

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.
Petitioner

v.

VIRGINIA INNOVATION SCIENCES, INC.
Patent Owner

Case IPR2013-00572
Patent 7,899,492

Before MICHAEL W. KIM, BRIAN J. McNAMARA, and
MATTHEW R. CLEMENTS, *Administrative Patent Judges*.

CLEMENTS, *Administrative Patent Judge*.

DECISION
ON REQUEST FOR REHEARING
37 C.F.R. § 42.71

I. INTRODUCTION

On April 4, 2014, Samsung Electronics Co., Ltd. (“Petitioner”) filed a request for rehearing (Paper 16, “Req.”) of the Board decision (Paper 15, “Dec.”), dated March 6, 2014, denying institution of *inter partes* review of claims 23, 24, 26, and 33 of Virginia Innovation Sciences’ (“Patent Owner”) U.S. Patent No. 7,899,492 (Ex. 1001, “the ’492 patent”). The Board denied *inter partes* review of (1) claims 23, 24, and 33 under 35 U.S.C. § 102 as anticipated by Palin; (2) claim 26 under 35 U.S.C. § 103 as obvious over Palin and Hayakawa; and (3) claim 33 under 35 U.S.C. § 103 as obvious over Palin and Seaman. Dec. 11-18. Petitioner seeks reconsideration of the decision to deny institution on the following grounds:

1. Claims 23, 24, and 33 under 35 U.S.C. § 102 as anticipated by Palin;
2. Claim 26 under 35 U.S.C. § 103 as obvious over Palin and Hayakawa; and
3. Claim 33 under 35 U.S.C. § 103 as obvious over Palin and Seaman.

For the reasons set forth below, the request for rehearing is *denied*.

II. STANDARD OF REVIEW

When rehearing a decision on institution, the Board will review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c). An abuse of discretion may be determined 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. *Star Fruits S.N.C. v. U.S.*, 393 F.3d 1277, 1281 (Fed. Cir. 2005); *Arnold P'ship v. Dudas*, 362 F.3d 1338, 1340 (Fed. Cir. 2004); and *In re Gartside*, 203 F.3d 1305, 1315-16 (Fed. Cir. 2000). The request must identify, with specificity, all matters that the moving party believes the Board misapprehended or overlooked. 37 C.F.R. § 42.71(d).

III. DISCUSSION

Petitioner argues that the Board erred by (1) applying claim 23's conversion requirement to the wrong signal of Palin (Ex. 1002); (2) misinterpreting claim 23's conversion requirement; and (3) not applying the broadest reasonable construction of the term "converting." Req. 1-2.

A. *Claim Construction*

Petitioner argues that the Board adopted an unreasonably narrow construction of "conversion." Req. 11-12. Specifically, Petitioner argues that the Board's construction is narrower than the construction adopted by the District Court in the co-pending litigation. *Id.* In construing "converted video signal" to have its plain and ordinary meaning, the District Court determined that it required "only a change to the video signal identified at the beginning of the claim," and not "a change to the underlying video content." Ex. 1009 at 42; *id.* at 38-52. Petitioner argues that the Board construed "convert" to mean "to change the representation of data from one form to another" on the basis of extrinsic evidence (an IEEE Dictionary), and that the construction was unreasonably narrow because it "would not encompass many changes to the video signal that fall within the District Court's construction, such as changing signal strength." Req. 12.

We disagree. The Board’s reference to the IEEE Dictionary definition of “convert” was an example of the plain and ordinary meaning that a person of ordinary skill in the art would have attributed to that term, not a construction of the claim term “converting.” The ordinary and customary meaning of a term may be evidenced by a variety of sources, including “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*). Thus, the Board, like the District Court, gave the term “convert” its plain and ordinary meaning. We are not persuaded that the Board erred by relying on the IEEE Dictionary definition of “convert” to determine the plain and ordinary meaning of “converting.”

Moreover, Petitioner’s emphasis on “converting” ignores the remaining language of the claim limitation. Claim 23 recites more than merely “converting.” The pertinent limitation of claim 23 requires:

wherein processing by the signal conversion module includes converting the video signal *from a compression format appropriate for the mobile terminal to a display format for the alternative display terminal that is different from the compression format*, such that *the converted video signal comprises a display format and a power level appropriate for driving the alternative display terminal*

(Emphasis added.) Even assuming that “converting” alone encompasses any change to the video signal, the remainder of the claim expressly limits the type of change required. The District Court recognized these very

limitations when construing this limitation as a whole—as opposed to the term “converted video signal” in isolation—for purposes of deciding summary judgment:

In examining this claim language, it is clear that decompression is encompassed by the language of claim 23 and, thus, its dependent claims as well. It might be argued that a format different from the first compression format could simply constitute a different compression format, achievable through the performance of a process referred to as “transcoding” by an encoder. However, the requirement that it be in a display format after conversion seems to indicate otherwise as evidence has been presented indicating that a video must be decompressed before it may be displayed. Mem. In Opp., Ex. A at f 14, ECF. No. 163. Specifically, the evidence before the Court indicates that *a video in a display format must be uncompressed*, and the Court finds this evidence compelling.

Ex. 2006 at 20 (emphasis added); *id.* at 19-22. Thus, the District Court did not construe the limitation as a whole to encompass every change to the video signal, as Petitioner suggests. Rather, the District Court construed the limitation to require a specific type of change: decompression of the video signal into an uncompressed format. *Id.* Accordingly, we are not persuaded by Petitioner’s argument that the Board’s construction is narrower than the construction adopted by the District Court.

