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## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANIL M. RAO

Appeal 2013-007775 Application 11/973,025 Technology Center 2400

Before DEBRA K. STEPHENS, MICHAEL J. STRAUSS, and AMBER L. HAGY, *Administrative Patent Judges*.

STEPHENS, Administrative Patent Judge.

## **DECISION ON APPEAL**

#### STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from a Final Rejection of claims 1–4, 11–13, and 17–24. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

<sup>&</sup>lt;sup>1</sup> Claims 5–10 and 14–16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### STATEMENT OF THE INVENTION

According to Appellant, the claims are directed to a method and apparatus for a coordinated scheduling method to avoid multiplexing of control and data for power limited users in the LTE reverse link (Abstract). Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of coordinated scheduling for a telecommunication device comprising:

scheduling uplink data transmissions, uplink data retransmissions and uplink control transmissions for subframe time positions by a first scheduling mode; and

scheduling downlink data transmissions for subframe time positions by a second scheduling mode;

where the uplink data transmissions, the uplink data retransmissions, and the uplink control transmissions are offset to take place in different subframe time positions.

## REFERENCE

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Li

US 8,014,264 B2

Sept. 6, 2011

#### **REJECTIONS**

Claims 18 and 20–24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Li (Final Act. 2–3).

Claims 1, 4, 11, 13, 17, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Li (Final Act. 3–5).

We have only considered those arguments that Appellant actually raised in the Briefs. Arguments Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2012).

#### **ISSUE 1**

35 U.S.C. § 102(e): Claims 18 and 20–24

Appellant argues its invention is not anticipated by Li (App. Br. 5–6). The issue presented by the arguments is:

Issue 1: Has the Examiner erred in finding Li discloses

a scheduler configured to control uplink transmissions for a first transmitter and downlink transmissions for a second transmitter; . . . wherein the scheduler is configured to coordinate scheduling of the uplink data transmissions and uplink control transmission for said first transmitter and scheduling of the downlink data transmissions for the second transmitter such that uplink data transmissions and uplink control transmissions are communicated by the first transmitter during different subframes[,]

as recited in claim 18?

#### **ANALYSIS**

Appellant argues Li does not disclose the disputed limitation

wherein the scheduler is configured to coordinate scheduling of the uplink data transmissions and uplink control transmission for said first transmitter and scheduling of the downlink data transmissions for the second transmitter such that uplink data transmissions and uplink control transmissions are communicated by the first transmitter during different subframes.

(App. Br. 5–6). Instead, according to Appellant, using Li's uplink period of a subframe (that also includes a downlink period) for channel feedback does not describe "scheduling uplink data transmissions and uplink control transmissions for *different* subframes as claimed" (*id.* at 6 (emphasis added). Appellant further argues "the Examiner's response . . . constitute[s] new

grounds for rejection," but still does not disclose "the scheduling" recited in claim 18 (Reply Br. 2).

We are not persuaded by Appellant's arguments. We agree with the Examiner that one skilled in the art would have understood Li's base station and mobile stations include transmitters, and the base station transmission schedules symmetric and asymmetric uplink and downlink transmissions (Final Act. 2; Ans. 2 (citing Li 1:25–40, Fig. 1)). We further agree the asymmetric configuration is capable of scheduling uplink data transmissions for different subframes (Final Act. 3; Ans. 2 (citing Li 2:59–67, Fig. 1)).

In addition, we agree with the Examiner's finding that, in Li, the uplink data and the uplink control are sent during different subframes and the downlink data is transmitted with the uplink control information (Final Act. 3 (citing Li, 4:50–60, 5:4–8); Ans. 2). We are not persuaded the Examiner's response constitutes new grounds of rejection (Reply Br. 2); rather, we find the Examiner's response merely points to the background of the invention and figures corresponding to previously cited portions of Li relied upon in the Final Action (Final Act. 2–3; Ans. 2; *see* Li 1:25–40; *see also* Li Fig. 3 described in 4:50–60 and 5:4–8, 27–32). Nonetheless, Appellant has waived any argument that the Examiner's Answer contains a new ground of rejection because Appellant did not file a petition under 37 C.F.R. § 1.181(a) within two months from the mailing of the Examiner's Answer.

