

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

FULLVIEW, INC.,
Plaintiff-Appellee

v.

POLYCOM, INC.,
Defendant-Appellant

2023-1201

Appeal from the United States District Court for the Northern District of California in No. 3:18-cv-00510-EMC, Judge Edward M. Chen.

Decided: April 29, 2024

BRUCE JOSHUA WECKER, Hausfeld LLP, San Francisco, CA, argued for plaintiff-appellee.

KELLY CATHERINE HUNSAKER, Winston & Strawn LLP, Redwood City, CA, argued for defendant-appellant. Also represented by DAVID DALKE, Los Angeles, CA; SAMANTHA MAXFIELD LERNER, Chicago, IL; EIMERIC REIG-PLESSIS, San Francisco, CA.

Before DYK, CLEVINGER, and CHEN, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* CHEN.

Opinion dissenting in part and concurring in part filed by
Circuit Judge DYK.

CHEN, *Circuit Judge*.

FullView, Inc. (FullView) filed suit against Polycom, Inc. (Polycom) in the United States District Court for the Northern District of California, alleging Polycom infringed U.S. Patent No. 6,128,143 ('143 patent). The district court granted FullView's motions for summary judgment of non-obviousness and infringement and denied Polycom's cross-motions for summary judgment of obviousness and noninfringement. Polycom appeals both the grants and denials of these motions. As to validity, because Polycom's obviousness evidence raises genuine disputes of material fact, we *reverse* the grant of summary judgment of nonobviousness for FullView and *affirm* the denial of Polycom's motion for summary judgment of obviousness. As to infringement, because the district court correctly construed the claims and because we are otherwise unpersuaded that Polycom has raised a genuine dispute of material fact as to literal infringement, we *affirm* both the grant of summary judgment of infringement for FullView and the denial of Polycom's motion for summary judgment of noninfringement.

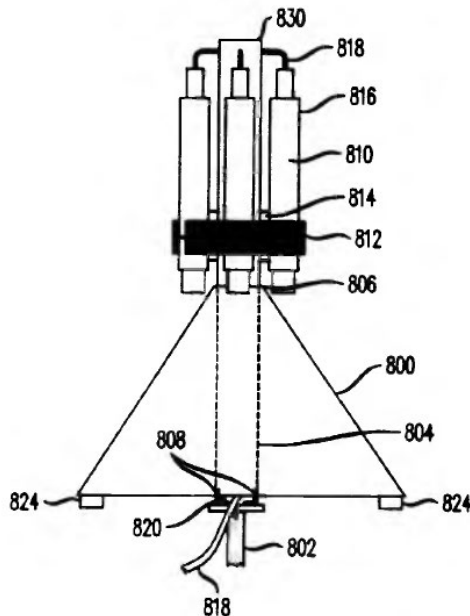
BACKGROUND

The '143 patent, owned by FullView, is titled "Panoramic Viewing System with Support Stand." The invention relates to a panoramic viewing system including several cameras directed toward a pyramid-shaped mirror, which redirects the field of view of each camera to capture a panoramic view or a 360-view of an area around the viewing system. '143 patent col. 1 ll. 26–27, col. 3 ll. 53–57, col. 4 ll. 3–10. The viewing system permits a remote user to view the area. *Id.* col. 1 ll. 30–41. The cameras are precisely positioned relative to the pyramid-shaped mirror so that

the cameras have common or nearly common virtual optical centers within the pyramid-shaped mirror. *Id.* col. 3 l. 53 –col. 4 l. 37.

Figure 17 (reproduced below) of the '143 patent illustrates an example of such a panoramic viewing system in which the cameras and the pyramid-shaped mirror are securely positioned. *Id.* col. 11 ll. 54–65. In this example, a reflective pyramid 800 and cameras 810 are secured to a hollow tube 804 (i.e., a support member). *Id.* col. 11 ll. 55–65. To mount the cameras 810 to the tube 804 in a secure manner, a strap or belt 812 presses the cameras 810 against a spacer 814 between the cameras 810 and the tube 804. *Id.* col. 11 ll. 60–65. Video and power cables for the cameras 810 can be routed through the length of the tube 804 and out through a space at the bottom of the tube 804. *Id.* col. 11 l. 67 – col. 12 l. 3.

FIG. 17



'143 patent FIG. 17.

The issues in this appeal deal with independent claim 10, which recites:

10. A panoramic viewing apparatus, comprising:

plurality of image processing devices, each having an optical center and a field of view;

a pyramid shaped element having a plurality of reflective side facets facing in different directions,

each of at least two of the plurality of reflective side facets redirecting a field of view of one of the plurality of image processing devices to create a plurality of virtual optical centers; and

a support member intersecting an inner volume of the pyramid shaped element, the pyramid shaped element being secured to the support member and the plurality of image processing devices being secured to the support member.

Id. at claim 10 (emphases added). The emphasized limitations “a support member intersecting an inner volume of the pyramid shaped element” and “the plurality of image processing devices being secured to the support member” concern the obviousness and infringement disputes on appeal, respectively.

