

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KYOCERA CORPORATION and KYOCERA COMMUNICATIONS INC.,

Petitioners

v.

ADAPTIX, INC.,

Patent Owner

Case IPR2015-00318

U.S. Patent No.: 7,454,212

Issue Date: November 18, 2008

OFDMA WITH ADAPTIVE SUBCARRIER-CLUSTER
CONFIGURATION AND SELECTIVE LOADING

**PATENT OWNER'S OPPOSITION TO
PETITIONERS' REQUEST FOR REHEARING**

Patent Owner opposes Petitioners' Rehearing Request. With respect to Ground 4, Petitioners incorrectly allege that "[t]he Board's decision in Case IPR2015-00319 ('748 Decision') held that the Chuang reference disclose[s] the claimed 'pilot symbols,'" and "[t]he Board's decision in Case IPR2015-00318 ('212 Decision') mistakenly held that the Chuang reference does not disclose the claimed 'pilot symbols.'" (Reh. Req. at 1.) The Rehearing Req. misleadingly characterizes the Board's holdings to just whether Chuang discloses "pilot symbols." Contrary to Petitioner's assertions, the '748 and '212 Decisions can be reconciled regarding measuring of "channel and interference information" for a "plurality of subcarriers based on pilot symbols received from" a base station, as recited in independent claims 1 and 18 of the '212 Patent.

Issue 1 – Petitioners' characterization of the Board's holding that Chuang discloses "pilot symbols" in the '748 Decision, but not in the '212 Decision, is incorrect and overly simplistic. The two decisions can be reconciled.

In the '212 Decision, the Board construed the phrase "channel and interference information" as follows: "[f]or purposes of this opinion, we construe the term as including various measurements that characterize a channel's signal strength and interference. SINR is a specific example of such a characterization." ('212 Decision at 8; emphasis added.) Based on the construction in the '212 Decision, "channel and interference information" is the signal strength and interference for a plurality of subcarriers. The Board then concluded:

Patent Owner argues that Chuang (like Sollenberger) does not teach measuring both channel and interference information based on pilot symbols. Prelim. Resp. 32. We agree with Patent Owner's argument (Prelim. Resp. 34-35) that Chuang utilizes "beacons" to determine which port to communicate with, and not to determine strength of traffic subcarriers. (the '212 Decision at 17.) Thus, the '212 Decision acknowledges that signal strength of the traffic subcarriers is not measured in Chuang. Instead, the strength of the beacons, transmitted on the beacon channel (which is a downlink control channel, not a traffic subcarrier), is measured for port selection. (Chuang at 708, left col., 11-15.) Thus, these measurements are of the beacons and not of the pilot symbols. (Chuang at 707, left col., 45-51.)

In the '748 Decision, the Board did not construe the phrase "channel and interference information" that is measured based on pilot symbols. The '748 Decision did not address Patent Owner's argument that Chuang does not measure signal strength based on pilot symbols. If the Board had construed "channel and interference information," Patent Owner submits that the Board would have reached the same result in the '748 Decision because Chuang does not measure signal strength based on pilot symbols.

The section of Chuang (Chuang at 708, right col., 12-19) referenced by Petitioners at page 3 of the Rehearing Req. fails to disclose measuring "channel and interference information" for a "plurality of subcarriers based on pilot

symbols.” At most, Section 2.4 of Chuang discloses a port (base station) broadcasting a short list of channels on its beacon channel to a portable (subscriber unit), and then the portable measuring pilots from surrounding base stations that correspond to the channels on the short list, where the measurement of the pilots correspond to interference information as defined in Section 2.3 of Chuang. (See Chuang at 708, right col., 1-19.) Furthermore, Chuang describes pilots (used to measure interference) and beacons (used to measure the strength of the port):

“[a]ll portables measure the signal strengths of the beacons and select the strongest port for communications purposes.” (Chuang at 708, left column, 13-15; emphasis added.) “If a port is active on a traffic channel, then it transmits an RF pilot signal (at the same power controlled level as that of the active traffic channel) on the control frequency in time-slots 0 and 5 of the designated frame,” and “[s]imilarly, time-slots 0 and 5 contain identical information, so that all active portables are able to make measurements corresponding to the interference on all of the 100 possible traffic channels.” (Chuang at 708, left col., 37-44; emphasis added.)

