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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/485,482	09/12/2014	Senthil Kumar Mani	070852.000051	3270
125968	7590	10/01/2019	EXAMINER	
Vorys, Sater, Seymour and Pease LLP (ImgTec) 1909 K St., N.W. Ninth Floor Washington, DC 20006			LUO, ANTHONY L	
			ART UNIT	PAPER NUMBER
			2465	
			NOTIFICATION DATE	DELIVERY MODE
			10/01/2019	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SENTHIL KUMAR MANI and PRASAD PURAM

Appeal 2018-007950
Application 14/485,482
Technology Center 2400

Before JOHN A. JEFFERY, DENISE M. POTHIER, and
JUSTIN BUSCH, *Administrative Patent Judges*.

POTHIER, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

Pursuant to 37 C.F.R. § 41.52, Appellant¹ has submitted a timely Request for Rehearing dated August 27, 2019 (“Request”), requesting rehearing of the June 28, 2019 Decision on Appeal (“Opinion” or “Op.”) affirming the rejections of claims 1–20 under 35 U.S.C. § 103. *See* Op. 12.

We have reconsidered the Opinion in light of Appellant’s arguments in the Request. We find no substantive errors and decline to change our prior decision for the following reasons. However, in an abundance of

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Imagination Technologies Limited. Appeal Br. 1.

caution, we designate our affirmance of the rejections of claims 1–20 as new grounds under 37 C.F.R. § 41.50(b).

A request for rehearing must state with particularity the points believed to have been misapprehended or overlooked. *See* 37 C.F.R. § 41.52(a)(1). Generally, arguments not raised in the briefs before the Board and evidence not previously relied upon in the briefs are not permitted in the request for rehearing. *See id.* Permitted new arguments are limited to: (a) new arguments based upon a recent relevant decision of either the Board or a Federal Court; (b) new arguments responding to a new ground of rejection designated pursuant to 37 C.F.R. § 41.50(b); or (c) new arguments that the Board’s decision contains an undesignated new ground of rejection. *See id.* § 41.52(a)(2)–(4).

PURPORTED, UNDESIGNATED NEW GROUND OF REJECTION

The Examiner rejected claims 1, 7–9, 11, 16–18, and 20 under § 103 as being unpatentable over Zheng (US 2010/0312552 A1, published Dec. 9, 2010) and Rajendran (US 2008/0027717 A1, published Jan. 31, 2008). *See* Final Act. 4–7; Ans. 2–3.² Appellant’s arguments in the briefs regarding this and other rejections did not persuade us of error. *See* Op. 5–11. In the Request, Appellant contends that we presented new factual findings in the Opinion that constitute new grounds of rejection pursuant to 37 C.F.R. § 41.50(b). *See* Request 1–2.

I.

Appellant first asserts, in the Opinion, we relied on a new factual finding that claim 1’s limitation reciting “wherein, if at least a portion of the

² We refer to the Final Office Action mailed September 1, 2017 and the Examiner’s Answer mailed May 30, 2018.

voice data is classified as unvoiced, the encoded voice data payload is determined to be a critical payload” (“the ‘wherein’ clause”) is a conditional limitation similar to that discussed in *Ex parte Schulhauser*, No. 2013-07847, 2016 WL 6277792, at *5, 7 (PTAB Apr. 28, 2016) (precedential). *See* Request 1 (citing Op. 6–7). We are not persuaded.

