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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte VON K. MCCONNELL, KENNETH C. JACKSON, and
BRYCE A. JONES

Appeal 2015-003000
Application 12/272,390
Technology Center 2400

Before JEAN R. HOMERE, NABEEL U. KHAN, and
AMBER L. HAGY, *Administrative Patent Judges*.

KHAN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Final Rejection of claims 10, 13–18, 21, and 23. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ According to Appellants, the real party in interest is Sprint Spectrum L.P. App. Br. 1.

THE INVENTION

Appellants' invention relates to providing services, such as call-waiting, data forwarding, air interface control, and handoff control, for traffic of all sorts (e.g. voice and data, circuit-switched and packet-switched). Spec. 6:3–9; 7:2–8.

Exemplary independent claim 10 is reproduced below.

10. A method comprising:

receiving from a portable subscriber terminal, via an air interface connection that couples the portable subscriber terminal with a serving system, a request to initiate a communication session, wherein the serving system comprises a base transceiver station and a gateway coupled to a packet-switched network in which communications are transmitted as IP packets;

responsive to the request, sending information about the communication session from the serving system to a service agent layer via the packet-switched network;

receiving the information at the service agent layer, and determining at the service agent layer a service-level to be applied on the air interface, wherein the service agent layer is configured to determine air-interface service levels for the serving system and for at least one other serving system; and

sending from the service agent layer to the serving system, via the packet-switched network, a directive to apply the determined service-level on the air interface; and

the serving system applying the determined service-level on the air interface.

REFERENCES and REJECTIONS²

1. Claims 10, 13, 15, 18, 21, and 23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Widegren et al. (US 6,374,112 B1, issued Apr. 16, 2002), Haumont (US 6,466,552 B1, issued Oct. 15, 2002), and Daly et al. (US 6,393,014 B1, issued May 21, 2002).
2. Claim 14 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Widegren, Daly, and Koorapathy et al. (US 6,631,124 B1, issued Oct. 7, 2003).
3. Claim 16 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Widegren, Daly, and Hasan et al. (US 6,707,813 B1, issued Mar. 16, 2004).
4. Claim 17 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Widegren and Daly.
5. Claims 10, 13, 15, 18, 21, and 23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Widegren, Daly, and Kari et al. (US 6,480,485 B1, issued Nov. 12, 2002).

ANALYSIS

I. The Rejection of Claim 10 over Widegren, Haumont, and Daly

The Examiner rejects claims 10, 13, 15, 18, 21, and 23 over Widegren, Haumont, and Daly. However, all arguments address claim 10 or assert patentability in view of a claim's dependency or similar subject

² We note the Examiner filed a Non-Final Rejection on December 30, 2014, that was vacated on January 12, 2015. We have not considered the Examiner's Non-Final Rejection for purposes of this Decision.

matter. Accordingly, we direct our analysis to claim 10. *Cf.*, 37 C.F.R. § 41.37(c)(1)(iv) (representative claims).

A. Combining the UTRAN Approach with the Traditional Approaches Disclosed in Widegren

The Examiner finds Widegren’s embodiments teach a system that determines a service-level to be applied on the air interface, but that this determination is done at UTRAN, not at the service layer. Final Act. 3 (citing Widegren Fig. 1, 3:7–21). However, according to the Examiner, Widegren also explains that in “traditional approaches” a determination of the service level to be applied on the air interface is done at the service agent layer (which is called external network service node in Widegren). *Id.*

Appellants present several arguments, contending that the UTRAN approach disclosed in Widegren and the “traditional approach,” also described in Widegren, are not properly combinable. For example, Widegren describes the UTRAN approach as “different from traditional approaches” (Widegren 3:12–16), leading Appellants to argue that “the Examiner’s attempt to combine elements of Fig. 1 for some aspects of claim 10 with the ‘traditional approaches’ for other aspects of claim 10 is simply invalid” because “the two approaches are incompatible.” App. Br. 6; *see also* App. Br. 11. Appellants argue that “because the ‘traditional approaches’ are different than the UTRAN approach reflected in Fig. 1, a network that uses the ‘traditional approaches’ would not include the elements shown in Fig. 1 on which the Examiner’s rationale relies.” App. Br. 7. Appellants specifically point to the Examiner’s identification of the claimed “serving system,” as box 24 in Figure 1 of Widegren, and the claimed “service agent layer,” as box 16, as examples of elements that

would not be used in a traditional approach. *Id.* Further, Appellants argue that the traditional approaches refers to circuit-switched networks, rather than packet-switched networks, and thus the elements of Figure 1 of Widegren, which are directed to packet-switched networks, would not be used in a circuit-switched network of the traditional approach. App. Br. 8; *see also* App. Br. 11, 13.

