

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MEDIVIS, INC.
Petitioner

v.

NOVARAD CORP.
Patent Owner

US Patent No. 11,004,271

Inter Partes Review No. IPR2023-00042

Request for Rehearing Under 37 CFR §42.71(d)(2)

INTRODUCTION

The Final Written Decision (FWD) in this IPR overlooked or misapprehended matters related to the evidence of public accessibility of certain non-patent references. When properly considered in view of the totality of facts and circumstances in the record about their public accessibility, Chen (Exhibit 1009)¹, 3D-Slicer-Visualization (Exhibit 1007)², and 3D-Slicer-GUI (Exhibit 1010)³ each qualify as printed publications.

BACKGROUND

This IPR began when Medivis petitioned for *inter partes* review of US Patent 11,004,271 on three grounds. Novarad, the owner of the '271 patent, filed no preliminary response. The Board instituted review on all three grounds and acknowledged that, among other grounds, “[Medivis] contends that claims 1-6 and

¹ X. Chen et al., “Development of a Surgical Navigation System Based on Augmented Reality Using an Optical See-Through Head-Mounted Display,” 55 JOURNAL OF BIOMEDICAL INFORMATICS 124-131 (2015) (“Chen”).

² S. Pujol, Ph.D. et al., 3D Visualization of DICOM Images for Radiological Applications, (Surgical Planning Laboratory, Brigham and Women’s Hospital, Boston, Massachusetts 2014) (“3D-Slicer-Visualization,” aka “3D Visualization”) (Ex. 1007).

³ Main Application GUI for 3D Slicer available at <https://www.slicer.org/wiki/Documentation/4.6/Slicer/Application/MainApplicationGUI> (“last edited 7 November 2016”) (“3D-Slicer-GUI,” aka “3D Slicer”) (Ex. 1010).

11-20 would have been obvious over the combined teachings of Doo and Amira, and the combined teachings of Chen, [3D-Slicer-GUI], and [3D-Slicer-Visualization].” Inst. Dec. 12 (citing Pet. 41-69 and Ex. 1012 ¶¶80-133).

In response to Novarad objections, Medivis timely served declarations and other evidence as an offer of further proof of the public accessibility of its non-patent references. Reply, Table of Exhibits (reporting service of Exhibits 1015-1021 and 1023-1024 on May 22, 2023)). With that proof in hand, Novarad nonetheless asserted that Medivis “offers no proof that any of the asserted documents were in fact publicly available before the priority date of the ‘271 patent.” POR 19 (July 18, 2023). Implicitly acknowledging the lack of candor in its absolute assertion, Novarad argued “a copyright notice ... is not enough.” POR 19-20.

As to obviousness of ‘271 patent claims in view of the combined teachings of Chen, 3D-Slicer-Visualization, and 3D-Slicer-GUI, the FWD “start[ed] and end[ed the] analysis with public accessibility.” FWD 26. It found that, “[b]ecause [Medivis] has not shown any of the references of this ground to be publicly accessible prior art, Petitioner has not proven by a preponderance of evidence that claims 1-6 and 11-20 would have been obvious over the combination of Chen, [3D-Slicer-Visualization], and [3D-Slicer-GUI].” FWD 31.

STANDARD FOR EVALUATION

“‘[P]ublic accessibility’ [is] the touchstone in determining whether a reference constitutes a ‘printed publication’ bar under 35 U.S.C. § 102(b).” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 (PTAB Dec. 20, 2019) (precedential) at 10 (quoting *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1348 (Fed. Cir. 2016)). “A given reference is ‘publicly accessible’ upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *Hulu*, at 10-11 (quoting *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008)). “What constitutes a ‘printed publication’ must be determined in light of the technology employed.” *Hulu*, at 10 (citing *Samsung Elecs. Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363, 1369 (Fed. Cir. 2019)).