Our claim interpretation does not rise to the level of a new ground of rejection, for which Appellant has not had a fair opportunity to react to the thrust of the rejection. *See In re Kronig*, 539 F.2d 1300, 1302–03 (CCPA 1976) (“[T]he ultimate criterion of whether a rejection is considered ‘new’ in a decision by the [B]oard is whether [applicants] have had fair opportunity to react to the thrust of the rejection.”). Our discussion concerning how the “wherein” clause should be construed was not necessary to resolve Appellant’s dispute, but rather was intended to highlight to Appellant the breadth of this limitation. *See* Op. 7 (noting the “wherein” clause is a conditional limitation, but then proceeding to address this limitation “even if this ‘wherein’ clause were not a conditional limitation”). Moreover, we sustained the rejection based on Zheng and Rajendran (Op. 7–8), which according to Appellant, is the rejection from which this appeal was taken. Request 1 (stating “the rejection appealed from is the proposed modification of Zheng with Rajendran under 35 U.S.C. 103 (see Final rejection at 4).”).

On this basis, Appellant has been afforded a fair opportunity to respond to the rejection.

II.

Appellant next contends, in the Opinion, we relied on new factual findings that (1) Zheng alone suggests the “wherein” clause, and (2) Rajendran is technically cumulative to Zheng with respect to the “wherein”

clause. *See* Request 1 (citing Op. 7). According to Appellant, the rejection appealed from is the proposed modification of Zheng with Rajendran under 35 U.S.C. § 103, and we newly found Zheng alone teaches the “wherein” clause. *See id.* at 1–2 (quoting Final Act. 4–5).

In the Answer and as cited in the Opinion (Op. 5, 7), the Examiner elaborated on Zheng’s teachings, finding Zheng’s speech data may include voice and unvoiced data. *See* Ans. 2 (citing Zheng ¶ 42). The Examiner explained Zheng further discloses analyzing a speech frame by *determining whether the speech frame is a critical frame* and by creating a redundant copy of the speech frame. *See id.* (citing Zheng ¶ 40). According to the Examiner, “[w]hen Zheng discloses the speech data is critical, it could mean the unvoiced data is critical.” *Id.*; *see* Op. 7 (quoting Ans. 2).

Consequently, at least as of the Answer, Appellant was on notice of the Examiner’s position regarding Zheng’s paragraphs 40 and 42 related to the limitation “determining whether the encoded voice data payload is a critical payload or non-critical payload by classifying the received voice data as voiced or unvoiced” and the “wherein” clause. *See* Op. 5–7; *id.* at 7 (citing Ans. 2–3 and stating “the Examiner indicated (1) Zheng alone suggests or, alternatively, (2) Zheng in combination with Rajendran suggests the ‘wherein’ step.”). Notably, Appellant could have petitioned the Director regarding the Examiner’s failure to designate the rejection of claim 1 as elaborated on in the Answer as a new ground pursuant to 37 C.F.R. § 41.40(a), and “[f]ailure of appellant to timely file such a petition will constitute a waiver of any arguments that a rejection must be designated as a new ground of rejection.” 37 C.F.R. § 41.40(a) (2019); *see* MPEP § 1207.03(b).

In any event, the record lacks some clarity regarding whether Rajendran is being discussed as an alternative rejection under § 103 or the sole § 103 rejection. *See* Ans. 2–3. For example, although we understand the Examiner to have taken an alternative position relying on Zheng’s teaching alone to teach the features in claim 1’s “determining” step and the “wherein” clause, the Examiner further states “Zheng does not *explicitly* disclose the unvoiced data is a critical payload” and then addresses Rajendran regarding this limited feature of claim 1. *Id.* (emphasis added). Thus, the record is not entirely clear concerning whether Rajendran is being discussed as the sole rejection or an alternative rejection under obviousness. Therefore, out of an abundance of caution, we grant the Request to the extent the Examiner did not present an alternative rejection of claims 1, 7–9, 11, 16–18, and 20 based on Zheng alone under 35 U.S.C. § 103.