FullView’s operative complaint accused Polycom of selling a line of videoconferencing products (Accused Products) that infringe independent claim 10 and dependent claims 11–12 of the ’143 patent. In response, Polycom alleged that the claims were invalid as obvious. Over the course of litigation, the parties cross-moved for summary judgment as to both infringement and validity. On both issues, FullView prevailed, with the district court granting summary judgment of infringement and validity and denying Polycom’s cross-motions. *FullView, Inc. v. Polycom, Inc.*, 635 F. Supp. 3d 917, 920 (N.D. Cal. 2022) (*Infringement Order*); *FullView, Inc. v. Polycom, Inc.*, No. 18-cv-

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00510, 2022 WL 836302, at *1 (N.D. Cal. Mar. 21, 2022) (*Obviousness Order*).

Polycom appeals. We have jurisdiction under 28 U.S.C. § 1292(c)(2). *Robert Bosch, LLC v. Pylon Mfg. Corp.*, 719 F.3d 1305, 1317 (Fed. Cir. 2013) (en banc).

STANDARD OF REVIEW

We review the district court’s grants of summary judgment under the law of the regional circuit—here, the Ninth Circuit. *Adasa Inc. v. Avery Dennison Corp.*, 55 F.4th 900, 907 (Fed. Cir. 2022), *cert. denied*, 143 S. Ct. 2561 (2023). The Ninth Circuit “review[s] the district court’s grant of summary judgment de novo, determining whether, viewing all evidence in the light most favorable to the nonmoving party, there are any genuine issues of material fact and whether the district court correctly applied the relevant substantive law.” *Id.* (alteration in original) (quoting *Kraus v. Presidio Tr. Facilities Div./Residential Mgmt. Branch*, 572 F.3d 1039, 1043–44 (9th Cir. 2009)).

DISCUSSION

I. Obviousness

Obviousness is a legal question with underlying factual inquiries. *Ivera Med. Corp. v. Hospira, Inc.*, 801 F.3d 1336, 1344 (Fed. Cir. 2015). “Determining whether one of ordinary skill in the art would have been motivated to combine the teachings of different references is a flexible inquiry, and the motivation is not required to be found in any particular prior art reference.” *Id.* For example, a particular approach may be obvious to try if a design need, market pressure, or other motivation would suggest to a skilled artisan to pursue that approach. *Rolls-Royce, PLC v. United Techs. Corp.*, 603 F.3d 1325, 1339 (Fed. Cir. 2010) (citing *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007)). As the Supreme Court held in *KSR*, “[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions,” these

solutions may be obvious to try. 550 U.S. at 421. And in analyzing obviousness, we may consider common sense when explained with sufficient reasoning. *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1361 (Fed. Cir. 2016) (citing *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1328 (Fed. Cir. 2009)).

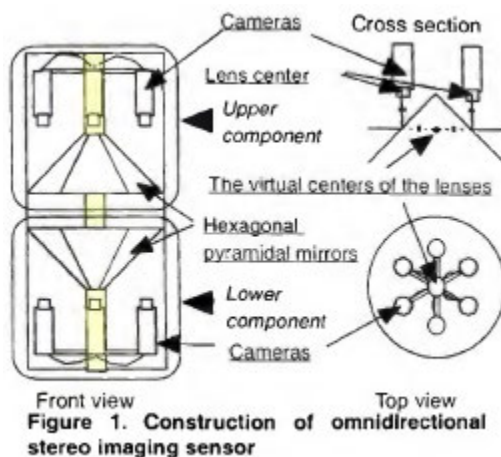
On appeal, it is undisputed that the prior art reference Yamazawa 1998¹ discloses every limitation in claim 10 except for one: “a support member intersecting an inner volume of the pyramid shaped element.” Appellant’s Br. 35–36; see Appellee’s Br. 65–66. Polycom contends there is no genuine dispute of material fact that this limitation would have been obvious to try in view of Yamazawa 1998, and, as a result, the district court should have granted summary judgment in favor of Polycom. Appellant’s Br. 43. In the alternative, Polycom argues that the record reveals at least two triable disputes of fact: (1) whether Yamazawa 1998’s Figure 1 suggests the possibility of a single contiguous support member that satisfies the “intersecting” limitation, and (2) whether Polycom’s expert testimony as to the known benefits and simplicity of using a contiguous support member would have motivated a skilled artisan to modify Figure 1 to arrive at the claimed “intersecting” limitation. *Id.* at 50–60. While the district court did not err in denying Polycom’s motion for summary judgment of obviousness, we find the district court erred in granting FullView’s motion for summary judgment of nonobviousness because material factual disputes as to whether the “intersecting” limitation would have been obvious to try or

¹ Takahito Kawanishi & Kuzamasa Yamazawa et al., *Generation of High-resolution Stereo Panoramic Images by Omnidirectional Imaging Sensor Using Hexagonal Pyramidal Mirrors*, in PROCS.: FOURTEENTH INT’L CONF. ON PATTERN RECOGNITION (Anil K. Jain et al. eds., Aug. 16–20, 1998) (Yamazawa 1998).

obvious as a matter of common sense preclude summary judgment.

