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LEVEL 3 COMMUNICATIONS, LLC			ROUDANI, OUSSAMA	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PATRICK S. CALLAHAN,
RICHARD DEAN TERPSTRA, and ADAM CHARLES UZELAC

Appeal 2019-001344
Application 15/595,384
Technology Center 2400

Before ERIC B. CHEN, JAMES B. ARPIN, and MICHAEL J. ENGLE,
Administrative Patent Judges.

ENGLE, *Administrative Patent Judge.*

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner’s decision rejecting claims 1–20, which are all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies Level 3 Communications, LLC as the real party in interest. Appeal Br. 3.

TECHNOLOGY

The application relates to “differentiated routing of communication services through a communication network domain according to routing plan information associated with an access point of a subscriber terminal into the network domain.” Spec. ¶ 2.

ILLUSTRATIVE CLAIM

Claim 1 is illustrative and reproduced below with disputed limitations emphasized:

1. A differentiated routing system comprising:

[(A)] a computing system comprising at least one processor and in communication with a subscriber terminal and a first network domain; and

[(B)] a core routing engine (CRE) executable by the at least one processor to:

[(B.1)] receive a request for a communication service from the subscriber terminal through an access point at which the subscriber terminal accesses the first network domain; and

[(B.2)] when the communication service is to be routed to a second network domain:

[(B.2.i)] *identify the access point;*

[(B.2.ii)] include a tag in the request, *the tag selected based on the identified access point*, and the tag including information to be used by the second network domain for routing the communication service; and

[(B.2.iii)] transmit the request to the second network domain.

REFERENCES

The Examiner relies upon the following prior art references:

Name	Number	Date
Hegarty	US 2015/0043453 A1	Feb. 12, 2015
Shah	US 2008/0244076 A1	Oct. 2, 2008
Soininen	US 2003/0152042 A1	Aug. 14, 2003

REJECTIONS

Claims 1, 3–9, and 11–20 stand rejected under 35 U.S.C. § 103 as obvious over the combined teachings of Hegarty and Shah. Final Act. 2.

Claims 2 and 10 stand rejected under 35 U.S.C. § 103 as obvious over the combined teachings of Hegarty, Shah, and Soininen. Final Act. 9.

ISSUES

1. Did the Examiner err in finding the combination of art teaches or suggests (i) to “identify the access point” and (ii) “the tag selected based on the identified access point,” as recited in claim 1?

2. Did the Examiner err in finding Hegarty teaches or suggests to “route the communication service through the second network domain according to the tag in the received request,” as recited in claim 5?

ANALYSIS

Claims 1, 3, 4, 8, 9, 11, 12, 15–17, and 20

Claim 1 recites (i) “identify the access point” and (ii) “the tag selected based on the identified access point.” Independent claims 9 and 15 recite commensurate limitations. Appeal Br. 13.

For “identify the access point,” the Examiner finds that “Appellant’s disclosure does not define how or in what specific manner the access point is

identified” but that “[i]t is well known in the art that in IP based networks, such as in Hegarty and Shah, communications sent from an access point are packetized and encoded with the network address (i.e. identifier) of the originating access point.” Ans. 4; *see also* Hegarty ¶ 1.

For “the tag selected based on the identified access point,” the Examiner finds that Shah discloses that the tag is based on “location information [that] is obtained from location circuitry within the associated access point,” such as the access point’s GPS circuitry. Final Act. 5 (citing Shah ¶ 36).

Appellant argues that the access point’s IP address (or “network address” or “MAC address”) is not used to select the tag. Reply Br. 5. However, claim 1 does not require that the feature used to *identify* the access point (e.g., IP address) is the same feature on which the tag is based. Instead, claim 1 recites that the tag is selected based on the *access point*, and we agree with the Examiner that a tag selected based on the access point’s GPS location teaches or suggests this limitation.

Appellant further argues that in Shah, the access point’s GPS location is meant to serve as a proxy for the client device, but again the language of claim 1 does not preclude this. *See* Appeal Br. 12.

Accordingly, we sustain the Examiner’s rejection of independent claims 1, 9, and 15, and their dependent claims 3, 4, 8, 11, 12, 16, 17, and 20, which Appellant argues are patentable for similar reasons. *See* Appeal Br. 13; 37 C.F.R. § 41.37(c)(1)(iv).

Claims 2 and 10

Appellant argues dependent claims 2 and 10 are patentable for the same reasons as claim 1. Appeal Br. 12. For the reasons discussed above, we are not persuaded by Appellant’s arguments for claim 1.

Accordingly, we sustain the Examiner’s rejection of claims 2 and 10. See Appeal Br. 12; 37 C.F.R. § 41.37(c)(1)(iv).

Claims 5–7, 13, 14, 18, and 19

Dependent claim 5 recites a “second network domain comprises a second CRE to” “route the communication service through the second network domain according to the tag in the received request.” Claims 13 and 18 recite commensurate limitations. Appeal Br. 15–16.

Hegarty discloses using the tag to determine *whether* to route a message to the second network. Hegarty ¶¶ 16 (“indicating whether the terminating call should be routed to the CS network”), 51 (“determines whether the policy rule in relation to the service indicator . . . indicates that the terminating call should be routed to the CS network”).

The Examiner determines this sufficiently teaches or suggests the claimed limitation. Ans. 7–8. Appellant argues this is insufficient: “Hegarty merely teaches that the tag is used to ensure the request does not reenter the IMS network. There is no indication that the tag has an effect on routing the request *within* the CS network.” Appeal Br. 15.

We agree with Appellant. Hegarty discloses that “the *SCC-AS node 204* . . . parses the received SIP URI in the route header” and “the *SCC-AS node 204* determines whether the policy rule in relation to the service indicator (e.g. ‘rcs’) indicates that the terminating call should be routed to

the CS network 107.” Hegarty ¶ 51 (emphases added). Hegarty’s Figure 2a clearly depicts SCC-AS node 204 *in the IMS network 106* (i.e., the *first* network), not the CS network 107 (i.e., the *second* network). Thus, at best, Hegarty discloses the *first* network domain comprises a CRE to determine whether to route through the second network domain, but fails to disclose such a component in the *second* network domain, as required by claim 1.

Accordingly, we do not sustain the Examiner’s rejection of claims 5, 13, and 18, and their dependent claims 6, 7, 14, and 19.

DECISION

The following table summarizes the outcome of each rejection:

Claims Rejected	35 U.S.C. §	References	Affirmed	Reversed
1, 3–9, 11–20	103	Hegarty, Shah	1, 3, 4, 8, 9, 11, 12, 15–17, 20	5–7, 13, 14, 18, 19
2, 10	103	Hegarty, Shah, Soinen	2, 10	
Overall Outcome			1–4, 8–12, 15–17, 20	5–7, 13, 14, 18, 19

TIME TO RESPOND

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.36(a)(1)(iv).

AFFIRMED-IN-PART