

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS INC.,
Petitioner,

v.

HYBRID AUDIO, LLC
Patent Owner.

Case IPR2016-01265
Patent RE40,281

Before GEORGIANNA W. BRADEN, MATTHEW R. CLEMENTS, and
MONICA S. ULLAGADDI, *Administrative Patent Judges*.

ULLAGADDI, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

Unified Patents Inc. (“Petitioner”) filed a request for rehearing (Paper 8, “Reh’g Req.”) of our Decision Denying Institution (Paper 7, “Dec.”). Petitioner requests that we reconsider our decision to deny institution of *inter partes* review with respect to claims 5, 12, 18, 26, 34, 41, 48, 57, 66, 71, 83, 90, 95, 100, 107, 112, 114, 116, and 120 (“the challenged claims”) and our determination that Petitioner had not demonstrated a reasonable likelihood of prevailing in showing that the challenged claims of U.S. Patent No. RE40,281 (Ex. 1001, “the ’281 patent”) would have been obvious over various combinations of Jones, Adelson, and Veldhuis. For the reasons set forth below, the request is denied.

II. STANDARD OF REVIEW

Under 37 C.F.R. § 42.71(c), “[w]hen rehearing a decision on petition, a panel will review the decision for an abuse of discretion.” An abuse of discretion occurs when a “decision was based on an erroneous conclusion of law or clearly erroneous factual findings, or . . . a clear error of judgment.” *PPG Indus., Inc. v. Celanese Polymer Specialties Co.*, 840 F.2d 1565, 1567 (Fed. Cir. 1988) (citations omitted). The burdens and requirements of a request for rehearing are stated in 37 C.F.R. § 42.71(d):

(d) *Rehearing.* . . . The burden of showing a decision should be modified lies with the party challenging the decision. The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.

III. ANALYSIS

A. Whether We Overlooked Teachings of Non-QMF Filters in Jones and Adelson

Petitioner contends that we “overlooked that the prior art is not limited to QMF filters [quadrature mirror filters].” Reh’g. Req. 2 (emphasis omitted). First, Petitioner argues that Jones refers to its low pass filters (LPFs) and high pass filters (HPFs) generically, and only mentions that the filters *can be* QMF filters. *Id.* (citing Ex. 1004, 3:9–22, Figs. 13, 15, 17). Second, Petitioner makes a similar argument with respect to Adelson by pointing us to a discussion of “separable two-dimensional spatial filtering” and “non-separable two-dimensional spatial filtering” and arguing that “non-separable two-dimensional filters must be made to ‘operate as quadrature mirror filters.’” *Id.* at 3–4 (citing Ex. 1005, 4:6–19). Petitioner asserts that “since a two-dimensional filter must be made to *operate* as a QMF filter, it is not by default a QMF filter.” *Id.* at 4.

For the “filter bank” and “plurality of filters” claim limitation, the Petition cites column 3 of Jones, which discloses that, “[i]n subband coding, the original image X is decomposed into a number of overlapping frequency bands, *generally* by using a set of 1-D lowpass (LPF) and highpass (HPF) quadrature mirror filters (QMFs).” Ex. 1004, 3:9–22 (emphasis added); Pet. 25–26. As an initial matter, we disagree that the word “generally” implies that another type of filter (i.e., other than a QMF filter) could or would be employed with the disclosed decomposition method and the disclosed high pass and low pass filtering. *See* Ex. 1004, 3:9–22. “Generally” could also be interpreted to mean that a set of QMFs other than a set of 1-D lowpass and highpass filters could be used.

More importantly, Petitioner did not argue in the Petition that the filters taught in Jones are anything other than QMF filters. The Rehearing Request “must

specifically identify all matters the party believes the Board misapprehended or overlooked, and *the place where each matter was previously addressed* in a motion, an opposition, or a reply.” 37 C.F.R. § 42.71(d) (emphasis added). We could not have overlooked or misapprehended this argument because it was not made in the Petition.

We also could not have overlooked or misapprehended Petitioner’s second argument regarding separable and non-separable spatial filtering in Adelson because it also was not made in the Petition. Tellingly, the Request for Rehearing does not cite anywhere in the Petition where this argument was raised. *See id.* Accordingly, we are not persuaded that we misapprehended or overlooked Adelson’s teachings of filters other than QMF filters. *See id.*

B. Whether “filter” includes QMF filters

Petitioner argues “that a filter is a QMF filter does not preclude it from also being an FIR filter, as the Board mistakenly concluded.” Reh’g. Req. 6–7. As a result, according to Petitioner, “even if Jones was limited to QMF filters, its disclosure of QMF filters includes FIR [Finite Impulse Response] QMF filters.” *Id.* at 1–2. In support of this contention, Petitioner cites Exhibits 1009 through 1016. *See id.* at 5–7.

As an initial matter, we could not have overlooked or misapprehended Petitioner’s arguments that a person of ordinary skill in the art would have understood the QMF filters in Jones to be FIR filters because it was not made in the Petition. Exhibits 1010 through 1016 were not even filed by Petitioner until after our Decision Denying Institution and are discussed for the first time in Petitioner’s Rehearing Request. *See* 37 C.F.R. § 42.71(d). As a result, we are not persuaded that we misapprehended or overlooked Petitioner’s arguments and

evidence when we determined that the term “filter,” in the context of the ’281 patent and its prosecution history, excludes QMF filters. *See id.*

Moreover, even assuming that a QMF filter may be an IIR QMF filter or an FIR QMF filter, as Petitioner argues, we still would not be persuaded that a QMF FIR filter would teach or suggest the recited “filter” or “filters” in the challenged claims. When construing “filter” in our Decision Denying Institution, we noted that the ’281 patent discloses that “filter ban[k]s with large numbers of levels are to be avoided” and that “filter banks based on QMF filters which divide the signal into two bandlimited signals require large numbers of levels.” Dec. 10 (quoting Ex. 1001, 4:37–39). We further noted that “the ’281 patent discloses that the inventive decomposition ‘is carried out with only two levels of filters, and hence, avoids the aliasing problems inherent in QMF filter banks that require many levels,’ which become significant when there are more than four levels of filters.” *Id.* (quoting Ex. 1001, 11:25–31). Based on the foregoing, we construed “filter” to exclude QMF filters and determined that Petitioner did not establish sufficiently that Jones, Adelson, and Veldhuis, either singularly or in combination, disclose or suggest anything other than QMF filters. *Id.*

As a result, even assuming that Jones’ filter was both a QMF and an FIR filter, as Petitioner contends, it would still not be a “filter” under our construction because it would be a QMF filter.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Patent Owner’s request for rehearing is *denied*.

IPR2016-01265
Patent RE40,281

FOR PETITIONER:

James D. Stein
P. Andrew Riley
Ryan H. Ellis
David C. Seastrunk
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP
James.stein@finnegan.com
Hybridaudio-IPR@finnegan.com

Jonathan Stroud
UNIFIED PATENTS INC.
jonathan@unifiedpatents.com

FOR PATENT OWNER:

Jason Vick
Tadd Wilson
David Kellis
SHERIDAN ROSS, PC
jvick@sheridanross.com
twilson@sheridanross.com
dkellis@sheridanross.com