We further designate our affirmance of the rejections of claims 1, 7–9, 11, 16–18, and 20 as explained in the Opinion (Op. 3–11) as new grounds due to the above-noted ambiguities. To clarify, claims 1, 7–9, 11, 16–18, and 20 are rejected based on (1) Zheng alone or, alternatively, (2) Zheng in combination with Rajendran. Op. 5–8. More particularly, the Opinion explains how Zheng alone teaches or suggests the disputed “determining” step and the “wherein” clause. *See id.* The Opinion further discusses Zheng’s teachings in paragraphs 40 and 42 with respect to the “wherein” clause and how “Rajendran provides an additional reason why an artisan would want to recognize [Zheng’s] data as critical (e.g., important in comprehending speech in the highband) and even how an artisan would have recognized unvoiced speech data (e.g., data that includes more information).” Op. 7–8 (citing Zheng ¶¶ 40, 42); *see id.* at 9–10. As to the

remaining, undisputed limitations, we adopt the Examiner’s findings and conclusions. See Final Act. 4–8.

Conclusion

We designate our affirmance of the rejections of claims 1, 7–9, 11, 16–18, and 20 based on (1) Zheng alone or, alternatively, (2) Zheng in combination with Rajendran as new grounds, affording Appellant another opportunity to respond. Because we are designating the rejections of claims 1, 7–9, 11, 16–18, and 20 as new grounds, we similarly designate the rejections of the remaining claims as new grounds.

PURPORTED POINTS BELIEVED TO BE MISAPPREHENDED OR OVERLOOKED

I.

In the Request, Appellant contends that we misapprehended Appellant’s argument regarding Zheng when we stated Appellant argued Zheng fails to teach “determining whether the voice data payload is a critical payload or noncritical payload by classifying the received voice data as voiced or unvoiced,” as recited in claim 1. *See* Request 2–3 (citing Op. 5). According to Appellant, Appellant did not dispute that Zheng classifies frames as critical or noncritical, but argued “Zheng does not disclose determining data classified as unvoiced to be a critical payload.” *See id.* at 3 (quoting Appeal Br. 8) (underlining omitted). We are not persuaded.

In the Appeal Brief, Appellant argues

Zheng does not disclose the step of ‘determining whether the voice data payload is a critical payload or noncritical payload by classifying the received voice data as voiced or unvoiced, wherein if at least a portion of the voice data is classified as unvoiced, the voice data payload is determined to be a critical payload,’ as required by the claims.

Appeal Br. 8 (underlining omitted). We acknowledged this argument in the Opinion, stating “Appellants assert [that] Zheng fails to teach ‘determining whether the voice data payload is a critical payload or noncritical payload by classifying the received voice data as voiced or unvoiced’” as claim 1 recites. *See* Op. 5.³ Additionally, we noted Appellant contended “Zheng does not teach determining an encoded voice data payload to be a critical payload if at least a portion of the voice data is classified as unvoiced. . . .” *Id.* at 3–4. We further addressed *both* these arguments in the Opinion. *Id.* at 5–8.

Thus, contrary to Appellant’s contention (see Request 3), we did not misapprehend Appellant’s argument, and addressed Appellant’s contention regarding Zheng and whether it discloses the recited “data payload is determined to be a critical payload” if the recited “voice data is classified as unvoiced” in claim 1.

II.

Appellant further contends that we misapprehended the Examiner’s findings to be that Zheng alone suggests the “wherein” clause. *See* Request 3 (citing Op. 7). According to Appellant, nowhere in the record did the Examiner find that Zheng discloses the “wherein” clause. *See id.* (citing Final Act. 2, 4–5 and another final action, mailed October 28, 2016).

