶ 57–58.³

Accordingly, and constrained by the record before us, we are persuaded that Malki does not teach or suggest “where each of the two Mobility Anchors has a control function for finding, setting up, and maintaining a route optimized path between the two mobile nodes,” as recited in claim 1, and we do not sustain the rejection of claim 1 under 35 U.S.C. § 103(a). For the same reason, we also do not sustain the rejection of the remaining claims which depend therefrom.

DECISION

We reverse the Examiner’s rejection of claims 1, 3–15, and 17 under 35 U.S.C. § 103(a).

REVERSED

³ The Examiner states in the Answer that “some of the features that, the [A]ppellant states are not explicitly disclosed by Malki and Taniuchi; are explicitly taught by Alfano, and Patel.” Ans. 5. However, the rejection set forth in the Final Office Action does not rely on Alfano and Patel for the argued limitation, and it is not incumbent upon Appellants to argue against a finding not made by the Examiner. Moreover, although it does appear that Patel includes disclosure relevant to the argued limitation (*see, e.g.*, Patel ¶¶ 38–42), without sufficient explanation from the Examiner regarding its relevance, we cannot sustain the rejection on this basis.