Nonetheless, “the indicia on the face of a reference, such as printed dates and stamps, are considered part of the totality of the evidence.” *Hulu*, at 17-18 (citing *Nobel Biocare Servs. AG v. Intradent USA, Inc.*, 903 F.3d 1365, 1377 (Fed. Cir. 2018)). Applying the law to the facts of record, the Hulu decision—which is precedential as to how a petitioner may show an asserted reference qualifies as a printed publication—held that a copyright date, a printing date, an ISBN date, and

an established publisher of a series of a similar type of references demonstrate a reasonable likelihood that a book is a printed publication. *Hulu*, at 19-20.

OVERLOOKED AND MISAPPREHENDED MATTERS

The FWD did not properly evaluate the public accessibility of Chen (Exhibit 1009), 3D Slicer-Visualization (Exhibit 1007) and 3D Slicer-GUI (Exhibit 1010) in view of all of the facts and circumstances relevant to their public accessibility of record with respect to the Petition, the Reply, Novarad's adopted evidence, and undisputed facts set forth in Medivis's Motion to Exclude.

First, the FWD wrongly found that the Petition offers "no proof" that any of these references were publicly accessible. FWD 26 (citing Pet. 29-30). The FWD's citation suggests that finding is based on only two pages of the Petition. But even those two Petition pages cite evidence that the *Hulu* tribunal recognized as a type of evidence that can support a finding that a reference is a printed publication: including a copyright date, a publication date, and an established publisher of a series of a similar type of references. *Hulu*, at 19-20. The Board overlooked or misapprehended the substance of *Hulu*'s precedential decision and how that decision applies to the Petition evidence including, but not limited to, evidence cited on pages 29-30 of the Petition.

Professor Kazanzides qualifies as a person of ordinary skill in the art (POSA), under both his proposed definition and the Board's slightly-modified definition. Pet.

9-10; FWD 7. The Petition relies on Kazanzides's knowledge and experience from "teaching, researching, and working in the field of computer-assisted surgery for nearly 20 years," as presented in his original declaration. Pet. 9-10 (citing Ex. 1012).

The Petition explained that, "by 2014, the 3D Slicer open-source software platform for segmentation, registration, and 3D visualization of medical imaging data was on its fourth major revision." Pet. 16-17 (citing Ex. 1012 ¶41 and Ex. 1007, slides 6-7). The www.slicer.org website was known as the source for information about the "well-known free and open-sourced package named 3D Slicer." Pet. 54 (citing Ex. 1009, 131 at 1:29-31). Based on his knowledge and experience as an expert qualified as a POSA, Kazanzides testified that "[a] POSA would have been familiar with the 3D Slicer application and its ability to load and display data for a user." Pet. 16-17 (citing Ex. 1012 ¶41).

Based on his knowledge and experience, Kazanzides further testified that, "in 2014, the Surgical Planning Laboratory ('SPL') published examples of 3D data displayed as individual 2D slices of inner layers of a patient's anatomy." Pet. 17-18 (citing Ex. 1012 ¶42 (citing Ex. 1007, slide 39)). Similarly, based on his knowledge and experience, Kazanzides testified that, "in 2014, the SPL published examples of 3D data displayed as a 3D model of inner layers of a patient's anatomy." Pet. 18-19 (citing Ex. 1012 ¶43 (citing Ex. 1007, slide 42)).

Based on his knowledge and experience, Kazanzides also testified that, “[b]y 2016, the 3D Slicer software included published documentation of the Main Application Graphical User Interface (GUI).” Pet. 55 (citing Ex. 1012 ¶106 (citing Ex. 1010)). The Board overlooked or misapprehended Kazanzides’s original testimony cited in the Petition as to the public accessibility of non-patent references related to 3D Slicer.

