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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SEPPU ALANARA¹

Appeal 2015-006168
Application 13/130,297
Technology Center 2400

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

FISHMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 20–38.² Claims 1–19 have been cancelled. App. Br. 2. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm-in-part and designate our affirmance as containing a NEW GROUND OF REJECTION pursuant to our authority under 37 C.F.R. § 41.50(b).

¹ Appellant identifies Nokia Corporation as the real party in interest. App. Br. 1.

² In this Decision, we refer to Appellant’s Appeal Brief (“App. Br.,” filed October 27, 2014); Appellant’s Reply Brief (“Reply Br.,” filed June 1, 2015); the Final Office Action (“Final Act.,” mailed May 14, 2014); the Examiner’s Answer (“Ans.,” mailed May 7, 2015); and the original Specification (“Spec.,” filed May 19, 2011).

THE INVENTION

Appellant's invention is directed to monitoring a user equipment's downlink signal quality. Spec., Abstract.

Independent claim 20, reproduced below, is illustrative:

20. A method, comprising:

monitoring downlink signal quality of a user equipment with a base station at least in part [based] on measurement results received from the user equipment; and

if the downlink signal quality is less than a threshold value, sending a revised radio resource allocation to the user equipment to initiate switching operation of the user equipment from a full duplex frequency division duplex mode of operation to a half duplex frequency division duplex mode of operation.

THE REJECTIONS

Claims 20, 21, 23–27, 29–33, and 35–38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCoy (US 2007/0254692 A1; publ. Nov. 1, 2007) and Arviv et al. (US 6,549,759 B2; iss. Apr. 15, 2003) (“Arviv”). Final Act. 2–9.

Claims 22, 28, and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCoy, Arviv, and Choi et al. (US 2009/0296609 A1; publ. Dec. 3, 2009 (filed June 2, 2008)) (“Choi”). Final Act. 9–10.

ANALYSIS

Only those arguments actually made by Appellant have been considered in this Decision. Arguments that Appellant did not make in the Briefs are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

We have reviewed the Examiner's rejections in light of Appellant's arguments that the Examiner erred. App. Br. 4–25; Reply Br. 1–5. We are not persuaded by Appellant's contentions regarding claims 20–23 and 25. With the exception of the Examiner's discussion of claims 24 and 26–38, we adopt as our own the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–9) and as set forth by the Examiner in the Answer (Ans. 2–6). However, we highlight and address specific arguments and findings for emphasis as follows.

Claims 20–23 and 25

Appellant contends the Examiner erred in finding the combination of McCoy and Arviv teaches or suggests the limitations of independent claim 20. In particular, Appellant argues McCoy does not teach a full to half duplex switch decision based on downlink signal quality as determined from measurement results received from user equipment. App. Br. 4–5 (citing McCoy ¶¶ 18, 29, 53, 64, 91, 103). Appellant further argues Arviv does not teach a full to half duplex switch decision as determined from a base station. *Id.* at 6 (citing Arviv 12:8, Figs. 4 and 5).

Appellant's contentions are not persuasive. Appellant considers the teachings of McCoy and Arviv in isolation and fails to rebut specifically the Examiner's ultimate legal conclusion of obviousness that is based on *the combination* of McCoy and Arviv. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Specifically, the Examiner relies on McCoy, *not Arviv*, for disclosing a full to half duplex switch decision determined from a base

station. Final Act. 2–3 (citing McCoy ¶¶ 18, 29, 53, 64, 67, 91, 92, 101; Figures 4–6); *see also* Ans. 2–3. The Examiner relies on Arviv, *not McCoy*, for disclosing determining downlink signal quality based on measurement results received from user equipment. Final Act. 3 (citing Arviv 11:15–17, 11:37–57, 12:8–18); *see also* Ans. 3. Thus, the Examiner finds *the combination* of McCoy and Arviv teaches a base station basing a full to half duplex switch decision on downlink signal quality as determined from a user equipment’s measurement results. We agree with the Examiner’s findings and conclusions and adopt them as our own.