First, Polycom raised a genuine dispute of material fact as to whether a skilled artisan would have found a contiguous support member to be one of a finite number of identified, predictable solutions to a design need or problem and hence obvious to try in Yamazawa 1997² and Yamazawa 1998 (collectively referred to as the Yamazawa references). Relying primarily on the contents of Figure 1 in Yamazawa 1997 and Figure 1 in Yamazawa 1998 (reproduced below), the district court found the Yamazawa references affirmatively teach the *absence* of the “intersecting” limitation. *Obviousness Order*, 2022 WL 836302, at *8–9. These figures differ from one another only in that the English translation of Yamazawa 1997 captioned the left panel of Figure 1 as a “cross-sectional view,” while Yamazawa 1998 captioned the left panel of Figure 1 as a “front view.”

² Kazumasa Yamazawa et al., *High-Resolution Omnidirectional Stereo Imaging Using Pyramidal Mirror*, 1997 GEN. CONF. INST. ELECS., INFO. & COMMC’N ENG’RS 353 (Yamazawa 1997).



J.A. 2701 (yellow coloring added by Polycom).

Though we agree with the district court that Yamazawa 1998's Figure 1 "clearly does *not* show" the "intersecting" limitation, we believe the district court erred in finding that the Yamazawa references "demonstrate the *absence* of the claimed intersection." *Id.* at *9 (emphasis in original). The district court appears to have accepted as true that the left panel depicts a cross-sectional view and thereby reveals that an interior of the apparatus in the Yamazawa references lacks a contiguous support member extending through the pyramidal mirrors. *See id.* at *6, *9. The district court credited testimony from FullView's expert, Dr. Vishjit S. Nalwa, that "if a 'cross section' does not show something, that something is necessarily absent." *Id.* at *9 (quoting J.A. 3005). Polycom genuinely disputed this determination by countering with its own expert testimony that the correct caption for the left panel should be "side view" or "front view." J.A. 2912. In any event, whether the structure is absent in the Yamazawa references or just not shown to be present does not control the obviousness analysis. In either event, the question is whether it was obvious to provide a contiguous support structure in Yamazawa. We note that the mere absence of a claimed structure in a prior art reference is not a teaching away. A reasonable

juror could conclude that Yamazawa 1998's disclosure leaves open the possibility that a configuration with such a contiguous support member—a configuration FullView does not dispute would result in the “intersecting” limitation, *see* Appellee's Br. 45—could be one of a finite number of identified, predictable solutions to implement Yamazawa's apparatus.

And Polycom indeed raises a genuine dispute of material fact as to whether a skilled artisan would have found using a contiguous support member in Yamazawa 1998 to be one of a finite number of predictable solutions to a design need, even if Yamazawa 1998 itself does not expressly disclose a contiguous support member. As Polycom's expert, Mr. Kurtis Keller, described, Yamazawa 1998's Figure 1 shows two pyramidal mirrors secured to a vertical support member and six corresponding cameras secured to the support member above and below each mirror. J.A. 2902–03. Referring to Yamazawa 1998's Figure 2 (reproduced below), Polycom's expert explained that camera wires are routed from the top of the apparatus and through the bottom of the apparatus. *Id.* at 2902. He then named the benefits of a contiguous support structure (compared to using multiple smaller, individual support members), including: (1) “more structural rigidity to the overall device,” (2) “a conduit for the wires of the cameras to be routed from the top of the apparatus,” and (3) a “simplified” configuration. *Id.* at 2903–05. Polycom's expert also indicated that “a two- or three-part central column/pole . . . might be an option for a device that needs greater portability . . .” *Id.* at 2904. On the other hand, “[a] non-contiguous support member would not make sense from an engineering standpoint because camera cables would not be easily passed or fished through from the top to the bottom portion of the device.” *Id.* at 2903. FullView's expert, in contrast, explained that Yamazawa 1998 could be implementing a support structure in which each pyramidal mirror has an independent support member fastened to the parts of the

support structure above and below the pyramidal mirror.
J.A. 3021.



J.A. 1870 FIG. 2.

The district court found that Polycom, by not identifying any known design need or problem, failed to show that the “intersecting” limitation was obvious to try. *Obviousness Order*, 2022 WL 836302, at *9–10. We disagree. Based on Polycom’s expert testimony, we conclude there is a genuine dispute of material fact as to whether a contiguous support member was a variant that would be obvious to try, given the need to provide an adequate support structure for the apparatus. Both parties agree that Yamazawa 1998 shows a support structure (i.e., the three vertically aligned yellow sections visible in Yamazawa 1998’s Figure 1 above) for supporting the pyramidal mirrors and the cameras and disagree only as to whether it would be obvious for that support structure to form a contiguous support member, as opposed to existing as three separate, smaller pieces. Both parties likewise agree that the top and bottom of Yamazawa 1998’s support structure receive camera cables. J.A. 2901; J.A. 2964.

