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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RICHARD STIRLING-GALLACHER
and JENS-UWE JURGENSEN

Appeal 2013-002413
Application 12/537,531
Technology Center 2400

Before MAHSHID D. SAADAT, HUNG H. BUI,
and MIRIAM L. QUINN, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the final rejection of claims 15-34. Claims 1-14 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

STATEMENT OF THE CASE

Introduction

Appellants' invention relates to communicating data symbols over a communication channel (*see* Abstract).¹ Claim 15, which is illustrative of the invention, reads as follows:

15. A method for transmitting one or more data symbols over a communication channel, comprising:

spreading each of the one or more data symbols using a spreader unit, with one or more associated spreading codes, thereby producing a corresponding spread data symbol for each data symbol,

wherein the one or more associated spreading codes are mutually orthogonal;

scrambling, using a scrambling unit, each spread data symbol with an associated scrambling code, thereby producing a corresponding scrambled symbol for each spread data symbol;

assigning a plurality of scrambled codes to one user, wherein each of the plurality of scrambled codes being used within a same link; and

transmitting, using a transmitter, each corresponding scrambled symbol.

The Examiner's Rejections

Claims 15-17, 21-27, and 31-34 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Zehavi (US 5,777,990). (*See* Final Rej. 2-5).

¹ Throughout this decision we refer to various portions of the Specification by citing to the original patent (US 6,570,889 B1).

Claims 18-20 and 28-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zehavi in view of Bottomley (US 5,550,809). (*See* Final Rej. 6-7).

Appellants' Contentions

With respect to the rejection of claim 15, Appellants contend that Zehavi does not disclose the claimed step of “scrambling” (App. Br. 7). Appellants specifically point out that the cited portions in columns 7 and 8 of Zehavi identify quadrature spreading elements 62, 64, 66, and 68, but do not teach or suggest scrambling (App. Br. 7-8).

Appellants further contend that Zehavi does not disclose “each of the plurality of scrambled codes being used within the same links” (App. Br. 8). Appellants assert that the cited portions in columns 4, 9, and 10 of Zehavi “describe a general connection between a base station and remote station and providing overflow traffic mitigation” whereas Appellants’ invention requires “different scrambling codes are used **within the same link**, for example, the downlink 26” (App. Br. 9)(emphasis in original).

Appellants further argue the patentability of the remaining claims based on the same reasons stated above with respect to claim 15 (App. Br. 10), allowing those claims to stand or fall with independent claim 15. *See* 37 C.F.R. § 41.37(c)(1)(vii).

ISSUE

Did the Examiner err in rejecting claim 15 as being anticipated by Zehavi because the reference does not disclose the recited scrambling step “wherein each of the plurality of scrambled codes being used within the same links?”

ANALYSIS

We have reviewed the Examiner's rejection in light of Appellants' arguments that the Examiner has erred. We disagree with Appellants' conclusions.

As stated by the Examiner (Ans. 3), Zehavi discloses using a Walsh sequence for spreading and a PN sequence for scrambling (Ans. 3 (citing col. 5, ll. 7-29)). In that regard, Zehavi discloses that the entire packet is provided to the combining element 58 where the packet is spread by an orthogonal function W_i (col. 7, ll. 9-15) and provided to spreading element 62 and 64, which applies the pseudorandom noise (PN) functions PN_I and PN_Q (col. 7, ll. 20-26). Therefore, contrary to Appellants' argument (Reply Br. 6-8), Zehavi performs a spreading step by applying an orthogonal function sequence, typically a Walsh sequence, to the information packets, resulting in a Walsh spread packet that is mixed or spread spectrum processed with a PN sequence (*see* col. 5, ll. 16-19).

We further find that the Examiner, giving the claim its broadest reasonable interpretation consistent with the Specification, *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997), properly relies on Zehavi's disclosure of the link between user terminal 2 and gateway 8 of Figure 1, described in column 9, line 55 – column 10, line 2, to show that the traffic channel and the overflow channel are parts of the same link (Ans. 4). We also agree with the Examiner's conclusion (*id.*) that Zehavi's PN short code and PN' long code allocated to the traffic channel and the overflow channel, respectively, meet the claimed plurality of scrambling codes used within the same link.

Accordingly, we conclude that the portions of Zehavi the Examiner relied on adequately disclose the disputed limitations of claim 15.

CONCLUSION

On the record before us, we conclude that, because Zehavi teaches all the claim limitations, the Examiner did not err in rejecting claim 15 as being anticipated by Zehavi. Therefore, we sustain the rejection of claim 15 and of claims 16-34 falling therewith.

DECISION

The Examiner's decision rejecting claims 15-34 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)(1)(iv).

AFFIRMED

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