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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SONG YEAN CHO, HAN NA LIM, CHAE GWON LIM, SUNG HO CHOI, and BEOM SIK BAE

Appeal 2018-006494
Application 14/879,034
Technology Center 2600


AMUNDSON, Administrative Patent Judge.

DECISION ON APPEAL

Appellants¹ seek our review under 35 U.S.C. § 134(a) from a final rejection of claims 1, 2, 4–7, 9–12, 14–17, 19, and 20, i.e., all pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ Appellants identify the real party in interest as Samsung Electronics Co., Ltd. App. Br. 2.
STATEMENT OF THE CASE

The Invention

According to the Specification, the invention concerns “a wireless communication system and method for establishing connection between a User Equipment (UE) and a Mobility Management Entity (MME) in the wireless communication system.” Spec. ¶ 2.2

Exemplary Claim

Independent claim 1 exemplifies the claims at issue and reads as follows:

1. A method by a mobility management entity (MME) in a communication system, the method comprising:

   receiving, from a terminal, a first request message;

   transmitting, to a home subscriber server (HSS), a second request message related to the terminal based on the first request message;

   receiving, from the HSS, a first response message in response to the second request message, the first response message including subscription information of the terminal;

   allocating a tracking area update (TAU) timer value based on the subscription information of the terminal and information on an operator policy; and

   transmitting, to the terminal, a second response message including the allocated TAU timer value.

App. Br. 13 (Claims App.).

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The Prior Art Supporting the Rejection on Appeal

As evidence of unpatentability under 35 U.S.C. § 103(a), the Examiner relies on the following prior art:

Yano et al. ("Yano")
US 2010/0184432 A1 July 22, 2010
US 2010/0210269 A1 Aug. 19, 2010

The Rejection on Appeal

Claims 1, 2, 4–7, 9–12, 14–17, 19, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Shuai and Yano. Final Act. 4–9.

ANALYSIS

We have reviewed the § 103(a) rejection in light of Appellants’ arguments that the Examiner erred. Based on the record before us and for the reasons explained below, we concur with Appellants’ contentions that the Examiner erred in finding that the cited portions of Shuai and Yano teach or suggest a mobility management entity (MME) allocating a tracking area update (TAU) timer value “based on the subscription information” of a terminal received from a home subscriber server (HSS) as required by each independent claim.

The § 103(a) Rejection of Claims 1, 2, 4–7, 9–12, 14–17, 19, and 20

INDEPENDENT CLAIMS 1, 6, 11, AND 16

Appellants argue that the Examiner erred in rejecting independent claims 1, 6, 11, and 16 because Shuai and Yano do not teach or suggest the following limitations in claim 1 and similar limitations in the other independent claims: an MME (1) “receiving, from the HSS, . . . subscription information of the terminal” and (2) “allocating a tracking area update (TAU) timer value based on the subscription information of the terminal.”
See App. Br. 6–7; Reply Br. 3–4. Specifically, Appellants assert that an Attach Accept message in Shuai with a Tracking Area Identity (TAI) includes the TAI elements “a mobile country code, a mobile network code, and [a] tracking area code” but “not subscription information.” App. Br. 6 (citing Shuai ¶ 55). Appellants also assert that these TAI elements “correspond to a tracking area, not a terminal,” and do not constitute “subscription information of the terminal” received from an HSS. Id. In addition, Appellants contend that “Shuai does not disclose how the TAU timer [value] is allocated.” Reply Br. 6. Further, Appellants urge that Yano’s disclosure of “a home subscriber server is not enough” for the Examiner “to assert that a TAU timer value is based on subscription information of the terminal received from the HSS.” Id. at 4.

In response, the Examiner explains that Shuai “discloses, ‘the MME sends a TAI list to the UE according to the TAI and may also send other parameters like Periodic TA Update Timer to the UE’.” Ans. 5 (quoting Shuai ¶ 63). The Examiner also explains that Yano’s “Home Subscriber Server (HSS), as the name suggests provides subscriber information and is designated as a server for tracking user location and user subscription information.” Id. at 5–6. Further, the Examiner finds that Yano’s HSS sends tracking-area-update information and subscriber information to an MME. Id. at 6 (citing Yano ¶ 151, Fig. 12). The Examiner similarly finds that “the subscriber information based Location Update” in Yano “is provided between the HSS and MME.” Id. at 7 (citing Yano ¶¶ 92, 116).

Based on the record before us, we agree with Appellants that the Examiner has not adequately explained how the cited portions of Shuai and Yano teach or suggest an MME allocating a TAU timer value “based on the
subscription information” of a terminal received from an HSS as required by each independent claim. That Yano’s HSS sends tracking-area-update information and subscriber information to an MME does not mean the MME employs the received subscriber information as an input to allocate a TAU timer value as an output. The Examiner fails to provide sufficient technical reasoning to establish that the cited portions of Shuai and Yano teach or suggest that the MME employs the received subscriber information as an input to allocate a TAU timer value as an output. See Ans. 5–7; see also Final Act. 4–8. Hence, we do not sustain the § 103(a) rejection of claims 1, 6, 11, and 16.

**Dependent Claims 2, 4, 5, 7, 9, 10, 12, 14, 15, 17, 19, and 20**

Claims 2, 4, and 5 depend from claim 1; claims 7, 9, and 10 depend from claim 6; claims 12, 14, and 15 depend from claim 11; and claims 17, 19, and 20 depend from claim 16. For the reasons discussed for claims 1, 6, 11, and 16, we do not sustain the § 103(a) rejection of claims 2, 4, 5, 7, 9, 10, 12, 14, 15, 17, 19, and 20.

Because this determination resolves the appeal for all pending claims, we need not address Appellants’ other arguments regarding Examiner error. See, e.g., *Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (explaining that an administrative agency may render a decision based on “a single dispositive issue”).

**DECISION**

We reverse the Examiner’s decision to reject claims 1, 2, 4–7, 9–12, 14–17, 19, and 20.
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Application 14/879,034

REVERSED