In considering Chen (Exhibit 1009), the FWD overlooked or misapprehended the substance of the *Hulu* decision as it pertains to Petition evidence of its public accessibility. The FWD indicates that Medivis cannot rely “in part on the face of Chen.” FWD 28 (explaining “any reference can state that it was published without actually being published”). Similarly, the FWD improperly rejected as evidence of public accessibility the fact that Chen “was published in volume 55 of the JOURNAL OF BIOMEDICAL INFORMATICS.” Pet. 29-30 (citing Ex. 1009 at 124-131). But the FWD’s approach directly contradicts *Hulu*’s explanation that “the indicia on the face of a reference, such as printed dates and stamps, are considered part of the totality of the evidence.” *Hulu*, at 17-18. The Board should reconsider the totality of the evidence as to Chen’s public accessibility with the understanding from *Hulu* that indicia on its face are part of the totality of evidence.

Second, the Board overlooked or misapprehended most of the relevant evidence presented in the Reply.⁴ The FWD acknowledges that 3D Slicer-GUI (Exhibit 1010) is “documentation for Slicer software[, which] describes an application menu, toolbar, data probe, 3D viewer, slice viewers, and chart viewers.” FWD 26. But finding it somehow unduly burdensome, the Board overlooked Kazanzides’s cited testimony that 3D Slicer-GUI (Exhibit 1010) is documentation for Version 4.6 of 3D Slicer, which was released on November 8, 2016. Reply 28 (citing Ex. 1021 ¶¶ 36-38). The Board also either misapprehended or overlooked the logic that application documentation must be accessible to potential application users because it serves to help users use the application.

The FWD acknowledges that 3D Slicer-Visualization (Exhibit 1007) is a “tutorial [that] provides an introduction to the 3D Slicer software, describes 3D data loading and visualization of images, and describes 3D interactive exploration of the anatomy.” FWD 25. But finding Kazanzides’s five short cited paragraphs somehow unduly burdensome, the Board overlooked the cited support for the statement that

⁴ The Board expressed its willingness to consider **uncited exhibits, filed without explanation**, for Novarad’s benefit. Order, Paper 23 (Dec. 11, 2023), 4 (“At a minimum, we are able to assess the qualifications of [Novarad’s] declarants based on their [uncited] curricula vitae.”)). It would be arbitrary and capricious for the Board to not be at least as willing to review **cited** exhibits of similar length for Medivis’s benefit.

3D Slicer-Visualization (Exhibit 1007) “was available on the internet on September 30, 2014.” Reply 27-28 (citing Ex. 1007, 2-124; Ex. 1019; Ex. 1021, ¶¶ 25-29). Although *Hulu* found that an established publisher of a series of a similar type of references to be evidence that a reference is publicly accessible (*Hulu* at 19-20)—the FWD found to the contrary that the fact that 3D Slicer’s Director of Training had presented similar tutorials at 22 conferences to more than 2700 people (Reply 27-28 (citing Ex. 1007, 1-2, 7-8, 14-15, and Ex. 1021 ¶¶ 11-23)) does not support the public accessibility of 3D Slicer-Visualization (Exhibit 1007) (FWD 29).

Third, the Board overlooked Novarad’s adoption of the Price Declaration as its own evidence of the state of the art at the relevant time. Novarad cited the Price Declaration as evidence of the state of the art at the relevant time. Sur-reply 20-21 (citing the Price Declaration as Ex. 1023). Requesting authorization to file the Price Declaration later, Novarad represented that it had intended to file the Price Declaration with its Sur-reply. Order, Paper 23 (Dec. 11, 2023) (hereinafter “December Order”), 2 (citing “Ex. 3001” (not included in record)). Although the Board later expunged it as duplicative of Medivis Exhibit 1023, on December 12, 2023, Novarad did file a copy of the Price Declaration as Novarad Exhibit 2023. Novarad’s designation of the Price Declaration as Exhibit 2023 confirms that Novarad adopted the Price Declaration as its own evidence of the state of the art. *See* 37 CFR §42.63(c) (“the patent owner[’s exhibit] range is 2001-2999.”).

