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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KENNETH L. STANWOOD, STANLEY WANG,
and ROBERT M. JOHNSON

Appeal 2019-001326
Application 15/160,065
Technology Center 2400

Before JOHNNY A. KUMAR, JAMES W. DEJMEK, and
STEPHEN E. BELISLE, *Administrative Patent Judges*.

BELISLE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from a Final Rejection of all pending claims, namely claims 4 and 5. Appeal Br. 5, 7. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ Throughout this Decision, we use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42 (2017). Appellant identifies the real party in interest as Wi-LAN Inc., a subsidiary of Quarterhill Inc. Appeal Br. 3.

STATEMENT OF THE CASE

The Claimed Invention

Appellant's invention relates generally to "packet data communications systems, and reformatting data in such systems before transmitting the data through a link." Spec. ¶ 2.

Claim 4, reproduced below, is illustrative of the subject matter on appeal:

4. A mobile subscriber unit for a wireless communications system operable to pack and fragment variable length service data units (SDUs) into variable length protocol data units (PDUs), the mobile subscriber unit comprising:

a processor addressable storage medium;

at least one processor in communication with the processor addressable storage medium and configured to:

pack data of a first SDU into a payload area of a PDU of an uplink frame, the PDU of a length different than the length of another PDU of another uplink frame;

on a condition that data of a second SDU fits in a remaining payload area of the PDU, pack the data of the second SDU into the remaining payload area of the PDU, the second SDU of a length different than the length of the first SDU; and

on a condition that the data of the second SDU does not fit in the remaining payload area of the PDU, pack a first fragment of the data of the second SDU into the remaining payload area of the PDU.

Appeal Br. 13 (Claims App.).

The Applied References

The Examiner relies on the following references as evidence of unpatentability of the claims on appeal:

Kordsmeyer	US 6,963,751 B1	Nov. 8, 2005
Pezeshki-Esfahani	US 6,711,176 B1	Mar. 23, 2004

The Examiner's Rejection

The Examiner rejected claims 4 and 5 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Kordsmeyer and Pezeshki-Esfahani. Final Act. 2–5.

ANALYSIS²

Appellant disputes the Examiner's findings that the combination of Kordsmeyer and Pezeshki-Esfahani renders obvious independent claims 4 and 5. Appeal Br. 7–11; Reply Br. 2–4.

Appellant argues, *inter alia*, claims 4 and 5 involve “combin[ing] variable size PDUs with packing and fragmenting of variable sized SDUs” (Reply Br. 4), and that there is no basis in the record, but for impermissible hindsight, for modifying Kordsmeyer to meet the claim limitations at issue (Appeal Br. 10–11). *See* Reply Br. 4 (“[I]t is only through improper hindsight in view of Appellant's disclosure that one of ordinary skill would think to combine variable size PDUs with packing and fragmenting of variable sized SDUs as set forth in the claims on appeal.”). On the present record, we find Appellant's argument persuasive, as discussed below.

Kordsmeyer discloses packing of data of variable-length SDUs into the payload area of PDUs (*see* Appeal Br. 8 (citing Kordsmeyer, col. 7:1–13); Ans. 6–7 (citing Kordsmeyer, Fig. 2)), but it does so in the context of *fixed-size* PDUs, and does not disclose packing of data of variable-length

² Throughout this Decision, we have considered Appellant's Appeal Brief filed October 2, 2018 (“Appeal Br.”); Appellant's Reply Brief filed November 29, 2018 (“Reply Br.”); the Examiner's Answer mailed November 2, 2018 (“Ans.”); the Final Office Action mailed November 3, 2017 (“Final Act.”); and Appellant's Specification filed May 20, 2016 (“Spec.”).

SDUs into the payload area of *variable-length* PDUs, as recited, for example, in claim 4 (*see* Ans. 7 (“Kordsmeyer is only admittedly deficient in showing such packing and fragmenting applied to variable-length PDUs.”); Final Act. 3 (“Kordsmeyer discloses mapping to fixed length PDUs in a DECT system rather than variable length PDUs.”); Appeal Br. 9 (“Kordsmeyer’s need to pack and fragment is driven by the case where the SDUs are of a variable size and the PDUs (per the DECT standard) are of a fixed size.”)). Nevertheless, the Examiner finds “*Kordsmeyer* also *contemplates application* in an ATM (Asynchronous Transfer Mode) environment,” and based on this finding, introduces Pezeshki-Esfahani for teaching varying PDU sizes in such an environment, and determines the skilled artisan “would recognize the packing and fragmenting efficiencies gained in Kordsmeyer would also be applicable to variable-length PDUs, such as the frame-based ATM in [Pezeshki-Esfahani].” Ans. 7–8 (emphases added); *see* Final Act. 3. We find the Examiner’s rationale here deficient.

Although Kordsmeyer mentions “ATM cells,” it does so only in the context of describing “Related Art,” namely, European Patent EP 0708576, and describes this reference as disclosing “a method for the transmission of payload data in telecommunication systems where the concern is how payload data blocks fashioned as CDMA data packets can be transmitted in ATM cells fashioned as data units.” Kordsmeyer, col. 6:10–29. Appellant argues “[Kordsmeyer] contains no reference to or suggestion of contemplating the application of *Kordsmeyer’s fixed length PDU DECT invention* in an ATM environment. ATM is not even mentioned anywhere else in Kordsmeyer.” Reply Br. 3 (emphasis added); *see* Appeal Br. 9–11. We find Appellant’s argument persuasive, and that the Examiner has not

provided sufficient evidence or technical reasoning to explain clearly why the skilled artisan, absent hindsight, would recognize Kordsmeyer to be applicable to variable-length PDUs, such as in an ATM environment. *See Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570 (Fed. Cir. 1996) (“To draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use the invention as a template for its own reconstruction—an illogical and inappropriate process by which to determine patentability.” (citing *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983))). The Examiner also has not persuasively shown how the other cited art remedies this deficiency. Because we find this issue dispositive here, we do not address Appellant’s other arguments.

Accordingly, we do not sustain the Examiner’s rejection under pre-AIA 35 U.S.C. § 103(a) of independent claims 4 and 5.

DECISION SUMMARY

In summary:

Claims Rejected	pre-AIA 35 U.S.C. §	Reference(s)/ Basis	Affirmed	Reversed
4, 5	103(a)	Kordsmeyer, Pezeshki-Esfahani		4, 5

REVERSED