In view of this specific configuration taught in Yamazawa 1998 and Polycom’s expert testimony, a reasonable juror could conclude that a design need or problem existed for a support structure in Yamazawa 1998 that provides both (1) structural support for the cameras and mirrors

and (2) a conduit for the camera cables. Specifically, “[f]or a designer starting with [Yamazawa 1998], the question” could be how to provide a support structure, with the three vertically aligned sections visible in Figure 1 of Yamazawa 1998, that achieves the goals of structurally supporting the cameras and the mirrors and providing a conduit for the camera cables. *KSR*, 550 U.S. at 424. Even if Yamazawa 1998 may not expressly disclose a contiguous support structure, a reasonable juror could conclude, based on the record, a single contiguous structure and a multi-part central structure represent a finite number of identified, predictable solutions for achieving these goals. A reasonable juror therefore could have found both a single contiguous structure and a multi-part support structure to be obvious variants in the context of the teachings of Yamazawa 1998. *Cf. Uber Techs., Inc. v. X One, Inc.*, 957 F.3d 1334, 1340 (Fed. Cir. 2020) (describing that when the prior art leaves a skilled artisan with two design choices, each of the two design choices is an obvious variant).

Second, Polycom raised a genuine dispute of material fact as to whether common sense would have guided a skilled artisan to a contiguous support member in the context of Yamazawa 1998’s disclosed system. As Polycom’s expert reasoned, “a hollow, central core represents a commonsense design” and “would have been within the background knowledge, skill, and/or creativity” of a skilled artisan. J.A. 2905. Polycom’s expert furnished examples to support his reasoning. *Id.* at 2905–07. For example, the reference Horn³ describes a camera mounted on the top of an extendable shaft made up of two sections where cables from the camera can be located within the shaft. *Id.* And a common torch lamp “uses a hollow support structure to route electrical wires from the light bulbs to the floor where they can be plugged into a wall outlet.” *Id.* at 2907.

³ U.S. Patent No. 5,065,249.

By comparison, FullView’s expert asserted that “‘structural rigidity’ clearly does not require the claimed intersection or a ‘contiguous support member.’” J.A. 3020. According to FullView’s expert, a contiguous support member has disadvantages such as: (1) being “expensive to manufacture,” (2) “making assembly and transportation of the device unwieldy,” and (3) “not allow[ing] adjustment of the distance between the upper and lower camera assemblies.” *Id.*

In granting summary judgment for FullView, the district court erred in failing to acknowledge Polycom’s expert testimony. Polycom offered evidentiary support for its conclusion that a contiguous support member would be within the common sense of a skilled artisan as “the most mechanically simple construction.” *Obviousness Order*, 2022 WL 836302, at *11 (cleaned up). Polycom’s expert testimony described—with detailed reasoning based in part on prior art teachings—the benefits of and the simplicity of using a contiguous support member. *See* J.A. 2905–07. A reasonable juror could conclude, particularly given that Yamazawa 1998’s three support members are vertically aligned in Figure 1, that a contiguous support structure would have been within the knowledge of a skilled artisan as a straightforward and simple way of achieving the goals of mechanically supporting Yamazawa 1998’s cameras and pyramidal mirrors and providing a conduit for Yamazawa 1998’s camera cables. *Cf. Arendi*, 832 F.3d at 1362 (explaining that we have invoked common sense to supply a limitation missing from the prior art when “the limitation in question was unusually simple and the technology particularly straightforward”).

For these reasons, the evidence of record creates genuine disputes of material fact as to whether the “intersecting” limitation would have been obvious. The district court thus erred in granting summary judgment of nonobviousness but, for the reasons stated herein, correctly denied summary judgment of obviousness. We reverse the grant

of summary judgment and remand for further proceedings consistent with this opinion.

II. Infringement

“Whether an accused device infringes requires a two-step analysis—the court first ‘determines the scope and meaning of the patent claims asserted, and then the properly construed claims are compared to the allegedly infringing device.’” *Sound View Innovations, LLC v. Hulu, LLC*, 33 F.4th 1326, 1335 (Fed. Cir. 2022) (quoting *CommScope Techs. LLC v. Dali Wireless Inc.*, 10 F.4th 1289, 1295 (Fed. Cir. 2021)). Here, we apply the traditional claim-construction framework even though the district court construed the limitation “the plurality of image processing devices being secured to the support member” on summary judgment. *Wi-LAN USA, Inc. v. Apple Inc.*, 830 F.3d 1374, 1380–81 (Fed. Cir. 2016). The ultimate issue of claim construction is a legal question that we review de novo, with any subsidiary fact-findings on extrinsic evidence reviewed for clear error. *Id.* at 1381.

A.

The Accused Products are panoramic camera systems for videoconference applications in which several cameras are directed towards a pyramidal mirror.⁴ *Infringement Order*, 635 F. Supp. 3d at 922. For these panoramic camera systems to properly capture a panoramic image of a room, the camera systems must maintain a fixed relationship between their cameras and the mirror. *See* J.A. 3942. The Accused Products accomplish this goal by ensuring that the

⁴ Polycom does not dispute that the pyramidal mirror in the Accused Products satisfies the “pyramid shaped element being secured to the support member” limitation of claim 10.

cameras and the mirror are in a fixed relationship with a common support pole. *See* J.A. 4060.

