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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KRISHNA SAYANA, BOON LOONG NG, YOUNG-HAN NAM, THOMAS DAVID NOVLAN, JINKYU HAN, JIANZHONG ZHANG, HYOJIN LEE, and YOUN-SUN KIM

Appeal 2018-006464
Application 14/571,177
Technology Center 2400

Before: MAHSHID D. SAADAT, BETH Z. SHAW, and SCOTT E. BAIN, *Administrative Patent Judges*.

SHAW, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a rejection of claims 65–84, which are all the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

INVENTION

The claims are directed to reporting channel state information (CSI) in user equipment. Independent claim 65, reproduced below, is illustrative of the claimed subject matter:

> 65. A method for reporting channel state information (CSI) in a user equipment, the method comprising:
>
> acquiring a first CSI configuration associated with a first CSI-reference signal (CSI-RS) resource and a first CSI-interference measurement, and a second CSI configuration associated with a second CSI-RS resource and a second CSI-interference measurement;
>
> obtaining a rank indicator (RI) of the first CSI configuration, where the RI of the first CSI configuration is the same as an RI of the second CSI configuration, and wherein the second CSI configuration is configured for an RI report by a higher layer; and
>
> reporting the RI for the first CSI configuration.

REJECTIONS

The Examiner rejected claims 65–84 under pre-AIA 35 U.S.C. § 103(a) as being obvious over Khoshnevis et al. (US 2013/0258874 A1, published Oct. 3, 2013), Xu et al. (US 2013/0286904 A1, published Oct. 31, 2013), and Etemad et al. (US 2013/0301548 A1, published Nov. 14, 2013).

CONTENTIONS AND ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' arguments that the Examiner has erred. We agree with Appellants' contentions that the Examiner erred for the following reasons.

The Examiner determines "Khoshnevis discloses CSl-interference measurement because a person of ordinary skill in the art, at the time of the invention, would have understood state Channel State Information measurements inherently include interference information." Final Act. 4. In the alternative, the Examiner additionally finds Etemad teaches that a CSI configuration is associated with a CSI-reference signal resource and a CSI-interference measurement. *Id.* We address each of these findings below.

Khoshnevis

"The inherent teaching of a prior art reference" is a "question of fact." *In re Napier,* 55 F.3d 610, 613 (Fed. Cir. 1995). Inherency may supply a missing claim limitation in an obviousness analysis. *See, e.g.*, *Santarus, Inc. v. Par Pharm., Inc.,* 694 F.3d 1344, 1354 (Fed. Cir. 2012); *Alcon Research, Ltd. v. Apotex Inc.,* 687 F.3d 1362, 1369; *In re Kao,* 639 F.3d 1057, 1070 (Fed. Cir. 2011); *In re Kubin,* 561 F.3d 1351, 1357 (Fed. Cir. 2009). However, the use of inherency must be carefully circumscribed in the context of obviousness. *PAR Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1194–96 (Fed. Cir. 2014).

> Inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

In re Oelrich, 666 F.2d 578, 581 (CCPA 1981) (citations omitted).

Appellants argue the Examiner's finding of inherency is incorrect because CSI measurements as defined by Appellants are affected by interference signals from multiple transmission points. App. Br. 16. In the Answer, the Examiner does not respond with facts to support the legal conclusion of inherency. We cannot, on this record, conclude that the CSI-interference measurements *necessarily* are present in Khoshnevis or in the combination of prior art references. There are no findings of fact addressing that question on this record, and we decline to make such findings in the first instance.

Etemad

In the alternative, the Examiner relies on Etemad to teach that a CSI configuration is associated with a CSI-reference signal resource and a CSI-interference measurement. Final Act. 4; Ans. 15–16. Yet, as Appellants argue in the Appeal Brief, the non-provisional application resulting in Etemad was not filed until December 28, 2012, and is not prior art to the subject application unless the cited content of Etemad is supported in the priority filing for that non-provisional application, U.S. Provisional Patent Application No. 61/626,233, filed May 11, 2012 (the '233 provisional). App. Br. 18–19. Appellants argue the phrase "CSI-interference measurement . . . resource" from cited paragraph 27 of Etemad appears nowhere within the 235 pages of the '233 provisional, and therefore, the cited portion of Etemad is not prior art to the claimed invention. *Id.* The Examiner does not respond to this argument in the Answer, other than to restate the non-provisional and provisional filing dates of Etemad. Thus, on this record, the Examiner has not shown sufficiently that Etemad is entitled to claim priority to the cited subject matter in the '233 provisional. In other

words, the Examiner has not shown on this record that Etemad teaches that a CSI configuration is associated with a CSI-reference signal resource and a CSI-interference measurement.

Therefore, we are persuaded of error in the Examiner's rejection of independent claim 65 under 35 U.S.C. § 103, and we do not sustain the § 103 rejection of claim 65. For the same reasons, we do not sustain the § 103 rejection of independent claims 70, 75, and 80, as well as the pending dependent claims.

DECISION

For the above reasons, the Examiner's rejection of claims 65–84 is reversed.

REVERSED