Appellant further asserts a person of ordinary skill in the art would not ignore Arviv’s teaching of changing a modulation technique for *both* uplink and downlink signals. App. Br. 9; *see also id.* at 8 (citing Arviv Abstract, 2:8–27); Reply Br. 4. Appellant argues because Arviv teaches changing a modulation scheme for *both* uplink and downlink signals, “there appears to be only two possible ‘obvious’ combinations of the teachings of Arviv with McCoy,” and concludes “[n]either of these two suggestions is what [A]pplicant is claiming.” App. Br. 8–9.

Appellant’s contentions are not persuasive. It is well settled that mere attorney arguments and conclusory statements, which are unsupported by factual evidence, are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (attorney argument is not evidence). Further, Appellant’s arguments are not responsive to the Examiner’s rejection discussed *supra*. In particular, the Examiner finds, and we agree, Arviv teaches *downlink* signal quality as determined from a user equipment’s measurement results, not *uplink* signal quality.

Appellant further asserts, for the first time in the Reply Brief, the combination of McCoy and Arviv would use both McCoy's uplink signal and Arviv's downlink signal for determining a mode of operation.

Appellant argues the combination "would be unmanageable and result in conflicts; something neither reference suggests how to address."

Reply Br. 4. Appellant further argues replacing McCoy's use of uplink signal quality with a use of downlink signal quality for determining a mode of operation "would require throwing out most of what McCoy teaches and, thus, go[es] against the teaching in McCoy." *Id.*

These arguments are untimely and waived. 37 C.F.R. § 41.41(b)(2); *see also Ex parte Borden*, 93 USPQ2d 1473, 1474 (BPAI 2010) (informative) ("the reply brief [is not] an opportunity to make arguments that could have been made in the principal brief on appeal to rebut the Examiner's rejections, but were not"). Further, Appellant's arguments are not responsive to the Examiner's rejection discussed *supra*. In particular, the Examiner finds, and we agree, the combination relies on Arviv's *downlink* signal quality determined from a user equipment's measurement results, not McCoy's *uplink* signal.

Appellant further contends there is no motivation to make the Examiner's proposed combination. In rejecting claim 1, the Examiner finds it would have been obvious to modify the system of McCoy to include downlink signal measurement results received from user equipment as taught by Arviv "in order to provide a flexible system that adaptively adjusts the modulation scheme for each individual uplink and downlink in a two-way communication connection between each base station and subscriber unit pair." Final Act. 3-4 (citing Arviv 1:66-2:5). Appellant argues one of

ordinary skill in the art, when presented with McCoy's teachings relating to full to half duplex switch, would not be motivated to consider the teachings of Arviv to change a modulation scheme. App. Br. 9–10. The Examiner explains, because McCoy's base station makes a full to half duplex switch decision based on received signals from a mobile device, and Arviv's base station monitors its own signal quality to determine if uplink modulation should be changed, then "McCoy would use the teaching of Arviv to allow the use of reported downlink quality measurements by the user equipment for changing the operation mode (full/half duplex mode)." Ans. 16–17 (citing McCoy ¶ 70; Arviv 7:4–6).

We agree with Appellant, and find insufficient reasoning to justify a reason one of ordinary skill in the art would add the modulation system of Arviv to the system of McCoy. Although both disclosures discuss measuring signal quality between a base station and mobile device, there is no evidence cited or rationale provided by the Examiner supporting or explaining why a base station, making a full to half duplex switch decision based on uplink signal measurement results as taught by McCoy, would use a modulation scheme based on downlink signal measurement results as taught by Arviv.

However, we note claim 20 is directed to a method for sending a revised radio resource allocation to user equipment to switch the user equipment from a full to half duplex frequency division duplex mode of operation "if the downlink signal quality is less than a threshold value." Conditional steps employed in a method claim need not be found in the prior art if, under the broadest scenario, the method need not invoke the steps. *See Ex parte Katz*, No. 2010-006083, 2011 WL 514314, *4 (BPAI 2011) (citing

In re Am. Acad. of Sci. Tech Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004)).