The Board overlooked the fact that the Price Declaration addresses the public accessibility of two petition exhibits: Amira 5 User's Guide (Exhibit 1005) and 3D Slicer-Visualization (Exhibit 1007). Although the Price Declaration includes complete copies of both Petition exhibits, Novarad need not have adopted the Price Declaration as its own evidence to be able to reference a complete copy of the Amira 5 User's Guide (Exhibit 1005). For example, the Frank-White Declaration (Exhibit 1024), which was equally available to Novarad, includes a complete copy of the Amira 5 User's Guide (Exhibit 1005) but does not reference 3D Slicer-Visualization (Exhibit 1007). By adopting the Price Declaration as its own evidence of the state of the art, Novarad waived the right to challenge the Price Declaration and added to the record evidence of the public accessibility of 3D Slicer-Visualization (Exhibit 1007). Medivis cannot be faulted for not explaining the Price Declaration as evidence of 3D Slicer-Visualization's public accessibility because the Board denied Medivis's request for additional briefing in view of Novarad's citation of previously-uncited new evidence in its Sur-reply. December Order 4.

Fourth, the Board overlooked undisputed facts in Medivis's Motion to Exclude (MTE). Rule 42.23(a) **requires** that any opposition to a motion that contains a statement of material facts (SOMF) include "a listing of facts that are admitted, denied, or cannot be admitted or denied" and provides that "[a]ny material fact not specifically denied may be considered admitted." Medivis included a SOMF

in its MTE and specifically requested that “[a]ny material facts not specifically denied ... be deemed admitted.” MTE 2-7, 15. Medivis’s SOMF should be considered admitted because Novarad neither denied nor otherwise responded to any fact presented therein. *See generally* Opp. to MTE.

As explained in Medivis’s SOMF, Novarad’s expert admitted that multiple research groups commonly used *3D Slicer* technology before the relevant time:

Mulumudi admitted that he was unfamiliar with *3D Slicer* visualization technology (Ex. 1022, 130:6-8, 131:3-6, 131:7-10) and did not recognize Exhibit 1007, *3D Slicer-Visualization* (Ex. 1022, 150:10-21)—despite Medivis’s citing that exhibit both for the state of the art and as part of its third grounds for unpatentability. Pet. 16-19, 54-69. Mulumudi agreed that the underlying technology was commonly used by multiple research groups before the relevant time and attributed his lack of familiarity with *3D Slicer* to the fact that he is not involved in research. Ex. 1022, 147:13-148:9.

MTE SOMF 6-7. The public availability of the 3D Slicer related references should be reconsidered in view of that undisputed fact and the inference that groups commonly using *3D Slicer* technology before the relevant time must have had some way to understand the *3D Slicer* technology and to learn how to use it.

CONCLUSION

Medivis respectfully requests that the Board reconsider the public availability of Chen (Exhibit 1009), 3D Slicer-GUI (Exhibit 1010), and 3D Slicer-Visualization

(Exhibit 1007) based on the overlooked or misapprehended matters identified above. Based on the totality of facts and circumstances of record, including those that were misapprehended or overlooked, the Board should find that Chen (Exhibit 1009) is an article that was publicly accessible from the Journal of Biomedical Informatics and ScienceDirect before the relevant date. Based on the totality of facts and circumstances of record, including those that were misapprehended or overlooked, the Board should find that 3D Slicer-GUI (Exhibit 1010) was documentation of a version of 3D Slicer publicly accessible to potential 3D Slicer users on the www.slicer.org website before the relevant date to aid in their understanding of the main graphical user interface (GUI) for that version of 3D Slicer. Similarly, based on the totality of facts and circumstances of record, including those that were misapprehended or overlooked, the Board should find that 3D Slicer-Visualization (Exhibit 1007) was a tutorial by 3D Slicer's Director of Training publicly accessible to potential 3D Slicer users on the www.slicer.org website before the relevant date to help them use 3D Slicer.

Respectfully submitted,

April 5, 2024

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing Request for Rehearing was served on April 5, 2024 by transmitting a copy by e-mail to the email addresses of the patent owner's attorneys of record in the patent owner's latest mandatory notice:

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