

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,

Petitioner,

v.

SCALE VIDEO CODING LLC

Patent Owner.

Case IPR2024-01371

U.S. Patent No. 11,019,372

**PATENT OWNER'S SUR-REPLY IN SUPPORT OF
PATENT OWNER'S PRELIMINARY RESPONSE**

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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I. “IDENTIFYING BANDWIDTH-LIMITED CONDITIONS”

Cisco’s only argument for this term relies on a misapprehension of the claim language and misstates PO’s positions in district court.

First, Cisco mischaracterizes PO’s statements made during a combined Rule 12 and *Markman* hearing in the parallel district court proceeding. During claim construction, neither party argued for a specific construction of this term. Cisco argued it was indefinite, while PO argued that the term should be understood according to its plain and ordinary meaning. (EX1023 91:23-93:7; 109:15-113:13; *see also* EX1010 at 1-6.) Prior to the *Markman* hearing, the Court had tentatively found, (*see* EX1023 90:23-91:9), that no challenged terms were indefinite and the terms were all entitled to their plain and ordinary meaning. Cisco fails to identify any inconsistent positions allegedly taken by PO during the *Markman* hearing.

Instead, Cisco cites portions of the transcript from the **separate** Rule 12 (Section 101) hearing held on the same day. (EX1023 3:13-4:4.) There, PO’s counsel specifically addressed differences between claims 1 and 4, to describe the inventive concept within each claim. (*Id.* 28:25-33:23.) PO explained that “selective forwarding” could, in one instance, be based on receiving a “retransmission request” (as recited by claim 4), which “inform[s] the router that there was some issue receiving certain packets and the receiver would like some packets to be received again.” (*Id.* 32:13-22.) PO clarified that even in this scenario, a retransmission request is used in the router’s “own analysis of

bandwidth conditions,” because the router “internally maintains an average of packet loss to determine what is acceptable for the . . . desired quality level or the desired resolution.” (*Id.* 32:23-33:23.)

Importantly, PO did **not** take the position, as Cisco suggests, that merely **receiving** “feedback information” from a receiver, without more, satisfies this limitation. Rather, PO has repeatedly maintained that this limitation requires an affirmative “identifying” step by the claimed video router (or scalable video coding router). (POPR at 21, citing EX1001, Fig. 8A; 22:15-25; *see also* EX1023 at 33:18-23; EX1010 at 1-3.) Specifically, the claims require that the video router must act on any received feedback (such as a retransmission request) to “identify bandwidth-limited conditions,” **then** selectively forward one or more enhancement layers **based on** the identified bandwidth-limited conditions. (EX1023 30:22-31:18.) Passively receiving “feedback information” is therefore not sufficient.¹

Second, the surrounding claim language requires that the step of “identifying bandwidth-limited conditions” be performed **by the claimed video router** (claims 1 and 6) or scalable video coding router (claim 11). During the Rule 12 hearing,

¹ Nor is any generic “feedback information” itself sufficient. The specific scenario that PO described relates to a retransmission request. Cisco does not argue that Shao-028 teaches retransmission requests, or that any of its arguments in the Petition are based on retransmission requests.

PO's counsel argued precisely this point in explaining why the use of such a specialized router was itself inventive under *Alice* step two. (EX1023 37:11-41:16.) In both the Petition and Reply, Cisco overlooks this plain language and argues instead that functionality in "end systems" or elsewhere in the network can nevertheless be imputed to the claimed "video router." (Rep. at 1; *see generally* POPR at 20-22.) But Cisco fails to identify any actual evidence (including expert opinion) to support this theory; and as set forth above, its characterizations of PO's statements during a Rule 12 hearing for this purpose are misplaced.

Cisco's footnote that its Petition sufficiently identifies teachings in Shao-028 for this limitation further confuses the issue. (Rep. at 2 n.1.) PO has already explained why *under Cisco's own understanding* of this term,² Cisco fails to meet its burden. (*See, e.g.*, POPR at 16-30, 51.) But even under Cisco's new position that receiving feedback from a receiver amounts to "*identifying*" bandwidth-limited conditions, the Petition does not describe what, if any, "bandwidth-limited conditions" are identified based on "feedback" in Shao-028. (*See* POPR at 30.) Nor does the Petition describe how any selective forwarding is "based on the identified bandwidth-limited conditions," as the claims require. (*See* POPR at 40-42.) Therefore, even if the Board were to credit Cisco's untimely claim

² As explained in the POPR, PO does not disagree with Cisco that "identifying" requires "recognizing" or "determining." (*See* Pet. at 23; POPR at 16.)

construction arguments, the Petition remains fatally deficient.

II. CISCO'S "LAYER" ARGUMENTS ARE A RED HERRING

Cisco's new arguments, couched as "claim construction" arguments, are misleading and, in any event, fail on the merits. First, Cisco asserts that PO imported a meaning of the "layer" terms from "Annex G to the H.264 standard." (Rep. at 3 n.3.) Not so. The POPR does not reference Annex G at all. Rather, the POPR explains that "SVC" refers to "scalable video coding," the *technology* described and claimed by the '372 patent itself. (See POPR at 3-5.) Therefore, even to the extent PO described "SVC" layers in the POPR, PO was referring to the intrinsic evidence, not extrinsic information.

Cisco is likewise wrong in suggesting that "SVC" introduced a new meaning of "base layer" or "enhancement layer" beyond the scope of the intrinsic evidence. As evidenced by the prior art cited during prosecution, the "layer" terms were well understood by a POSITA at the time of the inventions of the '372 patent. See *V-Formation, Inc. v. Bennetton Group SPA, et al.*, 401 F.3d 1307, 1311-12 (Fed. Cir. 2005) (prior art cited in a patent or cited in the prosecution history constitutes intrinsic evidence). For example, the prosecution history includes several references to video "layers," including "base layers" and "enhancement layers," in the then-conventional video compression and encoding technologies. (See, e.g., EX1002 at 145-47 (reference discussing video-layered solution with base and enhancement layers), 598-604; see generally EX1001 at 3-5.) Cisco's expert

himself cited similar sources in opining on the meaning of the “layer” terms consistently with the intrinsic evidence. (EX1003 ¶¶ 43-46, citing EX1015.) Indeed, PO’s expert and Cisco’s expert applied the same understanding of these terms in analyzing the prior art. (*Compare, e.g.*, EX2001 ¶¶ 107-11, 127-28, with EX1003 ¶¶ 43-46, 125, 139.)

While the specification generally describes “layers” as having unique “priority values,” (EX1001 21:25-67, 30:41-44), a “priority value” alone does not sufficiently distinguish a “**base** layer” from an “**enhancement** layer.” Rather, as Cisco’s expert and PO’s expert both recognize, base layers and enhancement layers are also qualitatively different and serve different purposes in a scalable video stream. (EX1003 ¶¶ 43-46, citing EX1015; EX2001 ¶¶ 32-35.) It is under this agreed understanding that PO’s expert rightly demonstrated Shao-028 does not teach (i) forwarding a base layer, because, unlike in a scalable video stream, information within each “base layer” of Shao-028 is associated with multiple priorities and is therefore not all “forwarded” (*see* POPR at 31-35); and (ii) selectively forwarding one or more enhancement layers, because, unlike in a scalable video stream, Shao-028 does not assign any priority levels to enhancement layers and therefore does not teach forwarding at least one. (*See* POPR at 36-40). On the other hand, Cisco’s arguments, which now deviate from its expert’s opinions, improperly read the terms “base” and “enhancement” out of the claims.

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on January 31, 2025, the foregoing document is being served via electronic mail upon the following counsel of record for Petitioner:

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