We find these arguments to be unpersuasive of Examiner error. The Examiner finds that while Widegren already determines a service-level to be applied on the air interface, it does so at UTRAN. The traditional approach is relied upon for the narrow purpose of showing that this already existing functionality can be shifted from UTRAN to the service agent layer depicted as the external network service node in Figure 1 of Widegren. Thus, the Examiner's findings indicate that the claimed elements were known in the prior art and that combining these known prior art elements would have yielded the predictable results of determining at the service agent layer a service-level to be applied on the air interface. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

Although Widegren describes traditional approaches as different than the UTRAN approach, being different is not tantamount to being incompatible. Nor have Appellants presented persuasive evidence demonstrating that the two would be incompatible. The fact that Figure 1 of Widegren illustrates a configuration of elements used in the UTRAN approach does not imply that one of ordinary skill in the art could not modify that approach with teachings from the traditional approach, to shift

some functionality from one element to another. Similarly, even if the teachings of the “traditional approaches” are related to circuit-switched networks, this does not preclude such teachings from being used in a packet-switched network. *See KSR* 550 U.S. at 420–421 (“[I]n many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle. . . . A person of ordinary skill is also a person of ordinary creativity, not an automaton.”); *see also In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. . . . Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art.”).

B. The Combination of Widegren and Haumont’s GPRS Systems

Although the Examiner finds Widegren’s Figure 1 illustrates at least two serving systems, and teaches determining a service-level for at least one of those serving systems, it does not teach determining a service-level for the “other serving system,” as recited in claim 1. Final Act. 6. For this, the Examiner relies upon Haumont as teaching GPRS being connected to the other serving system. Final Act. 6–7 (citing Haumont Fig. 1, 2:28–30).

Appellants argue “the Examiner has . . . incorrectly assumed that the ‘GPRS’ in Widegren corresponds to the ‘GPRS’ in Haumont. The ‘GPRS’ in Widegren (Fig. 1, box 20) is a GPRS *node*, whereas the ‘GPRS’ in Haumont (Fig. 1, box 10) is a GPRS *backbone network*.” App. Br. 11; *see also* App. Br. 14. We are unpersuaded by this argument. The Examiner’s findings show that Haumont’s circuit switched network is connected to the GPRS backbone and Haumont clearly states that the GPRS backbone consists of sub-networks which comprise GPRS support nodes. Haumont

1:30–42. Thus, by being connected to the GPRS backbone, the circuit switched network is connected to GPRS nodes.

Appellants further argue “Haumont does not teach that either the GPRS nodes or the GPRS backbone network ‘is configured to determine air-interface service levels,’ as recited in claim 10.” App. Br. 11; *see also* App. Br. 14. This argument is unpersuasive because it attacks the references individually and does not address the Examiner’s rejection as a whole. *Keller*, 642 F.2d at 426. The Examiner relies upon Widegren, not Haumont, as teaching a service-layer determining air-interface service levels. Final Act. 3–4; *see also* Ans. 22.

C. The Examiner’s Reliance on Daly as Teaching Transmitting IP Packets

The Examiner acknowledges that, although Widegren and Haumont teach packet-switched networks, they do not teach transmitting IP packets. Final Act. 7. The Examiner relies upon Daly as teaching transmitting IP packets “to a wireline network via wireless IP and wireline IP.” *Id.* (citing Daly Fig. 1B, 1:42–2:3).

Appellants argue “Daly does not make up for Widegren’s failure to teach a ‘service agent layer’ that sends and receives communications via a packet-switched network.” App. Br. 14. We are unpersuaded by Appellants’ arguments. As explained above, we find Widegren does, in fact, teach a service agent layer that communicates over a packet-switched network, thus there is no deficiency for Daly to cure. Further, the Examiner does not rely upon Daly as teaching a service agent layer, only as teaching communicating IP packets.

II. The Second Rejection of Claim 10 over Widegren, Kari, and Daly

The Examiner provides a second rejection of claims 10, 13, 15, 18, 21, and 23, this time over the combination of Widegren, Kari, and Daly. Final Act. 12–17. As before, we take claim 10 to be representative. 37 C.F.R. § 41.37(c)(1)(iv). The Examiner’s second rejection is similar to the first, with similar reasoning and findings. *See id.* In particular, the Examiner’s findings with respect to Kari parallel those made with respect to Haumont in the first rejection. Both Kari and Haumont show GPRS being connected to a circuit-switched network. *Compare* Haumont Fig. 1 *with* Kari Fig. 1.

Appellants make similar arguments against this rejection as they did against the Examiner’s first rejection of claim 10. In particular, Appellants’ arguments relating to Kari parallel those made relating to Haumont. *Compare* App. Br. 11–14 *with* App. Br. 17–20. Thus, for the same reasons as stated above, we sustain the Examiner’s second rejection of claim 10.

III. Claims 14, 16, and 17

Appellants do not make any additional arguments for the separate patentability of dependent claims 14, 16, and 17, relying on the arguments made with respect to claim 10. *See* App. Br. 20–21. Thus, we sustain the Examiner’s rejection of claims 14, 16, and 17 for the same reasons as explained above.

CONCLUSION

For the reasons stated above, we sustain the Examiner’s rejection of claims 10, 13, 15, 18, 21, and 23, which were argued as a group. *See* App.

Appeal 2015-003000
Application 12/272,390

Br. 3–20. We also sustain the Examiner’s rejection of claims 14, 16, and 17 which depend from claim 10, and for which Appellants do not present arguments for separate patentability. *See* App. Br. 20–21.

DECISION

The Examiner’s rejections of claims 10, 13–18, 21, and 23 are affirmed.

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

AFFIRMED