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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* SANTOSH PAUL ABRAHAM, SIMONE MERLIN,  
VINCENT KNOWLES JONES, MAARTEN MENZO WENTINK,  
and HEMANTH SAMPATH <sup>1</sup>

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Appeal 2016-002264  
Application 13/098,089  
Technology Center 2400

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Before MICHAEL J. STRAUSS, DANIEL N. FISHMAN, and  
JAMES W. DEJMEK, *Administrative Patent Judges*.

FISHMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1–50.<sup>2</sup> We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We reverse.

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<sup>1</sup> Appellants identify QUALCOMM Incorporated as the real party in interest. Appeal Brief 3.

<sup>2</sup> In this Decision, we refer to Appellants’ Appeal Brief (“App. Br.,” filed June 25, 2015); Appellants’ Reply Brief (“Reply Br.,” filed Dec. 18, 2015); the Final Office Action (“Final Act.,” mailed Jan. 9, 2015); the Examiner’s Answer (“Ans.,” mailed on Nov. 25, 2015); and the original Specification (“Spec.,” filed Apr. 29, 2011).

## THE INVENTION

Appellants' invention is directed to adapting a contention window size in response to detecting a multiuser transmission suffered a collision.

Abstract.

Claim 1, reproduced below, is illustrative:

1. A method, performed by an apparatus, for wireless communications, comprising:

simultaneously transmitting a first plurality of packets to a plurality of apparatuses in a first transmission;

determining that at least one of a plurality of acknowledgments corresponding to the first plurality of packets was not received from at least one of the plurality of apparatuses; and

increasing a contention window (CW) for a backoff counter based on the determination.

## THE REJECTIONS

Claims 1–4, 13, 14, 17–20, 29, 30, 33–36, 45, 46, and 50 are rejected under 35 U.S.C. § 102(a) as being anticipated by Haartsen (US 2008/0293366 A1; Nov. 27, 2008). Final Act. 2–4.<sup>3</sup>

Claims 5, 7, 9, 21, 23, 25, 37, 39, and 41 are rejected under 35 U.S.C. § 103(a) as being obvious over Haartsen and Chu et al. (US 2010/0165907 A1; July 1, 2010) (“Chu”). Final Act. 4–6.<sup>4</sup>

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<sup>3</sup> Claims 9, 25, 39, and 41 are mistakenly included in the header for this rejection. Final Act. 3. Further, claim 29 is mistakenly omitted from the header for this rejection, but otherwise appears in the body of the rejection. *Id.* We find the Examiner's typographical errors to be harmless.

<sup>4</sup> Claims 9, 25, 39, and 41 are mistakenly omitted from the header for this rejection, but otherwise appears in the body of the rejection. Final Act. 4–5.

Claims 6, 10, 11, 16, 22, 26, 27, 32, 38, 40, 42, 43, 48, and 49 are rejected under 35 U.S.C. § 103(a) as being obvious over Haartsen and Banerjee et al. (US 2010/0284380 A1; Nov. 11, 2010) (“Banerjee”).  
Final Act. 6–9.

Claims 8 and 24 are rejected under 35 U.S.C. § 103(a) as being obvious over Haartsen, Chu, and Banerjee. Final Act. 9–10.

Claims 12, 28, and 44 are rejected under 35 U.S.C. § 103(a) as being obvious over Haartsen, Banerjee, and King et al. (US 2005/0270977 A1; Dec. 8, 2005) (“King”). Final Act. 10.

Claims 15, 31, and 47 are rejected under 35 U.S.C. § 103(a) as being obvious over Haartsen, Banerjee, and Deb et al. (US 2009/0303908 A1; Dec. 10, 2009) (“Deb”). Final Act. 10–11.

## ANALYSIS

Claim 1 is directed to a method performed by an apparatus. The method comprises, *inter alia*, “transmitting a first plurality of packets to a plurality of apparatuses” and “increasing a contention window (CW).” All other independent claims include similar recitations.

The Examiner finds Haartsen discloses, *inter alia*, an apparatus that performs both the transmission of a first plurality of packets to a plurality of apparatuses and the increase of a CW. Final Act. 2–3 (citing Haartsen ¶¶ 63, 67, 68, 74, and 75); *see also* Adv. Act. 2 (citing Haartsen ¶¶ 76, 77) and Ans. 3.

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Further, claim 29 is mistakenly included in the header for this rejection. *Id.* at 4. We find the Examiner’s typographical errors to be harmless.

Appellants contend the Examiner erred in finding Haartsen discloses an apparatus that performs both the transmission of a first plurality of packets to a plurality of apparatuses and the increase of a CW. App. Br. 7–9. In particular, Appellants argue if the network node (3) of Haartsen is the claimed apparatus, the network node does not both transmit a plurality of packets to a plurality of apparatuses and increase a CW. *Id.* at 7–8 (citing Haartsen ¶ 76). Appellants further argue that if either of the apparatuses (1) or (2) of Haartsen are the claimed apparatus, the apparatuses (1) or (2) do not transmit a first plurality of packets “to a plurality apparatuses,” as claimed, because each of the apparatuses (1) or (2) communicate with a single network node (3). *Id.* at 9 (citing Haartsen Figure 1).

We agree with Appellants. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Here, we find the Examiner has failed to adequately explain how, nor are we able to ascertain that, Haartsen discloses an apparatus that performs both the transmission of a first plurality of packets to a plurality of apparatuses and the increase of a CW. In particular, Haartsen discloses a network node that transmits a plurality of beacon messages to communication apparatuses. Haartsen ¶¶ 63, 67, and 68. Additionally, Haartsen discloses communication apparatuses that increase a CW value. Haartsen ¶¶ 74–77. However, neither the network node nor the communication apparatuses performs both the transmission of a first plurality of packets to a plurality of apparatuses and the increasing of a CW.

In view of the above conclusion and on the record before us, we find the Examiner erred in rejecting independent claims 1, 17, 33, 49, and 50, and all dependent claims therefrom.

Appellants raise additional issues in the Briefs. However, we are persuaded of error with regard to the identified issue discussed *supra*, which is dispositive as to the rejection of all claims. We, therefore, do not reach the additional issues.

#### DECISION<sup>5</sup>

We reverse the Examiner's decision to reject claims 1–50.

#### REVERSED

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<sup>5</sup> In the event of further prosecution, we note that claim 49 is directed to “[a] computer-program product for wireless communications, comprising a computer-readable storage device comprising instructions executable to” perform the method–steps as recited in claim 49. The Examiner is invited to determine whether claim 49 comports with the requirements 35 U.S.C. § 101. *See Ex parte Mewherter*, 107 USPQ2d 1857, 1862 (PTAB 2013) (precedential-in-part) (machine-readable storage medium nonstatutory where Specification silent as to meaning).