B. The Board’s Application of Palin to Claim 23

Petitioner argues that (1) in claim 23, the antecedent basis for “the video signal” that is “convert[ed] . . . from a compression format appropriate for the mobile terminal to a display format for the alternative display terminal that is different from the compression format,” is the “video signal”

received by the interface module; (2) the “video signal” received in Palin is the *entire* signal shown in Figure 4(a) or 4(b) of Palin; (3) the *entire* signal shown in Figure 4(a) or 4(b) of Palin is “appropriate for displaying a video content on a mobile terminal,” as recited in the first limitation of claim 23; and (4) the *entire* signal shown in Figure 4(a) or 4(b) of Palin is “convert[ed]” to “a TV-only signal [] different from the mixed signal of the compressed received video signal” (Req. 9). Req. 2-10. Petitioner further argues that, “[i]t cannot be disputed that changing a packet of data having a data frame structure with both a mobile terminal part and a TV receiver part to a packet that has a data frame structure with only a TV part constitutes changing the representation of data from one form to another.” Req. 9-10.

In our decision, we acknowledged that Palin discloses that the packet depicted in Figure 4(a) or 4(b) is split into mobile terminal part 54 and external display device part 56 (*see, e.g.*, Ex. 1002, 5:44-48). We explained, however, that we are not persuaded that such splitting “convert[s] the video signal *from a compression format appropriate for the mobile terminal to a display format for the alternative display terminal that is different from the compression format,*” as recited in claim 23 (emphasis added). Dec. 14-16.

As we noted in our decision:

Even assuming that the format of the video signal contained in external display device parts 56 is in “a compression format appropriate for the mobile terminal,” the video signal is not “converted” because external display device parts 56 output to external display device 30 *are the same* external display device parts 56 received by mobile terminal 20. . . . Indeed, the specification differentiates repeatedly between converting signal formats and routing via a communications protocol. Ex.

1001, col. 3, ll. 33-46, col. 21, ll. 33-40, col. 26, ll. 28-32 and 59-63, col. 27, ll. 1-16. When this definition is applied to Palin, even after splitting, the first display device part(s) and second display device part(s) of Palin **retain their original form** such that they can still be displayed on their respective devices. The same analysis applies if Petitioner is attempting to assert that reassembling one or more external display device parts 56 into one or more Bluetooth-compliant packets corresponds to the recited converting. Thus, splitting application 218 does not “convert[] the video signal from a compression format appropriate for the mobile terminal”—**i.e., the format of the video signal in external display device parts 56**—“to a display format for the alternative display terminal that is different from the compression format,” as required by claim 23.

Dec. 15-16 (emphasis added).

Petitioner now argues that, “the compression format of [the packet depicted in Figure 4(a) or 4(b)] is mixed and includes both mobile terminal and external display components,” and that “[t]he display format of [external display device part 56] . . . includes only an external display component.” Req. 9. Petitioner did not make this argument in the Petition. We cannot have overlooked or misapprehended an argument that was not presented in the Petition.

Moreover, Petitioner’s argument necessarily implies that external display device part 56 is in “a display format that is different from the compression format, such that the converted video signal comprises a display format and a power level appropriate for driving the alternative display terminal,” and merely needs to be split from mobile terminal part 54 in order to become the recited “converted video signal.” However, that argument contradicts Petitioner’s previous contention that, “one of skill in

the art would understand that the transmission of video over a cellular network must inherently be compressed due to the limited bandwidth of cellular networks.” Pet. 14. We agree with Petitioner’s contention that one of ordinary skill in the art would understand the video data received over a cellular network to be in a compressed format. Thus, one of ordinary skill in the art would understand the video in Palin’s mobile terminal part 54 and external display device part 56 to be compressed. Because the video data in external display device part 56 is compressed, it is not in “a display format that is different from the compression format, such that the converted video signal comprises a display format and a power level appropriate for driving the alternative display terminal,” which requires an uncompressed format. Moreover, we are persuaded that one of ordinary skill in the art would expect it to remain compressed when Palin re-transmits it via Bluetooth. Prelim. Resp. 18 (“[O]ne of ordinary skill in the art would expect the same data to remain compressed as it is transmitted via Bluetooth,” because “the bandwidth of Bluetooth is not suitable for the transmission of uncompressed video data.”).

We note that the District Court reached the same conclusion with respect to claim 23 and Palin:

However *due to the constraints of Bluetooth connections as already discussed, that decompression must take place after the video is transmitted in a compressed format via a Bluetooth connection to the television.* In the asserted claims of the '492 and '711 patents, however, the decompression occurs during conversion at the mobile terminal, prior to transmission of the video signal to the alternative display terminal. Thus, while **Palin** does inherently disclose

decompression, it *does not disclose decompression as an element of the conversion of the video signal at the mobile terminal.*

The Court concludes that Palin does not teach decompression at the mobile terminal prior to sending the signal to the television, as is required by the asserted claims of the '492 and '711 patents.

Ex. 2006 at 32-33 (emphasis added).

For the foregoing reasons, Petitioner has not shown that the Board abused its discretion in not instituting *inter partes* review of independent claim 23. Because dependent claims 24, 26, and 33 depend from claim 23, Petitioner has also not shown that the Board abused its discretion in not instituting review of dependent claims 24, 26, and 33.

IV. CONCLUSION

Petitioner's request for rehearing is *denied*.

For PETITIONER:

Joseph S. Presta
Updeep S. Gill
Nixon & Vanderhye, P.C.
jsp@nixonvan.com
usg@nixonvan.com

For PATENT OWNER

D. Richard Anderson
George S. Dolina
Birch, Stewart, Kolasch & Birch, LLP
dra@bskb.com
gsd@bskb.com