As for the cameras, they are stabilized in relation to a central, pole-like support member by way of a few intervening structures. Specifically, a set of five camera lenses epoxied to corresponding image sensors are soldered to one side of a circuit board. *Infringement Order*, 635 F. Supp. 3d at 927. The other side of that circuit board is screwed onto a steel chassis. *Id.* In particular, the circuit board is designed with six screw holes to receive six corresponding screws that attach the circuit board to the steel chassis. *See id.*; J.A. 3947. Both the circuit board and the steel chassis are designed with a central hole to allow the support member to be inserted through them, and a nut and washer are used to attach the support member to the steel chassis. *Infringement Order*, 635 F. Supp 3d at 922, 927. Through these intervening structures, the cameras are maintained in a fixed and stable position relative to the pyramidal mirror, ensuring that the cameras do not unintentionally move out of position. As Polycom’s counsel acknowledged during the summary judgment hearing before the district court, in the Accused Products, “you have a very firm, structurally sound configuration for accomplishing [the] function” of securing the cameras compared to “using spacers and a belt [disclosed in the ’143 patent], where there’s a much greater chance of movement.” J.A. 4060.

Polycom’s noninfringement defense comes down to just one element: whether the Accused Products satisfy the limitation “the plurality of image processing devices being secured to the support member.” According to Polycom, the “image processing devices” in its products—the combination of the camera lenses and corresponding images sensors—are not “secured to the support member.” Appellant’s Br. 71. This is because, Polycom says, this limitation under a correct construction does not permit particular kinds of intervening structures to attach the “plurality

of image sensors” to the “support member.” *Id.* at 73–74. In Polycom’s view, one such impermissible intervening securing structure is the circuit board in the Accused Products, which serves to route image data and distribute power to electrical components. *Id.* In the alternative, Polycom contends that there is a triable question of fact as to whether the Accused Products literally infringe this limitation. *Id.* at 82–83. Neither argument is persuasive.

B.

We start with claim construction. The district court appears to have adopted FullView’s proposed construction, interpreting “the plurality of image processing devices being secured to the support member” to mean “fix[ing] or attach[ing] the plurality of image processing devices firmly to the support member so that [the image processing devices] cannot be moved.” J.A. 3967; *see Infringement Order*, 635 F. Supp. 3d at 927–28. As the district court explained, the “plain meaning of the term ‘secured’ allows for two objects to be fastened or attached in some way, such as with bolts and welding, without direct contact between the two objects.” *Infringement Order*, 635 F. Supp. 3d at 927. “The key to attachment or fastening,” the district court noted, “is that it does not allow movement.” *Id.* at 928. The district court concluded that the term “secured” does not “prevent[] fastening via intermediate elements like a bracket.” *Id.*

On appeal, Polycom does not dispute that the claims permit an intervening structure to attach the image processing devices to the support member. Nor, in Polycom’s view, does the claim require direct contact between the image processing devices and the support member. *See Appellant’s Reply Br.* 5; Oral Arg. at 58:20–58:24 (available at https://oralarguments.cafc.uscourts.gov/default.aspx?fl=23-1201_02092024.mp3). Polycom further agrees that an intervening structure may perform an additional function other than attaching. Oral Arg. at 34:21–34:34. And before

the district court, Polycom agreed that the combination of the circuit board, the chassis, and the nut and washer in the Accused Products “maintain[s] a fixed relationship between the [pyramidal mirror] and the image processing devices” and provides “a very firm, structurally sound configuration for accomplishing that [securing] function.” J.A. 4060.

What is in dispute is Polycom’s theory that the claims require intervening structures to be analogous to the “bolts or welding” examples mentioned by the district court or to embody the fasteners described in the ’143 patent specification—such as straps, belts, and spacers. Appellant’s Br. 73, 75–76; *see Infringement Order*, 635 F. Supp. 3d at 927. Polycom surmises that an intervening circuit board such as the one in the Accused Products does not satisfy this requirement, even though it contributes to the securing function, because the circuit board *also* “functions to route electronic data and power.” Appellant’s Br. 75–76. Moreover, during the summary judgment hearing before the district court, Polycom’s attorney asserted that a bracket would meet the “secured to” limitation, but a plate or steel chassis would not, even if that plate or chassis unquestionably secured the image processing devices to the supporting member. J.A. 4066–68, 4071–72; *see Oral Arg.* at 31:58–32:53. In other words, Polycom’s understanding of the “secured to” limitation appears to require that any intervening structures (1) are bolts, welding, straps, belts, spacers, brackets, or any analogous structures (but not plates), and (2) do not provide certain additional functions, like, for example, a power- and data-routing function. We disagree.

The crux of Polycom’s construction argument appears to be that the only intervening structures that can satisfy this limitation are ones that are traditionally understood to be securing devices, like, say, a bolt or a strap. Polycom further contends that any securing structure that also performs certain additional functions, like serve as a board for

holding electrical components (circuit board), would be disqualified from meeting the “secured to” limitation.