At the outset, we note the appeal is taken from the rejection in Final Action dated September 1, 2017 (not any preceding action discussed by Appellant), and confine our discussion to this rejection. Also, as previously

³ We note a typographical error on page 5 of the Opinion. “*See* Appeal Br. 7 (citing Zheng ¶ 42)” should be “*See* Appeal Br. 8 (citing Zheng ¶ 42).”

explained, the Examiner found Zheng teaches (1) speech data may include voiced and unvoiced data and (2) determining whether a data frame is a critical data frame. *See* Ans. 2 (citing Zheng ¶ 42); *see also In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992) (“In reviewing the examiner’s decision on appeal, the Board must necessarily weigh all of the evidence and argument. . . . [T]he ultimate determination of patentability is made on the entire record.”). The Examiner further found Zheng discloses modules that analyze a speech frame by *determining whether the speech frame (e.g., voiced or unvoiced) is a critical frame*. *See* Ans. 2 (citing Zheng ¶ 40). The Examiner elaborates that, “[w]hen Zheng discloses the speech data is critical, it could *mean the unvoiced data is critical*.” *Id.* (emphasis added). We therefore disagree that the Examiner had not found Zheng at least suggests the “wherein” clause.

Zheng further supports this position. Zheng states a FEC (forward error correction) module “determine[s] whether the speech frame is a critical frame and protect[s] the speech frame by creating a redundant copy of the speech frame.” Zheng ¶ 40, Fig. 3. Zheng further states module 402 “determine[s] if a speech frame is a critical frame *based on a speech mode 434*” (*id.* ¶ 42 (emphasis added), Fig. 4), which includes voiced and unvoiced speech modes (e.g., contains voiced or unvoiced data) (*see id.*).

As such, contrary to Appellant’s contention, we did not misapprehend the Examiner’s findings. We further discussed in the Opinion and above the proposed alternative positions the Examiner presented for the “wherein” clause based on (1) Zheng alone, and (2) Zheng and Rajendran collectively. Op. 6–8. Yet, for reasons previously indicated, we designate our affirmance of the rejections of claims 1, 7–9, 11, 16–18, and 20 based on (1) Zheng

alone or, alternatively, (2) Zheng in combination with Rajendran as new grounds.

III.

Appellant next asserts that we misapprehended the teachings in Zheng’s paragraphs 41 and 42. *See* Request 4. In particular, Appellant contends that we misapprehended Zheng’s examples of speech mode “as being the same as a listing of critical frames.” *Id.* According to Appellant, if all of Zheng’s examples of speech mode are determined as critical, then there is nothing to be determined by Zheng’s critical frame identification (ID) module 402 because every speech frame by definition has a speech mode. *See id.* We disagree.

First, we did not misapprehend Zheng’s paragraph 41 in our Opinion because we do not discuss or rely on this paragraph. *See generally* Op.

Second, we did not misapprehend Zheng’s example in paragraph 42 to mean that *all* the frames in the list (e.g., voiced, unvoiced, silence, transient, and voiced onset) are critical frames as asserted. *See* Request 4. Rather, Zheng states “a critical frame identification module 402 . . . may determine if a speech frame is a critical frame based on *a* speech mode 434 of the frame and the adjacent frames. . . . Examples of speech mode may include voiced, unvoiced, silence, transient, voiced onset, etc.” Zheng ¶ 42 (emphases added). The emphasized indefinite article “a” in the above passage underscores that Zheng teaches or suggests to ordinary skilled artisans that *one* exemplary speech mode (e.g., unvoiced) among the exemplary speech modes (e.g., voiced, unvoiced, silence, transient, and voiced onset) determines whether a speech frame is a critical frame. *See id.* Thus, when we stated “Zheng teaches various embodiments that determine

specific frames being critical, including those related to voiced or unvoiced data as well as other modes” and “a range of possible critical payloads” (Op. 6), we meant that Zheng teaches or suggests a speech frame is a critical frame based on the speech mode being voiced, unvoiced, *or* one of the other speech modes, not when the speech frame is classified as any of the discussed speech modes.

Third, Appellant does not adequately explain how our purported misapprehension (which we disagree with) leads to an error in the proposed rejection, including how Zheng teaches away from the claimed subject matter. Request 4. In any event, we acknowledged and addressed the argument that Zheng teaches away from the claimed subject matter in the Opinion. Op. 3–4, 8–10. We also indicated Zheng discusses the voice example presented in the briefs. Op. 6 (citing Appeal Br. 8 and Reply Br. 2). But, we further explained that Appellant “do[es] not address Zheng’s *further* teachings noted by the Examiner” (*id.*) (emphasis added), including those explained above in Zheng’s paragraph 42.