Accordingly, we are not persuaded the Examiner erred in finding Li discloses the invention as recited in independent claim 18 and dependent claims 20–24, not separately argued. Therefore, we sustain the rejection of claims 18 and 20–24 under 35 U.S.C. § 102(e) for anticipation by Li.

### **ISSUE 2**

35 U.S.C. § 103(a): Claims 1, 4, 11, 13, 17, and 19

Appellant asserts its invention is not obvious over Li (App. Br. 7–10). The issue presented by the arguments is:

Issue 2: Has the Examiner erred in finding Li teaches or suggests "scheduling . . . where the uplink data transmissions, the uplink data retransmissions, and the uplink control transmissions are offset to take place in different subframe time positions," as recited in claim 1, and similarly in claim 11?

#### **ANALYSIS**

Initially, Appellant argues Li does not disclose the disputed limitation for the same reasons argued in connection with claim 18 (App. Br. 7–9) which we find unpersuasive for the above reasons. Appellant additionally argues Li merely discloses retransmitting uplink data transmissions in response to receiving a negative acknowledgement (NAK) and further, Li does not teach or suggest the recited "offset" limitation associated with the three transmissions (*id.* at 7–8). According to Appellant, the Examiner mischaracterizes the "offset" limitation" and argues an "offset" would not be an obvious design choice because "the claim actually schedules three different types of uplink transmission that are offset in different subframe time positions" (*id.* at 8).

We are not persuaded by Appellant's argument. With respect to the limitations similarly recited as in claim 18, we agree with the Examiner's findings as set forth above. With respect to the offset limitation, the Examiner finds scheduling uplink voice data and downlink broadcasting are first and second modes with different subframes (Ans. 3). We agree with the

Examiner's finding that Li discloses a first and second transmission mode for voice and broadcast data (*id.*). Thus, we find Li teaches using different subframe time positions for the recited transmissions. The Examiner further finds, and we agree, an ordinary skilled artisan would have found it obvious to utilize three modes, although Li discloses two modes, because Li's uplink transmissions occur in different slots, which are located at different time positions of the uplink frame, thus using different offsets/delays in the uplink frame, *i.e.*, different subframe time positions (*id.*). Appellant has not presented sufficient evidence or argument to persuade us that adding a third mode would have been "uniquely challenging or difficult for one of ordinary skill in the art" or "represented an unobvious step" over Li's teachings. *See Leapfrog Enters.*, *Inc. v. Fisher-Price*, *Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citations omitted).

With respect to claim 11, Appellant's arguments are essentially the same as argued in connection with claim 1 and, for similar reasons, are not supported by sufficient evidence or argument to persuade us of error in the Examiner's findings (*see* App. Br. 9–10).

Accordingly, we are not persuaded the Examiner erred in finding Li teaches or suggests the limitations as recited in claims 1 and 11 and claims 4, 13, 17, and 19, not separately argued. Therefore, we sustain the rejection of claims 1, 4, 11, 13, 17, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Li.

## DECISION<sup>2</sup>

The Examiner's rejection of claims 18 and 20–24 under 35 U.S.C. § 102(e) as being anticipated by Li is AFFIRMED.

The Examiner's rejection of claims 1, 4, 11, 13, 17, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Li is AFFIRMED.

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. § 1.136(a)(1)(iv).

# <u>AFFIRMED</u>

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<sup>&</sup>lt;sup>2</sup> Should there be further prosecution with respect to claims 1–10, the Examiner's attention is directed to *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2356 (2014), *2014 Interim Guidance on Subject Matter Eligibility*, 79 Fed. Reg. 74,618 (Dec. 16, 2014) ("2014 IEG"), and *July 2015 Update on Subject Matter Eligibility*, 80 Fed. Reg. 45,429 (July 30, 2015).