The Board correctly construed “channel and interference information” in the ‘212 Decision. As such, the Board correctly found in the ‘212 Decision that Chuang does not disclose measuring “channel and interference information” for a “plurality of subcarriers based on pilot symbols,” as recited in independent claims 1 and 18 of the ‘212 Decision. If the Board had construed “channel and interference information” in the ‘748 Decision, the Board would have found the

same deficiency in Chuang. Thus, with this extra bit of analysis, the ‘748 and ‘212 Decisions can be reconciled with one another with respect to Chuang.

In addition, in the Preliminary Response, Patent Owner noted that Chuang is very similar to Sollenberger, and stated that Chuang is defective for the same reasons. (Prel. Resp. at 37.) In particular, section VI.A.1.c.ii.(2), explains that Sollenberger does not measure channel and interference information based on pilot symbols from a base station, i.e., an allocating base station. (Prel. Resp. at 17-19.) The Board agreed, “we do find persuasive Patent Owner’s argument that Sollenberger does not describe measuring channel and interference information based on pilot symbols transmitted from a base station that is the same as the allocating base station.” (‘212 Decision at 13.)

Patent Owner submits that for the same reason as Sollenberger, Chuang fails to disclose measuring channel and interference information based on pilot symbols transmitted from a base station that is the same as the allocating base station. Chuang discloses that the portable measures the pilot signals from the surrounding base stations (not the allocating base station) in order to predict the actual interference on the serving port. (Chuang at 707, right col., 26-27 and 708, right col., 2-15 and 37-39.) In other words, the portable is measuring the pilot signals from the neighboring ports to predict whether or not there would be interference if the corresponding channel was selected from the allocating port. (Chuang at 708, right col., 2-15.) Accordingly, Chuang also does not measure channel and

interference information based on pilot symbols from a base station (i.e., an allocating base station).

Issue 2 – In the Petition, Petitioners did not assert that the ‘212 Patent “acknowledges on its face that the claimed use of pilot symbols was well-known prior art,” as Petitioners now assert. (Reh. Req. at 7.) Rather, Petitioners asserted that “the ‘212 patent on its face acknowledges that the use of pilot symbols for determining channel quality was a well-known prior art technology.” Patent Owner does not dispute that measuring interference based on pilot symbols is a method “for determining channel quality” and that that was known in the prior art. That is, after all, the inferior method used by Chuang to “determine channel quality.” However, that is not “the claimed use of pilot symbols.”

The ‘212 Patent does not acknowledge “on its face that the claimed use of pilot symbols was well-known prior art.” (Reh. Req. at 7.) The ‘212 Patent acknowledges that “monitoring the interference” that is generated due to pilot symbols is known. (‘212 Patent at 9:13-14.) (This is what Chuang teaches.) The section relied upon by Petitioners does not state that channel information is measured by the subscriber unit. The ‘212 Patent does not state and does not acknowledge that it is well-known in the art that a subscriber unit measures “channel and interference information” for a “plurality of subcarriers based on pilot symbols received from” a base station, as recited in claims 1 and 18.

Conclusion – Patent Owner requests that the Rehearing Req. be denied.

Respectfully submitted,

Dated: July 29, 2015

/Amedeo F. Ferraro/
Amedeo F. Ferraro
Registration No. 37,129
Attorney for Patent Owner
MARTIN & FERRARO, LLP
17383 Sunset Boulevard, Suite 250
Los Angeles, California 90272
Telephone: (310) 286-9800
Facsimile: (310) 286-2795

The undersigned hereby certifies that copies of the PATENT OWNER
OPPOSITION TO PETITIONERS' REQUEST FOR REHEARING were served
in their entirety via electronic mail, upon the following counsel of record for
Petitioners:

Jared W. Newton
(Registration No. 65,818)
Quinn, Emanuel, Urquhart & Sullivan, LLP
777 6th Street NW, 11th Floor
Washington, D.C. 20001
General Tel: (202) 538-8000
Direct Tel: (202) 538-8108
Fax: (202) 538-8100
Email: jarednewton@quinnemanuel.com

Date of Service: July 29, 2015

Signature: /Amedeo F. Ferraro/
Amedeo F. Ferraro, Reg. No. 37,129