The intrinsic evidence does not support Polycom’s position. The claims use the broad functional term “secured to” in several places but not in a way that would impose the physical requirements pressed by Polycom. For example, independent claim 10 requires that “the pyramid shaped element [is] secured to the support member” and that the “plurality of image processing devices [are] secured to the support member.” In addition, dependent claim 11 specifies that the “plurality of image processing devices are secured to a portion of the support member extending out from the pyramid shaped element.” None of these instances, however, suggests that the term “secured to” prohibits intervening structures from performing a second function in addition to firmly fixing or attaching the image processing devices to the support member.

Polycom also criticizes the district court’s construction for failing to consider the attendant phrase “to the support member” in the claim. Appellant’s Br. 72. This criticism is unfounded. Although the district court considered the meaning of the word “secured,” it did so within the confines of determining whether two objects are considered “secured to” one another. *Infringement Order*, 635 F. Supp. 3d at 927–28. The district court declined to read into the claims a requirement for direct contact between the image processing devices and the support member. *Id.* at 928. It also chided Polycom for “offer[ing] no principled reason” for distinguishing among different configurations of intervening securing structures between the two objects, e.g., a bracket versus a plate—an observation that we share. *Id.* We thus do not believe the district court overlooked the phrase “to the support member” in claim 10.

We likewise do not believe the specification mandates Polycom’s proposed construction of the “secured to” limitation. The specification describes an example in which a

strap and spacer is used to secure cameras to a support member:

[C]ameras are mounted to tube 804 by strap or belt 812 which presses cameras 810 against spacer 814.” The pressure provided by clamp or strap 812 provides friction between camera 810, spacer 814, and the outer surface of tube 804 and thereby mounts cameras 810 to tube 804 in a secure fashion.

’143 patent col. 11 ll. 60–65. While the specification discloses this lone example for securing the cameras to the tube, nothing in the specification forbids intervening securing structures from performing another function in order for the cameras to be considered “secured to” the tube. We therefore conclude that the intrinsic evidence does not require intervening structures to be analogous to particular components, like bolts, welding, straps, belts, spacers, and the like, as urged by Polycom, and does not exclude intervening securing structures that perform an additional function.

Furthermore, we see no clear error in the district court’s use of extrinsic evidence. The dictionary definitions of “secure” relied on by the district court (“to attach or fasten something so that it does not move” and “to fasten one object firmly to another”) are consistent with FullView’s proposed construction requiring the image processing devices to be firmly fixed or attached to the support member so that the image processing devices cannot be moved. *Infringement Order*, 635 F. Supp. 3d at 928 (cleaned up).

We address one last claim construction concern that Polycom raises. Polycom contends that FullView fails to offer a principled limit to claim scope, hypothesizing that under FullView’s proposed construction, because “one structure can eventually be traced back to another through any number of intervening connections, why is a ceiling lamp not ‘secured to’ the floor of a room, or a steering wheel

not ‘secured to’ the trunk of a car?’ Appellant’s Reply Br. 31.

Polycom has not shown that these hypothetical examples bear on the narrow dispute before us. At oral argument, when asked where the ’143 patent limits the number and kind of intervening structures, Polycom’s counsel could not provide a response and instead made the conclusory statement, “I believe it’s a spectrum. . . . In this case, [the Accused Products] are on the other end of the spectrum.” Oral Arg. at 31:47–32:07. Yet Polycom poses these hypotheticals without elaborating how attending to them would address the present dispute. In this appeal, Polycom continuously points to the power- and data-routing function of a circuit board—a feature that is not relevant to Polycom’s hypotheticals—as the basis for revising the district court’s construction. But Polycom does not explain how the ceiling light and steering wheel examples should inform our understanding of the relationship between the scope of the “secured to” limitation and the circuit board, which in this case is also designed to serve as a means of securing the image processing devices to the support member, when combined with the steel chassis. In other words, Polycom has not put forth a meaningful case for how to articulate the construction of the “secured to” limitation in light of its hypotheticals.

What’s more, in raising these hypotheticals, Polycom seems to suggest—without outright saying—that the number, nature, and function of intervening structures are pertinent to the correct interpretation of the “secured to” limitation. But Polycom does not offer any support for such a position. Because the infringement dispute does not require us to construe the term “secured to” in such a way that resolves the hypotheticals and Polycom does not explain the relevance of these hypotheticals to the infringement dispute, we decline to address them.

In sum, we reject reading into claim 10 a requirement that intervening structures must be analogous to bolts, welding, straps, belts, spacers, brackets, and the like and must not provide certain functions beyond attaching or fixing the image processing devices to the support member, like a power- or data-routing function.⁵

C.

Finally, there is no genuine dispute of material fact that precludes summary judgment of literal infringement. Polycom alleges that the image sensors in the Accused Products are not “secured to the support member” and instead are “secured to” only the circuit board. Appellant’s Br. 71, 82–83. But Polycom’s arguments and evidence on this score essentially reprise its now-rejected claim construction arguments.

Polycom offered expert testimony that the circuit board in the Accused Products has an additional function for routing data and power. J.A. 3947–48. And at oral argument, relying on this same expert testimony, Polycom’s counsel seemingly suggested the image processing devices are not “secured to the support member” in the Accused Products because the circuit board is “designed” and “intended” to route data and power. Oral Arg. at 36:34–37:08.