We determine the conditional limitation recites an optional event that may not occur and, therefore, processing recited as dependent on the condition need not be performed nor taught by the prior art. Thus, we agree with the Examiner that claim 20 is rejected under 35 U.S.C. § 103(a) as unpatentable over McCoy and Arviv and the conditional operations need not be found in the prior art.

For the above reasons, we sustain the Examiner's rejection of independent claim 20, and dependent claims 22, 23, and 25, which are not argued separately with particularity. App. Br. 26.

Claim 21 depends from independent claim 20, and Appellant presents essentially the same arguments for claim 21. App. Br. 11–13. For the same reasons as claim 20, we are not persuaded the Examiner erred in rejecting claim 21 and we sustain its rejection.

Although we sustain the Examiner's rejection of claims 20–23 and 25, we designate our affirmance of the decision to reject claims 20–23 and 25 as a new ground of rejection pursuant to our authority under 37 C.F.R. § 41.50(b).

Claim 24

Claim 24 depends from claim 21 and further recites a user equipment's request "is sent at least partially in response to the user equipment detecting that the base station is scheduling uplink and downlink resources such that transmission coincides with reception." Appellant argues McCoy teaches a mobile device including a duplexer that transmits and receives signals simultaneously, but the duplexer does not detect that a

base station is scheduling uplink and downlink resources such that transmission coincides with reception. App. Br. 13–14 (citing McCoy ¶¶ 36 and 51).

In response to Appellant’s arguments, the Examiner finds McCoy teaches a mobile device will switch from a full to half duplex mode when the mobile device “neared an edge or other interfering element.” Ans. 21 (citing McCoy ¶ 29). The Examiner reasons McCoy “clearly shows that a request being sent at least partially in response to the user equipment detecting that the base station is scheduling uplink and downlink resources such that transmission coincides with reception (full duplex).” *Id.*

We agree with Appellant. The Examiner has not provided sufficient evidence or technical reasoning explaining how McCoy’s mobile device teaches or suggests “detecting that the base station is scheduling uplink and downlink resources such that transmission coincides with reception,” as claimed. In particular, although McCoy’s mobile device switches from full to half duplex mode when it nears an edge of a pentagonal area representing the coverage area of a base station, the Examiner fails to adequately explain how McCoy’s mobile device detects the base station is scheduling uplink and downlink resources such that transmission coincides with reception.

Thus, on the record before us, we are persuaded the Examiner erred in the rejection of claim 24 and we do not sustain its rejection.

Claims 26–38

Independent claim 26 includes recitations similar to claim 20 but is directed to a computer-readable memory medium storing computer instructions to perform the conditional operation discussed above.

Independent claim 32 is also similar to claim 20 but is directed to an apparatus configured to provide the optional function discussed *supra*. Although the optional step of the method of claim 20 need not be found in the prior art, the prior art must teach or suggest a claimed apparatus configured to perform the optional function, or a claimed computer medium with instructions to perform the optional function. Thus, for the reasons discussed *supra* regarding the optional function of claim 20, we reverse the rejection of independent claim 26 and 32 and claims 27–31 and 33–38 dependent therefrom, respectively.

DECISION

We reverse the Examiner’s decision to reject claims 24 and 26–38.

We affirm the Examiner’s decision to reject claims 20–23 and 25 and designate the affirmance as containing a NEW GROUND OF REJECTION.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). Section 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.” Section 41.50(b) also provides:

When the Board enters such a non-final decision, the appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the prosecution will be remanded to the examiner. The new ground of rejection is binding upon the examiner unless an amendment or new

Evidence not previously of Record is made which, in the opinion of the examiner, overcomes the new ground of rejection designated in the decision. Should the examiner reject the claims, appellant may again appeal to the Board pursuant to this subpart.

(2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART
37 C.F.R. § 41.50(b)