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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* LEIF WILHELMSSON, JOHAN RUNE,  
JOACHIM SACHS, and ANDERS WALLÉN

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Appeal 2018-002568  
Application 14/379,827  
Technology Center 2400

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Before MAHSHID D. SAADAT, JASON J. CHUNG, and  
STEVEN M. AMUNDSON, *Administrative Patent Judges*.

AMUNDSON, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants<sup>1</sup> seek our review under 35 U.S.C. § 134(a) from a final rejection of claims 28–52, i.e., all pending claims.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

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<sup>1</sup> Appellants identify the real party in interest as Telefonaktiebolaget L M Ericsson. App. Br. 2.

<sup>2</sup> A December 13, 2016 After Final Response proposed new claims 53–55. Initially, in a January 3, 2017 Advisory Action, the Examiner noted that the proposed new claims would be entered. Subsequently, however, in a February 1, 2017 Advisory Action, the Examiner noted that the proposed new claims would not be entered. Additionally, the Answer explains that the “Examiner hasn’t entered those amendments.” Ans. 6.

STATEMENT OF THE CASE

*The Invention*

According to the Specification, the “invention relates to methods for controlling retransmission protocol based transmission of data blocks and to corresponding devices.” Spec. 1:8–9.<sup>3</sup> The Specification explains that “[t]he feedback time defines a time interval between transmission of one of the data blocks and transmission of a feedback message indicating whether the data block was successfully received.” *Id.* at 3:13–15; *see id.* at 6:37–7:1, Abstract. The Specification further explains that “[t]he feedback message . . . may be an ACK (‘acknowledgement’) indicating that the data block . . . was successfully received, or a NACK (‘negative acknowledgement’) indicating that the data block . . . was not successfully received.” *Id.* at 6:19–22; *see id.* at 13:14–16, 18:2–4. In one embodiment, a “transmitter determines the value of the feedback time,” and “[d]epending on the determined value of the feedback time, the transmitter controls transmission of the data block to the receiver.” *Id.* at 3:15–17. In another embodiment, a “receiver determines the value of the feedback time,” and “[d]epending on the determined value of the feedback time, the receiver controls reception of the data block at the receiver.” *Id.* at 3:24–26.

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<sup>3</sup> This decision uses the following abbreviations: “Spec.” for the Specification, filed August 20, 2014; “Final Act.” for the Final Office Action, mailed October 18, 2016; “App. Br.” for the Appeal Brief, filed May 9, 2017; “Ans.” for the Examiner’s Answer, mailed November 14, 2017; and “Reply Br.” for the Reply Brief, filed January 8, 2018.

*Exemplary Claim*

28. A method of controlling wireless transmission of data blocks between a transmitter and a receiver based on a retransmission protocol with a variable value of a feedback time, the method comprising:

determining, by the transmitter, the value of the feedback time, wherein the feedback time defines a time interval between transmission of a data block by the transmitter and transmission of a feedback message by the receiver indicating whether the data block was successfully received by the receiver; and

controlling, by the transmitter, transmission of the data block to the receiver based on the determined value of the feedback time.

App. Br. 11 (Claims App.).

*The Prior Art Supporting the Rejections on Appeal*

Nakazawa	US 2004/0165543 A1	Aug. 26, 2004
Senta et al. (“Senta”)	US 2006/0203855 A1	Sept. 14, 2006
Geile et al. (“Geile”)	US 7,280,564 B1	Oct. 9, 2007
Ahn et al. (“Ahn”)	US 2010/0008270 A1	Jan. 14, 2010

*The Rejections on Appeal*

Claims 28, 30, 31, 33–37, 40–42, 47, and 49–52 stand rejected under 35 U.S.C. § 102(b) as anticipated by Senta.<sup>4</sup> Final Act. 3–10.

Claims 29, 32, 38, 39, 43, 44, and 48 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Senta and Nakazawa. Final Act. 11–12.

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<sup>4</sup> On September 16, 2012, the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), took effect and amended 35 U.S.C. §§ 102 and 103. Because Application 14/379,827 has an effective filing date before the AIA’s amendments to §§ 102 and 103, this decision refers to the pre-AIA versions of §§ 102 and 103.

Claim 45 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Senta and Ahn. Final Act. 13.