⁵ At oral argument, Polycom’s counsel acknowledged that intervening structures could perform a function other than attaching but that the “primary function” must be an attachment function. Oral Arg. at 34:25–35:00. This argument seems to implicate a novel proposed construction for the term “secured to” that was not raised before the district court. In any case, the record does not support such line drawing for at least the reasons discussed above with respect to Polycom’s construction that it has consistently pressed before the district court and in its briefing to us.

But Polycom fails to explain how this expert testimony, even viewed in the light most favorable to Polycom, creates any genuine disputes of material fact as to whether the image processing devices in the Accused Products are “secured to the support member.” First, it fails to grapple with the undisputed fact that the circuit board is also specially designed (with a hole in the middle and screw holes) and intended to secure the cameras to the support member. Second, the expert testimony presupposes—without any basis—that the image processing devices in the Accused Products are secured to only the circuit board, not the support member, and that the power- and data-routing functions of the circuit board must be considered in determining whether the image processing devices are secured to the support member. J.A. 3947–48. Polycom does not, for example, explain how a reasonable factfinder could find that a skilled artisan would understand this additional function of the intervening circuit board as precluding the board and steel chassis configuration from being considered an attachment structure that “secure[s]” the image processing devices to the support member as required in the claim. The construction of “the plurality of image processing devices being secured to the support member” requires only that the attachment or fixation between the image processing devices and the support member is firm and prevents movement. And Polycom concedes that this limitation permits intervening structures to provide the securing function. Oral Arg. at 31:30–31:45. Polycom’s evidence directed to the additional function of the circuit board therefore does not create a dispute of material fact.

Moreover, Polycom fails to identify any other dispute of material fact as to whether the Accused Products satisfy the limitation “the plurality of image processing devices being secured to the support member.” Polycom offers no evidence indicating that the intervening structures and connections in the Accused Products prevent the image

sensors from being considered fixed or attached firmly to the support member so that the image processing devices cannot be moved. *See* J.A. 4060 (Polycom’s counsel at the summary judgment hearing acknowledging that the Accused Products have “a very firm, structurally sound configuration” for securing the image processing devices to the support member). Polycom does not dispute that the intervening structures—including the circuit board and the steel chassis—are rigid and thereby ensure the image sensors are fixed or attached firmly to the support member. And as to the intervening connections—the solder between the circuit board and the image sensors, the screws between the circuit board and the steel chassis, and the nut and washer between the steel chassis and the support member—Polycom’s expert agreed that the image sensors are soldered onto the circuit board and that the circuit board “is firmly mounted on a chrome-plated steel chassis with six screws.” J.A. 3947. Polycom does not adduce any evidence indicating that the image processing devices in the Accused Products are not fixed or attached firmly to the support member so that the image processing devices cannot be moved.

Nevertheless, according to Polycom, “the only way to link the accused image processing devices to the support member is through a tortuous ‘series of fixed connections,’” and this series of connections thus confirms that the alleged image processing devices are not secured to the support member. Appellant’s Br. 72–73 (quoting *Infringement Order*, 635 F. Supp. 3d at 927). In Polycom’s view, the alleged image processing devices are secured to only the circuit board, not the support member. *Id.* at 80.

But in the Accused Products, the indirect series of fixed connections between the image processing devices and the support member satisfies the “secured to” limitation in light of the district court’s construction, a construction we affirm today. The alleged image processing devices and the pyramidal mirror need to be secured to the common

support member to maintain a fixed relationship between the image processing devices and the pyramidal mirror. J.A. 4060. Each intervening structure (the circuit board and steel chassis) contains specific design features dedicated to ensuring that the alleged image processing devices are secured to the support member. The circuit board and the steel chassis each have screw holes to receive screws that fasten the circuit board to the steel chassis and each have a central hole for receiving the support member, and the steel chassis is directly attached to the support member via the nut and washer. These intervening structures thus are designed to cooperate together to ensure the image processing devices remain fixed in relation to the support member, a key goal of the entire apparatus. There is no evidence that the intervening structures are configured in this manner for any purpose other than that.

In determining what the image processing devices are “secured to” in the context of claim 10, we reject Polycom’s overly narrow view that exclusively focuses on the direct connection between the image processing devices and the circuit board. Given that Polycom has acknowledged a single intervening bracket is a permissible intervening structure, J.A. 4066–67, that Polycom does not seem to dispute that two intervening brackets would also be a permissible intervening structure, Appellant’s Br. 29–30 (citing *Infringement Order*, 635 F. Supp. 3d at 928), and that we have rejected Polycom’s argument that the claim excludes intervening securing structures that perform certain additional functions beyond the securing function, we see no principled reason why the “secured to” limitation excludes the series of fixed, intervening connections in the Accused Products but includes intervening brackets. And given that the Accused Products have two intervening securing structures (both of which unambiguously ensure that the apparatus operates properly by maintaining the cameras in the fixed, stable position), we do not need to wrestle with Polycom’s more exotic hypotheticals in which a great

multitude of intervening components could be said to create a fixed relationship between two disparate objects.

