

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KYOCERA CORPORATION, and
KYOCERA COMMUNICATIONS, INC.,
Petitioner,

v.

ADAPTIX, INC.,
Patent Owner.

Case IPR2015-00318
Patent 7,454,212 B2

Before GLENN J. PERRY, TREVOR M. JEFFERSON, and
JUSTIN BUSCH, *Administrative Patent Judges*.

PERRY, *Administrative Patent Judge*.

DECISION
Denying Petitioner's Request for Rehearing
37 C.F.R. § 42.71

INTRODUCTION

Petitioner Kyocera Corporation and Kyocera Communications, Inc. (“Kyocera”) filed a Request for Rehearing of the Board’s Decision (Paper 10, “Dec.”), dated June 10, 2015, which denied institution of *inter partes* review of claims 1, 8–13, 15, 18, 19, and 23–29 of U.S. Patent 7,454,212 B2 (Ex. 1003, “the ’212 patent”). Paper 13 (“Req. Reh’g”). Kyocera contends that we erred in not recognizing that the ’212 patent acknowledges on its face that the claimed use of pilot symbols was well-known prior art. Req. Reh’g 7.

For the reasons stated below, Kyocera’s Request for Rehearing is denied.

STANDARD OF REVIEW

When rehearing a decision on petition, the Board will review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c). “An abuse of discretion occurs if a decision is based on an erroneous interpretation of law, if a factual finding is not supported by substantial evidence, or if the decision represents an unreasonable judgment in weighing relevant factors.” *Arnold P’ship v. Dudas*, 362 F.3d 1338, 1340 (Fed. Cir. 2004) (citation omitted). The party requesting rehearing bears the burden of showing an abuse of discretion, and “[t]he request must specifically identify all matters the party believes the Board misapprehended or overlooked.” 37 C.F.R. § 42.71(d).

DISCUSSION

Chuang (Ex. 1007)

Kyocera contends that we erred with respect to alleged Ground 4 because we inconsistently interpreted the disclosure of Chuang¹ in our petition decisions in IPR2015-00318 (“the ’318 IPR”) and IPR2015-00319 (“the ’319 IPR”) with respect to “pilot symbols.” Req. Reh’g 1. Kyocera argues that in the ’319 IPR we held that Chuang discloses the claimed “pilot symbols”; but that in the ’318 IPR we mistakenly held that Chuang does not disclose the claimed “pilot symbols.” Thus, according to Kyocera, these decisions cannot be reconciled. We disagree. Chuang discloses a use of “pilot signals” but not the *claimed* use of “pilot symbols.”

Chuang describes control architecture for implementing dynamic channel assignment (DCA) in a Time Division Multiple Access (TDMA)² radio system having fixed and portable stations. Ex. 1007, Abstract. Fixed stations have “ports,” each of which communicates with a plurality of portables. These ports continuously broadcast “beacon” signals on channels that are not traffic channels. Portables scan for the strongest beacons (strong signal strength) to select a port with which to communicate. Traffic channel interference, caused by traffic channel communications between a fixed station and portables, is not considered in a decision by a portable as to

¹ J.C-I Chuang, N.R. Sollenberger, and D.C. Cox, *A Pilot Based Dynamic Channel Assignment Scheme for Wireless Access TDMA/FDMA Systems*, 2 1993 2ND IEEE INT’L CONF. ON UNIVERSAL PERSONAL COMM’NS 706–712 (1993). (Ex. 1007, “Chuang”)

² Time Division Multiple Access (TDMA) allows a fixed station to communicate with plural portable stations by allowing each portable to communicate during particular “slices” of time on a communication channel.

which beacons are strongest. Rather, only the signal strength of that port is relevant to the decision.

Once a fixed station port is selected by a portable, the dynamic channel allocation (DCA) process determines the assignment of traffic channels between the port and a portable. Each fixed station can communicate on multiple channels with multiple portables engaged in calls between the portable and the selected port. It is beneficial to select a channel for communication that will experience no, or at least little, interference from other calls. The port determines levels of signals on the various traffic channels. Based on these signal levels, it determines a “short list” of potential channels for assignment (those likely to experience relatively low interference). This short list includes about 6 of the channels having the lowest received power, causing them to be potentially good channels from the perspective of the fixed station. This information is communicated to the portables using pilot signals. The pilots are established to convey the power levels on the various active traffic channels.

A portable learns about the active traffic channels by detecting pilots transmitted in multiple time slots on a common control frequency. From these pilots, portables determine how much interference there would be on each of the various traffic channels. The portable is thus able to select particular traffic channels from the short list developed by the fixed station.

We determine that Chuang describes the use of pilot signals to communicate a level of interference on traffic channels.

Patent Owner argues that independent claims 1 and 18 are not rendered obvious by either of the challenges, including reliance on Chuang. Prelim. Resp. 31–40. We agreed (Dec. 17) and continue to agree with Patent

Owner's argument that Chuang does not disclose measuring *both* channel and interference information based on pilot symbols. As noted above, Chuang uses beacons to help a portable find a fixed station port having a channel strength that is greater than those of other fixed stations. Chuang's use of pilot signals is limited to communicating an amount of interference that may be caused by particular power-controlled traffic channels already in use.

IPR2015-00319 is terminated. An adverse judgment (Paper 15) against claims 8, 9, 21 and 22 was entered, based on an adverse judgment against the same claims in IPR 2014-01524 (Paper 30). The extent to which our Decision (Paper 10) in IPR2015-00319 may have reflected less than full appreciation of Patent Owner's arguments with respect to Chuang is now moot.

Well-Known Prior Art

Kyocera also contends that we erred in not recognizing "that the '212 patent acknowledges on its face that the claimed use of pilot symbols was well-known prior art." Req. Reh'g 7. We disagree. The '212 patent acknowledges that the use of pilot symbols was known. The *claimed* use of pilot symbols is not acknowledged as well-known prior art. The Specification acknowledgment that Kyocera points to states: "The channel/interference estimation by processing block **301** is well-known in the art by monitoring the interference that is generated due to full-bandwidth pilot symbols being simultaneously broadcast in multiple cells." Ex. 1003, 9:11-15. We interpret this acknowledgment to be that it was known to generate full-bandwidth pilot symbols and broadcast them simultaneously in

multiple cells, and that interference resulting from such full-bandwidth multiple transmissions could be measured. That is not the *claimed* use of pilot symbols. The claimed use of pilot symbols requires determining *channel information* and interference information based on pilot symbols. *See* claim 1.

Kyocera argues that given the '212 patent acknowledgement, a person of ordinary skill in the art would have understood that such pilot symbols would be an effective way to implement the channel monitoring described in Frodigh. Therefore, Frodigh alone would render obvious all claim elements involving measuring pilot symbols to determine channel quality. Moreover, a person of ordinary skill in the art would think to, and be motivated to, combine Frodigh with specific references which have strong teachings of pilot symbols in the context of adaptive channel allocation, such as Sollenberger. Reh'g Req. 7 (citing IPR2015-00318, Paper No. 1 at 23).

Kyocera's argument as set forth in its Petition was not overlooked. It is simply not persuasive that one of ordinary skill would have bridged the gap from what is actually acknowledged in the '212 patent to the scope of the claim limitations at issue, which require more than measuring interference using pilot symbols.

Accordingly, we did not misapprehend or overlook these arguments made by Kyocera.

ORDER

Accordingly, it is hereby

ORDERED that Kyocera's request for rehearing is *denied*.

IPR2015-00318
Patent 7,454,212 B2

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