Claim 46 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Senta and Geile. Final Act. 13–14.

#### ANALYSIS

We have reviewed the rejections of claims 28–52 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’ contention that the Examiner erred in finding that the cited portions of Senta disclose or suggest a “feedback time” that defines “a time interval between transmission of a data block by the transmitter and transmission of a feedback message by the receiver indicating whether the data block was successfully received by the receiver” as required by each independent claim.

#### *The § 102(b) Rejection of Claims 28, 30, 31, 33–37, 40–42, 47, and 49–52*

Appellants argue that the Examiner erred in rejecting independent claims 28, 40, and 49–52 because Senta does not disclose or suggest the following (or an essentially identical) limitation in each claim: “the feedback time defines a time interval between transmission of a data block by the transmitter and transmission of a feedback message by the receiver indicating whether the data block was successfully received by the receiver.” *See* App. Br. 6–8; Reply Br. 2–3. Specifically, Appellants assert that the Examiner’s citations to Senta do not “suggest to a skilled artisan that the feedback time is defined as a time interval between transmission of a data block by the transmitter and transmission of a feedback message by the

receiver . . . as claimed.” App. Br. 6. Appellants contend that “Senta teaches that the transmitter calculates the round trip time as a difference between an acknowledgement message arrival time that is received by the transmitter within a predetermined time period and a packet transmission time embedded in the acknowledgement message.” *Id.*

The Examiner finds that a transmitter in Senta determines “the feedback value time” where “the feedback time is the round trip time which is the total time from transmitter to receiver and receiver to transmitter.” Final Act. 4, 6, 8–10, 14–15. The Examiner also finds that the transmitter in Senta “determines the round trip time RTT based on transmission of [a] packet and whether [the] packet is successfully received.” Ans. 3–5.

Based on the record before us, we agree with Appellants that the Examiner has not adequately explained how the cited portions of Senta disclose or suggest a “feedback time” that defines “a time interval between transmission of a data block by the transmitter and transmission of a feedback message by the receiver indicating whether the data block was successfully received by the receiver” as required by each independent claim.

In Senta, a transmission-side terminal sends packets to a reception-side terminal. Senta ¶¶ 16–17, 25–26, 30–31, 49–62, Abstract, Figs. 1–2. When the transmission-side terminal sends a packet to the reception-side terminal, the transmission-side terminal embeds the transmission time in the packet. *Id.* ¶¶ 16–17, 27, 42, Abstract, Fig. 1. When the reception-side terminal sends an acknowledgment to the transmission-side terminal, the reception-side terminal embeds the transmission time in the acknowledgement. *Id.* ¶¶ 16–17, 27–28, Abstract, Fig. 1. After the

transmission-side terminal receives the acknowledgement, the transmission-side terminal calculates a round-trip time based on the transmission time embedded in the acknowledgement and the acknowledgement's arrival time. *Id.* ¶ 29, Fig. 1; *see id.* ¶ 8.

Senta's round-trip time does not meet the claimed "feedback time" because the round-trip time does not define a time interval between a transmission by a transmitter and a transmission by a receiver. Rather, the round-trip time defines a time interval between a transmission by a transmitter and a reception by the transmitter. *See Senta* ¶¶ 16–17, 27–29, 42, Abstract, Fig. 1. Hence, we do not sustain the § 102(b) rejection of claims 28, 40, and 49–52.

Claims 30, 31, and 33–37 depend from claim 28, while claims 41, 42, and 47 depend from claim 40. For the reasons discussed regarding the independent claims, we do not sustain the § 102(b) rejection of claims 30, 31, 33–37, 41, 42, and 47.

*The § 103(a) Rejections of Claims 29, 32, 38, 39, 43–46, and 48*

Claims 29, 32, 38, and 39 depend from claim 28, while claims 43–46 and 48 depend from claim 40. On this record, the Examiner has not shown how the additionally cited secondary references—Nakazawa, Ahn, and Geile—overcome the deficiency in Senta discussed above for claims 28 and 40. Hence, we do not sustain the § 103(a) rejections of claims 29, 32, 38, 39, 43–46, and 48.

Because this determination resolves the appeal with respect to claims 28–52, we need not address Appellants' other arguments regarding Examiner error. *See, e.g., Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423

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(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 28–52.

REVERSED