We accordingly find no genuine dispute of material fact that bars summary judgment of literal infringement.

D.

In conclusion, we adopt the district court's claim construction and do not discern any material disputes of fact relevant to literal infringement. We thus affirm the district court's grant of summary judgment of literal infringement and denial of summary judgment of noninfringement. Because we affirm the district court's grant of summary judgment of literal infringement, we do not reach the district court's determination that the Accused Products satisfy the "secured to" limitation under the doctrine of equivalents.

CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. For the foregoing reasons, we *reverse* the grant of summary judgment of nonobviousness and *affirm* the denial of summary judgment of obviousness, the grant of summary judgment of infringement, and the denial of summary judgment of noninfringement. We remand for further proceedings consistent with this opinion.

The parties shall bear their own costs.

**REVERSED-IN-PART, AFFIRMED-IN-PART, AND
REMANDED**

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

FULLVIEW, INC.,
Plaintiff-Appellee

v.

POLYCOM, INC.,
Defendant-Appellant

2023-1201

Appeal from the United States District Court for the Northern District of California in No. 3:18-cv-00510-EMC, Judge Edward M. Chen.

DYK, *Circuit Judge*, dissenting in part and concurring in part.

While I join part I of the majority opinion, I respectfully dissent from part II, which affirms the grant of summary judgment on infringement. Contrary to the majority opinion, I think there is a genuine dispute of material fact as to whether the cameras (i.e., the image processing devices) are “secured to the support member” as required by claim 10 of the ’143 patent.

The district court construed the phrase “the plurality of image processing devices being secured to the support

member” to mean “fix[ing] or attach[ing] the plurality of image processing devices firmly to the support member so that [the image processing devices] cannot be moved.” Maj. Op. at 15 (first citing *Infringement Order*, 635 F. Supp. 3d at 927–28; and then citing J.A. 3967). The majority opinion agrees with this construction, and rejects Polycom’s alternative construction. I agree that the district court’s construction was correct. However, the district court then applied that construction and determined that there is no genuine issue of fact as to whether this limitation is satisfied because the cameras in the accused device are “secured through a series of fixed connections” to the support member and “[n]othing prevents fastening via intermediate elements.” *Infringement Order*, 635 F. Supp. 3d at 927–28. Here, I disagree.

I think there is a fact question under the agreed claim construction as to whether an object that is fixed or attached to another object needs to be directly fixed or attached to that other object, or whether a connection through intervening structures could also fall within the claim scope. The Oxford Dictionary definition, relied on by the district court and approved by the majority, *see* Maj. Op. at 18, provides many examples of securing objects, and in each case where two objects are secured together the objects are directly secured to each other rather than through a chain of multiple intervening structures. *Secure*, OXFORD ENGLISH DICTIONARY, https://www.oed.com/dictionary/secure_v?tab=meaning_and_use#23684520 (last visited April 15, 2024) (listing securing books with chains, securing hair with a comb, and securing a door with a latch). Also, for example, it would strain common usage of the term “secured” or “attached” to say one’s toe is secured or attached to one’s finger through the skeleton, or a passenger on an airplane is secured to the wing through the seat-belt, or that an apple on a tree is secured to the ground through the stem, tree trunk, and tree roots, or that a boat

is secured to a dock by tying it to a different boat that is itself tied to the dock.

The district court agreed that in the accused device the “imag[e] processing devices are not mounted directly on the support member.” *Infringement Order*, 635 F. Supp. 3d at 927. The district court explained the cameras “are mounted on an intervening structure: the cameras’ lens is epoxied to an image sensor, which in turn is soldered onto the circuit board, which is screwed to a steel chassis with a circular hole through which passes the support member. The support member is attached to the chassis with a washer and nut.” *Id.* (citations omitted). Based on these facts, and the common meaning of secured or attached and using the district court’s claim construction, I think a reasonable juror could conclude that connecting two objects through an intervening structure in this circumstance is not securing or attaching or fixing the two objects to one another.

Under our cases, once there is a claim construction, it is the jury’s job to apply the construction to the accused device. The jury is tasked to apply the claim construction as determined by the court. *See Google LLC v. EcoFactor, Inc.*, 92 F.4th 1049, 1055 n.2 (Fed. Cir. 2024) (“[A] trial judge construes a claim and gives that construction to a jury for application to facts. In this instance, the jury’s application does not establish a claim construction”); *see also Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1320–21 (Fed. Cir. 2003). The court’s role at summary judgment is simply to determine whether there is a genuine issue of material fact for a reasonable jury under the court’s claim construction. The jury is not charged with considering another rejected claim construction for that analysis, and yet that appears to be what the district court and the majority have done here in determining infringement is a fact issue.

Because I think a reasonable juror could conclude that the cameras are not attached or fixed to the support member as required by the claim construction, I think there is a genuine issue of material fact that precludes summary judgment. The majority's analysis of the infringement issue is the very kind of analysis that juries (not the court on appeal) are charged with undertaking to determine infringement.

I respectfully dissent from part II of the majority opinion.