Based on the record, we disagree that we misapprehended the teachings in Zheng’s paragraphs 41 and 42.

IV.

Appellant lastly contends that we overlooked two facts pointed out by Appellant, which support that no possible combination of Zheng with Rajendran could result in the claimed invention. *See* Request 4–5. Appellant first asserts Rajendran’s Figure 18A illustrates that full frame bandwidth uses more bits to encode a voiced frame than to encode an unvoiced frame. *Id.* at 5. Appellant also asserts Rajendran pertains to

encoding frames, not transmitting them or redundant transmissions over a network. *Id.* We are not persuaded.

As to the latter assertion, we did not overlook this contention because we specifically stated Appellant’s “contention that Rajendran does not disclose transmitting encoded frames over a network (Reply Br. 3) is unavailing, for such contention does not address the reason why Rajendran was cited as previously discussed. *See* Final Act. 5[.]” Op. 10. That is, Rajendran was relied upon in the rejection for a limited purpose—to teach or suggest why one skilled in the art would have wanted to recognize and determine unvoiced data as a critical payload and how to recognize such data (Op. 7–8) and not for (1) its transmission features, (2) its redundancy features, or (3) Figure 18A’s encoded scheme. *See id.* at 7–10.

As to the former assertion regarding Rajendran’s Figure 18A, Appellant contended encoding an unvoiced frame with a larger number of bits than what is done for a voiced frame does not teach classifying an unvoiced frame as critical. Reply Br. 3. Although we did not explicitly reiterate this argument in the Opinion, we addressed that Rajendran was not relied upon to teach or suggest encoding frames or the number of bits used when encoding, but rather to teach or suggest that one skilled in the art would have recognized or known that unvoiced data in the *highband* has more information than voiced data. Op. 7–8, 10. Even Appellant recognizes this teaching. Reply Br. 3 (stating Rajendran “[is] reflective of the fact that more information is present in the *certain band* of an unvoiced frame than is present in the *certain band* of a voiced frame.”). The Opinion further explains Rajendran’s teaching provides a reason why an artisan would have wanted to recognize unvoiced data as critical (e.g., important in

comprehending speech in the highband), and even how an artisan would have recognized unvoiced speech data (e.g., identifying data having more information in the highband). *See* Op. 7–8 (citing Final Act. 5; Ans. 3). This discussion also provided a reason with some rational underpinning to combine Rajendran’s teaching with Zheng to arrive at the disputed “wherein” clause (“wherein, if at least a portion of the voice data is classified as unvoiced, the voice data payload is determined to be a critical payload.”) *Id.* at 7–9.

As such, we disagree with Appellant that we overlooked the two-noted facts pointed out in the Reply Brief.

Appellant does not specifically address the rejections of claims 2–20 in the Request. *See* Request.

Accordingly, Appellant has not persuasively identified a point in the briefs that we misapprehended or overlooked under 37 C.F.R. § 41.52(a)(1).

CONCLUSION

We have considered the arguments raised by Appellant in the Request, but are not persuaded that our original decision was in error. However, as previously noted, the record lacks some clarity regarding whether the Examiner alternatively rejected claims 1, 7–9, 11, 16–18, and 20 based on Zheng alone. Accordingly, we grant the Request to designate this rejection a new ground of rejection under 37 C.F.R. § 41.50(b). Similarly, as a cautionary measure and as explained above, we designate each of the remaining rejections, all of which are based on Zheng in combination with at least one other reference, as a new ground of rejection under 37 C.F.R. § 41.50(b).

Appeal 2018-007950
Application 14/485,482

REHEARING GRANTED IN PART;
37 C.F.R. § 41.50(b)